

A FORAGER'S TREASURY

A New Zealand
guide to finding
and using
wild plants

Johanna
Knox

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TREASURY

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JOHANNA KNOX

ALLEN & UNWIN

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Allen & Unwin
Level 3, 228 Queen Street
Auckland 1010, New Zealand
Phone: (64 9) 377 3800

83 Alexander Street
Crows Nest NSW 2065, Australia
Phone: (61 2) 8425 0100
Email: info@allenandunwin.com
Web: www.allenandunwin.com

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INTRODUCTION

[Forage: *verb* Search widely for food or provisions]

New Zealand is a nation of foragers. At the very least, can any of us say that we've never picked a blackberry?

Māori have a strong, continuous history of gathering, and a Royal Society study recently found that while consumption of wild foods is declining in industrialised countries around the world, in New Zealand over 60 species of wild plants and animals are still in common use, largely due to Māori traditions.

The annual Hokitika Wildfoods Festival has been popular since its launch in 1990, and the Monteith's Beer & Wild Food Challenge — with a strong emphasis on hunted as well as gathered food — has been going strong for fourteen years. Immigrants, especially from Europe, have brought with them their own foraging traditions, and chefs and cooks such as Italian Alessandra Zecchini regularly include wild foods in their dishes.

Foraging can be just as integral to medicine and crafts. Both Māori and Pākehā herbalists, weavers and dyers have always treasured wild plants.

It's the New Zealand way to head for the bush, the countryside or the beach when we have leisure time. Foraging for useful or edible treasures is a natural extension of that.

In recent years blogging, email lists and social networking sites have enabled an explosion of information-sharing between foragers.

According to my Mum, my own foraging life began at the age of about 3 when I unexpectedly squatted in the middle of my grandmother's garden and ate a pansy. I recall adoring pansies with their little monster faces so, maybe, wild-thing-like, I thought, 'I'll eat you up, I love you so.' Then again, perhaps I was just exhibiting the deep foraging instinct that fires in every child's mind.

Children love to share nuggets of local wild food lore with each other; how to nibble on onionweed or wood sorrel; how to eat *Romulea rosea* seed pods or suck the nectar from jasmine flowers. Many people have shared such childhood memories with me, and I feel almost deprived that at my school all we did was chew grass stalks now and then.

Nonetheless I was lucky enough to live on a bush-clad subdivision and have a keen gardener for a Dad. There was plenty of plant life to explore. As well, my mother was an insanely busy environmental activist, continually dragging my sister and me to protests, fundraising stalls and urgent meetings. True, it could be achingly boring, but now and then I found myself wide-eyed and breathless at some of the back-to-nature projects that '70s adults were working on. The strange foods! The clever crafts! All the Xeroxed books that these shaggy-looking grown-ups were writing about their passions!

Being an excitable child, I embarked on my own projects. I made cosmetics — especially face-packs — and enlisted my younger sister Andrea to lie still each morning while I plastered her face with bananas and oatmeal and bits of random garden plant. I stripped apples from my father's tree and dug a small pit in the ground so I could bury them, hoping to surprise and delight my family by bringing out this fresh supply in the depths of winter. (They *were* surprised, but not so delighted.)

I also remember making a birthday present for my wonderful friend Vanessa Rhodes by infusing water with rosemary and decanting it into an old perfume bottle. When Vanessa upended the bottle onto her wrist, out plopped a shocking lump of blue mould that quivered on her skin until she shrieked and hurled it off.

Despite early failures, I continued this kind of dabbling throughout my teenage years. Then, in my early twenties, something changed. For the first time I started to earn a reasonable amount of my own money. Buying things suddenly seemed more fun than scrounging them and materialism ruled.

Within a few years, another wave of change broke over me. My son was born and I was washed into a twilit world of human body fluids, disintegrating sleep patterns and single-minded dedication to this small, new cause. The dull band of pain across my head became a part of me, and my inability to remember what I'd

done a day, or even an hour, before grew legendary. Just when I thought it would never end, it did.

I resurfaced. Lo and behold, I had a new little friend who liked to pick me small bunches of forget-me-nots from garden borders, and eat nasturtium leaves at the park. He reminded me of how I used to be, and I started gathering and experimenting again.

I'm positive we're all foragers at heart. From birth, the drive kicks in. We snuffle around, smelling, feeling and able to see only as far as we need, to find food in our tiny mum-sized domains. Months pass, then years, but we still employ all our senses in the hunt for food. We follow our noses towards delicious-smelling Thai takeaways or surreptitiously feel avocados at the supermarket.

And many of us go wilder still, leaving behind the shiny fluoro-lit smorgasbord of supermarket foods, maybe even bypassing the friendly hum of the farmers' market. We head to where we and the food are free. We explore the vast treasury of nature, rummaging through its highest shelves and deepest cellars, trekking down its numerous aisles leading off from other aisles. There is not the supermarket's bright, artificial sense of order, but there is a deeper one.

Gathering is addictive and it speaks to many needs at once: the needs to escape, to explore, to discover, to collect and to provide for ourselves and our loved ones.

Each of us forages differently. We have our own gathering routines, favourite plants, and methods of harvest and use. We also have our own ways of ordering our ideas and experiences.

Foraging lore is a changing, evolving body of knowledge and every person has their pieces to add. I've enjoyed jigsawing together what pieces I can to make this book, and I'm grateful to the many people who've also generously shared their experiences and expertise with me.

I'd like to think this book is one to dip in and out of at whatever points catch your interest or to use to follow your own trails. It's by no means exhaustive. Nonetheless there is a host of accessible ideas and approaches, which I hope you will explore, alter, add to and make your own in ways that I can't even imagine.



READY TO FORAGE

A potted history of foraging in Aotearoa, New Zealand

When Māori arrived here around 1000 years ago, they brought a culture that blended agriculture with hunting and gathering. Geographically scattered iwi and hapū developed new ways of life according to the climate and available resources in the regions they settled. The ratio of cultivation to gathering varied, depending on which crops from home would grow and what else they could find here to use.

Westerners arrived in the eighteenth and nineteenth centuries, beginning with whalers, sealers, traders and missionaries. They learned from Māori how to utilise some local plants for food and medicine and added their own ideas. They also imported cultivated plants, some of which escaped to become the weeds that many of us forage for today.

By the second half of the nineteenth century, more and more new settlers were flowing in from Britain. The British government took increasing control over the land. Western-style agriculture spread. Māori were alienated from the majority of their lands, including customary gathering grounds. And yet, throughout it all, some kept their knowledge of hunting and gathering alive.

Meanwhile, as in other Westernised countries, Pākehā focused heavily on agriculture, complemented by peaks and troughs of foraging activity. The peaks

often coincided with hard economic times; for example, anecdotal evidence suggests that Westerners foraged more during the world wars and the Great Depression.

In the 1970s, oil shocks rocked the global economy, adding potency to signals that humanity was now playing a dangerous game with the environment. This brought about a new Western interest in both environmentalism and thrift, and one of the spin-offs was a foraging revival.

In the United States, writer Euell Gibbons had already popularised the idea of foraging with his 1962 book, *Stalking the Wild Asparagus*. Richard Mabey published his British classic *Food for Free* in 1972, and here in New Zealand, Sheila Natusch's delightful *Wild Fare for Wilderness Foragers* came out in 1979. In 1981, both Gwen Skinner and Andrew Crowe released their classics (see page 310).

As the 1980s prepared for ostentatious partying, the Western enthusiasm for foraging waned. However, since the turn of the twenty-first century it has been swelling again in a social climate reminiscent of the 1970s. Environmental issues are more pressing than ever; there is a backlash against industrialisation and how it affects both our personal health and that of the planet. Combined with tough economic times, foraging offers one small piece of an answer, as Māori have always known.

The terraced hills of today's urban and rural landscape were formerly the homes of kin groups; the remains of swamps are catchments once famed for their preservative mud, flax, and dyes or birds and fish ... the remnant of a karaka grove represents a once favourite provider of berries for the tribe; and a windswept sand dune on a river mouth that has always provided better pīngao than is found elsewhere is, today, being destroyed by trailbike riders.

In the face of such change, contemporary weavers have taken flax, pīngao and kiekie into protective cultivation and moved samples of mud used as preservatives and dyes to safe catchments. Families desperate not to lose the genetic stock have ... frequently planted karaka trees, sourced from favoured locations, in riparian reclamations.

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Why forage?

There are many good reasons to forage.

Keep yourself and your loved ones healthy

The cultivated foods we buy in shops today have been bred for the commercial market, which values size, sweetness, colour, storability and uniformity. Nutritional value isn't usually so high on the list of priorities for commercial plant breeders. Consequently, many modern cultivars have a lower nutritional value than their ancestors.

Wild foods are often more nutrient-dense. There can be more species variety in a wild-food diet, too.

Save money

In the short- and long-term, foraging can save dollars. Relatively few people in this country will live entirely off what they gather, even for a short time, but if you have a pantry stocked with cheap staples, you can combine them with many fresh, richly nutritious wild ingredients to make a wide range of dishes.

While I was writing this book, money was tight for my family. But, having been a bit of a 'prepper' since the onset of the global financial crisis, I had good stores of rice, pasta, flour, sugar and beans. By spending money only on a few extra essentials and foraging for the rest, I killed two birds with one stone. I tested the recipes in the latter part of this book and helped keep my family well fed.

Explore *terroir*

Every plant is a storehouse of valuable chemicals (phytochemicals — which just means chemicals from plants). Each plant or group of plants specialises in certain chemicals and holds them variously in its roots, sap, bark, leaves, flowers and seeds. Some chemicals appear throughout a plant and others only in one part of it.

The same chemicals can pop up in diverse parts of the plant kingdom; for example, anethol gives licorice, fennel and star anise their taste, even though they are from quite different plant families.

Chemicals give plants their individual colours, flavours, fragrances and their nutritional and medicinal values. But the exact mix and relative strength of a chemical in any given plant can be affected by many things, including genetics, soil, moisture, altitude, surrounding light levels and temperature as well as patterns

of change in all those things. So a plant's exact location in space and time affects what it will yield.

All this is what winemakers call *terroir*. More recently, producers of artisan foods have adopted the term. Herbal medicine practitioners, natural perfumers, and fibre-crafters have also long understood the principles described.

As a forager you're in a unique position to discover the effects of *terroir* on the plants that grow in your patch. A quick stroll can reveal, for example, that the lavender flowers growing outside a local café have a strength and softness to their fragrance that is quite different to those beside a neighbour's gate, which may have a quieter scent with a harsh, sour note.

For the forager, learning about *terroir* is a fascinating, never-ending journey. Even if you reach the geographical edges of your roaming space, you will never reach the edges of time, as plants grow and change every day, each season and year by year.

Rediscover the commons

The commons are the spaces we all share, including bush, beaches, parks, country roads, civic spaces, railway tracks and walkways. Foragers certainly work these physical commons. But the commons also include bodies of shared human knowledge. As a forager you constantly discover, use and pass on information about wild plants and their uses, and so you nurture the less tangible commons, too.

Being a 'commoner' puts you square in the middle of a new movement to protect, preserve and celebrate the resources we share as well as those we possess individually.

American ecologist Garrett Hardin made a splash with his article, *The Tragedy of the Commons*, published in 1968. The phrase entered common parlance, and many people accepted his theory that humans are, at heart, selfish individuals who always try to take a bit extra for themselves when using a shared resource. One person doing it is no big problem, but when everyone does it over a long period the 'tragedy' unfolds and the resource is ruined for all.

Since 2001, a US-based group called On the Commons has been promoting the benefits of the commons and the belief that it's possible for humans to share the commons without degrading them, as long as they are actively protected and managed for the good of all.

The group points out that 'environment' didn't become a household word until the 1970s, when it brought together widely shared concerns about air and water pollution, deforestation, littering, the growing rate of species extinction and more. The environmental movement highlighted the connections between these concerns.

The organisation suggests taking a similar approach to the commons and says, ‘linking the numerous social, cultural and environmental concerns related to the commons would spark a powerful new wave of citizen activism to shape popular consciousness . . . reshaping how we will solve the problems facing us in the twenty-first century’.

I’d like to think that humans are capable of managing the commons, including bodies of knowledge, without ultimately destroying them through greed or desperation.

I recall once harvesting something I shouldn’t have, thinking, *It won’t matter if it’s only me doing it*. I hope I have a bit more ethical backbone these days, but I have a nasty suspicion that if I were in a desperate situation I would argue that some morals are a luxury I can’t afford.

How do we avoid people getting into those needy, desperate situations in the first place? One of the tricks to maintaining the commons is to create a shared abundance, so people are rarely tempted to take extra for themselves.

Practise thrift

Foraging is full of opportunities to practise thrift, including when you:

- gather and use fruits, herbs or greens that would otherwise go unused
- preserve and use leftover gatherings that would otherwise go bad
- give something gathered or preserved to someone who will appreciate it
- appreciate something gathered or preserved that someone has given to you
- leave enough flowers on a precious plant to fruit, and enough fruits to seed
- encourage treasured and threatened plants
- battle pest plants
- share foraging knowledge with others.

It doesn’t matter whether your acts of thrift are big or small. Every single one contributes to the net thrift of humanity — and goodness knows that needs to be greater.

Provoke thought

As human populations sweep around the globe, exploring and colonising, they distribute collections of plants, usually the ones most beloved to them, but stowaways too. Just as some human cultures invade others, so it is in plant communities.

In any new location, some plants are well behaved, staying where you put them, and posing little or no threat to their neighbours. Others storm a landscape, overrunning all other plants in their path. While foraging, you see the effects of this process.

Human history and plant history are deeply entwined, and thinking about one sheds light on the other. Questions we may ask ourselves include:

- What plants do we want around us, and why?
- Do our reasons hold up to scrutiny?
- What has happened in the past?
- What should we do to ensure the best possible future?
- How do we understand and set to rights the mistakes of the past?

Connect with nature and tradition

Wild plants provided food and medicine for early humans, as well as materials for tools, shelter, clothing and more. Many communities continue to use wild plants in diverse ways. Traditions around how and when to harvest are tied closely to culture and identity. They directly involve communities in the natural world and its cycles, including daylight hours, seasons and tides. And they are often based on a reciprocal relationship with the natural world, a relationship that doesn't see everything in terms of dollar values, but simply gives what needs to be given, and takes what needs to be taken — a resilient and sustainable way of operating that the Western world has strayed very far from.

Traditional knowledge-keepers know that their own intimate interaction with the land, if adopted, can re-orientate the world, put people back in touch with nature and nourish cultural and artistic expression, in ways that support and affirm sustainable and equitable relations between all people and the environment.

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The basic rules of foraging

Before beginning, familiarise yourself with these guidelines. The first two are no-brainers because you must abide by New Zealand law. First, unless you have obtained a permit, don't take anything from national parks or marine reserves. Second, don't go onto private property, including farmland, without the owner's permission.

At a local level, there's a tangle of city, district and regional authority rules surrounding public spaces, including local parks and reserves. If you're unsure, check with your local council to find out where you can forage and what plant material you can and can't collect. For example, if a restoration project is going on, you may not be able to touch native plants but you could be doing everyone a favour if you remove introduced weeds.

While the lack of clear national guidelines may sometimes feel frustrating, it seems important that these kinds of rules and processes are developed to suit the individual locations and communities to which they apply.

Generally, collecting a bit of seaweed from a beach — as long as it's not a marine reserve — and removing a few weeds or picking flowers, leaves or fruit from an untended local park or the edges of local bush should be fine. Beside railway lines can also be good places to forage. (But stay a safe distance from the lines, and don't get hit by a train!)

As for private property, if something enticing is poking through or hanging over someone's fence into your property or into public property, it's still legally owned by the person who owns the soil from which the plant is growing. That means that, strictly speaking, you do need to ask permission to take these things, although you also have the right to ask the owner to remove them. On the other hand, in practice a few errant leaves or flowers nipped off are probably not going to bother anyone. Use discretion and common sense at all times and remember, people are usually happy to give permission if you ask, especially if you offer them some preserved gatherings as a thank you.

Safe foraging

Be careful where you forage, especially if you are going to be consuming your haul. If you're going to be using the plants for dyeing or some other craftwork, you don't have to worry about this so much.

In general, avoid areas subject to farm run-off, or busy roadsides where exhaust fumes and rubber from tyres may coat the plants. Avoid areas that have been

sprayed with herbicide or pesticide. If you're unsure, you can ring up your local council. They should be able to tell you what is being sprayed, what sprays are being used and when, or they may put you in touch with the contractor who does the spraying. Occasionally it won't be possible to find out.

Identify everything you gather

It's important that you know what you are gathering and have positively identified every plant. There is no room for confusion about this as plants that look similar are not the same, and one may be poisonous. It's good to get to know the poisonous plants you may come across in your area. It can be hard to identify a plant from a single image or description, so it's good to have several different images and resources to cross-reference.

Many plants are easiest to identify by their flowers, so you may want to keep an eye on a plant you're unsure of until it blooms. Searching Google images is super-useful, although be aware that among the grab-bag of internet resources there'll be some incorrectly labelled plants — you need to know your sources are reliable. A list of additional sources is given at the back of this book.

Listen to your body

Introduce new foods to your diet gradually, so if you find some new foraged foods you love, go easy on them at first. Give your body time to adjust. Sudden changes in diet, whether in quantity or content, can stress your system. Try things tentatively at first, introduce one new thing at a time, and listen to your body to check if it's telling you it doesn't like something.



Allergy alert

Horse chestnuts are poisonous to eat without skilled, labour-intensive processing. However, they've long been used to make soap, and early one morning I set about trying this.

I smashed the first nut with a meat-tenderiser to get at the meat inside and within seconds of the shell splitting open I felt a catch in my throat, as if I'd breathed in something nasty. I carried on smashing up the horse chestnuts, and for a few minutes my throat felt dry and scratchy. As I began to slice the horse chestnut meat more gently, the feeling subsided. I noted that it didn't seem to irritate the skin on my hands.

I put the sliced horse chestnut meat in a pot to boil, and as the vapour rose from the pot, I felt the burning in my throat again. With the liquid made, I swished it around a bit with my hands to make suds. The feeling in my throat persisted. I rinsed the horse chestnut off my hands, put the liquid aside to use on a load of washing, and started to get ready for my day, beginning by flossing my teeth. Suddenly my mouth was burning.

I realised that my hands must have had horse chestnut residue on them. I washed them again far more thoroughly, scrubbing and using other soap. I tried a new piece of floss, and all was fine.

I experimented with the horse chestnut, gently lifting it to my mouth and tongue. As soon as it got very close, a prickling feeling spread across my tongue. I've never experienced anything like this before. The reaction was clearly linked to the horse chestnuts, and I decided I would never work with them again.

In hindsight, this could have ended badly. If something has caused instant irritation, you should not do as I did and go experimenting with how close you can get it to your face! Anaphylactic allergic reactions can of course be fatal.



Common poisonous plants

New Zealand has many poisonous plants, both native and introduced. The following list is by no means comprehensive, but includes some of the most common. For a fuller list, including those that cause only mild symptoms, see the New Zealand Landcare Research website or get hold of *Plants that Poison: A New Zealand Guide* by Henry Connor and John Fountain. There is also an excellent section on toxic plants in Andrew Crowe's *A Field Guide to the Native Edible Plants of New Zealand*.

Hemlock

Hemlock (*Conium maculatum*) grows abundantly in New Zealand. It contains the neurotoxin coniine, and it doesn't take much of this stuff to kill.

Along with parsley, celery, fennel, carrot, coriander and more, hemlock belongs to the Apiaceae family. Fears abound that foragers will mistake hemlock for one of its more edible wild relatives. All are herbaceous and have lacy leaves, hollow stems and tiny flowers in umbrella-like clusters.

Hemlock is considered to look most like wild carrot, which has similar leaves. Also like wild carrot, hemlock has white flowers, although the *form* of hemlock

flowers is generally more like those of wild parsley and celery (which are, however, yellow).

Wild carrot, unlike hemlock, has hairy stems. Mature hemlock has smooth stems, distinguished from its relatives by sinister purple spots or streaks. *Note that these spots may be absent or hard to discern on very young plants.*

Jerusalem cherry

This garden ornamental (*Solanum pseudocapsicum*) is a member of the nightshade family that has become naturalised in New Zealand. Its attractive orange berries are very poisonous.

Karaka

The bitter orange fruits of karaka (*Corynocarpus laevigatus*) are safe, but the kernels contain karakin, which causes convulsions, paralysis and death. Karaka kernels *can* be made safe to eat, but only with skilful processing. They are a customary Māori food.

Nightshades

The Solanaceae family includes potatoes, tomatoes, chilli, tobacco and garden ornamentals such as *Brugmansia*. However, the family takes its common name from its most gothic, brooding members — the nightshades.

Black nightshade is far more common in New Zealand than deadly nightshade, although they're sometimes mistaken for each other. All parts of deadly nightshade are very poisonous. Black nightshade is controversial but avoid it unless you've really done your research and know what you're doing as far as identification, harvesting and processing goes.

Oleander

This evergreen shrub or tree (*Nerium oleander*), widely grown as a garden ornamental, is naturalised in New Zealand. All parts are very toxic. Since at least the 1950s, a story involving either a party of boy scouts or a family roasting sausages on sticks of oleander, with fatal results, has circulated. Although it's an urban legend, it's a cautionary tale worth heeding.

Ongaonga

This endemic New Zealand tree nettle (*Urtica ferox*) is the Terminator of nettles, sometimes growing over 2 m high. A serious brush with it could be the end of you or at least make you very sick. Look out for it in scrubland and around forest margins.

It deserves respect, rather than hatred. Like other native nettles, it is an important part of the ecosystem, providing vital food and habitat for New Zealand's native admiral butterflies.

Rangiora

This well-known shrub (*Brachyglottis repanda*) is a member of the daisy family. It has large leaves — white and velvety on the undersides, on which children love to write. They have also been used, fresh and boiled, as bandages and poultices, and trampers call them 'bushman's toilet paper'. However, they are poisonous when ingested.

Tutu

Several native *Coraria* species are known as tutu. These straggling trees or shrubs generally grow in bush and scrub, and have drooping clusters of flowers and berries. All parts, except the petals, contain the highly toxic substance tutin.

Yew

The yew tree (*Taxus baccata*) is an introduced conifer. Almost all parts of the yew tree are poisonous, including the seed of the appetising-looking berry.



Oxalates warning

Many plants, both wild and cultivated, contain oxalates. Some — including spinach, rhubarb, wood sorrel, dock, New Zealand spinach and beach spinach — contain particularly high levels.

Some oxalates can be broken down by cooking, or leached out of a food by boiling. Oxalates bind with calcium, so consuming calcium along with an oxalate-rich food will neutralise some of it. Certain foods, such as wild chenopodiums, have a high calcium-to-oxalates ratio. Despite their high oxalate levels, they will generally be absorbed by your body as if they had low levels. Others, like dock, contain little calcium at all, so the oxalates are highly available.

There are other factors to consider, too. Different people metabolise oxalates differently, so there is plenty of variation between us in how much oxalic acid we can comfortably consume.

General consensus seems to be that in moderate amounts oxalates are fine for most people. However, if you have gout, kidney trouble, rheumatoid arthritis or some

other condition where oxalates are dangerous for you, you will want to avoid foods that contain them.

If you are worried, check with a doctor.

Foraging and pest plants

This tricky issue can throw my moral compass into a spin. Some introduced plants have become pest plants in New Zealand, destroying ecosystems and beating out treasured native plants as they spread. You'll find these villains listed in the National Pest Plant Accord (NPPA), which is coordinated by Biosecurity New Zealand through the Ministry for Primary Industries. No one can 'sell, propagate or distribute' the plants on the list. In other words, it is an offence to do anything likely to spread them.

There are other species not listed in the NPPA that are considered pests in particular parts of New Zealand. They are listed on one or more local pest management strategies. This means no one can 'sell, propagate or distribute' them *in the locale where they are listed*. You can find the NPPA plant list, and regional lists, online.

Several of New Zealand's most forageable plants are on the National Pest Plant Accord: banana passionfruit, Japanese honeysuckle and South African ice plant, sometimes called Hottentot fig. Meanwhile, a plant that I particularly love, pink jasmine, is included in some regional pest management strategies, although not where I live. It spreads most rampantly and destructively in warmer places.

If we want to use a wild plant that is listed as a pest in our area or nationally, I suggest we take some for ourselves to use, but also do our public duty and pull out as much of the rest as we can, by the roots if possible. Then we should dispose of it in some reliable way — for example, by burning.

We also need to be careful that when we use the plant we don't compost or otherwise release plant material that could reproduce, such as seeds, roots or vines.

Of course, you could make the argument that by using plants to make good things, we're encouraging a liking for them, which could psychologically hinder efforts to get rid of these plants. It's similar to the argument made against wearing vintage second-hand fur. Although wearing old furs doesn't mean any new animals are killed, and they're garments that would otherwise go to waste, wearing them nonetheless publically promotes acceptance of 'fur as fashion'.

I will leave you to ponder that!

When you love a pest

When the plant you love is a pest, you have a problem. I've always enjoyed the Cape sundew (*Drosera capensis*), a sticky little carnivorous plant that is particularly easy to grow, and resistant to neglect. Since it's a perfect plant for kids to keep, I went through a stage of promoting it, including giving specimens to young people as gifts and selling them at school fundraisers. I was mortified to discover it's listed in the NPPA. Cape sundews reproduce easily, run wild and actually displace other small native plants, and I had been pushing them on children!

It took me a while to come to terms with forsaking them, but it had to be done. Instead I started trying to enthuse the children I knew about other species of carnivorous plant, such as native New Zealand sundews — *Drosera binata* and others. Unfortunately, they're not such a doddle to grow, but I guess that's the point.

Top tips for harvesting and preparing wild foods

What to take foraging

To make your life as a forager easy, you need some basic equipment. Here's a list of useful things to take:

- sharp, sturdy scissors and secateurs for tougher jobs
- a selection of plastic bags for damp stuff
- a selection of paper bags or reusable mesh produce bags for things that should breathe
- good shoes or boots with grip, strength and flexibility — you never know when you might need to walk across sharp rocks, through prickly things or scramble up a bank
- a friend or family member who is either deeply patient or just as enthusiastic about foraging as you — there's nothing worse than wanting to stop every minute to examine or collect something and having an impatient companion who wants to keep moving.

If I was more organised, I would have a foraging bag by the door, ready to go whenever the urge struck. It would contain a water bottle, scissors, secateurs and

bags. The sensible shoes would always sit right beside it so I could be on my way at the drop of a hat.

Getting going

Here are some basic tips for harvesting and processing:

- ➲ Harvest from places where the plants are growing lushly. Bitterness concentrates in slow-growing plants. The choicest forageables will often be in the fastest-growing patches.
- ➲ The youngest, newest leaves and stems on a plant will generally be more tender and delicious than older ones.
- ➲ Avoid stunted, damaged or diseased plants.
- ➲ Cut greens just above leaf nodes to encourage more growth.
- ➲ To remove flowers from their sepals, gently squeeze the sepals and, if necessary, pull or twist a little.
- ➲ Sometimes it's not a good idea to wash or dry a plant. Some flowers in particular are delicate. With some aromatic plants, you'll wash off valuable volatile oils.
- ➲ At other times, you will want to be sure to wash your plants. In the absence of a salad spinner to dry them, you could become a human salad-spinner by wrapping washed leaves in a clean tea towel, bunching the corners of the towel together to seal the leaves in a bag, and swinging the bag at arm's length in fast circles.
- ➲ Some flowers are full of very tiny, black bugs. If you don't want to rinse them, dump the flowers onto a white plate or piece of paper and watch the exodus. Transfer them to another plate or paper and more will come out. Keep transferring them back and forth until the exodus is pretty much complete.
- ➲ Many gathered leaves and flowers wilt quickly. If you're not using them straightaway, keep them in the fridge or, better still, stand them or float them in water.
- ➲ Some foraging is time consuming and labour intensive, especially when you're gathering or processing lots of small things, such as mallow peas or dandelion buds. Treat it as a meditative activity, or turn it into a social occasion with friends and get a production line going.

The forager's store-cupboard staples

Here's a checklist of the ingredients I like to keep on hand to complement foraged produce. With these in the cupboard I can cook up most of the recipes in this book.

CARBOHYDRATES

- breadcrumbs
- brown and white sugar
- chana (chickpea) flour
- chocolate — your favourite
- high-grade wheat flour for bread and pasta
- honey
- popcorn
- rice and pasta
- rice flour
- ricepaper sheets
- rolled oats
- standard wheat flour for cakes, biscuits and sauces
- vanilla wine biscuits
- vermicelli (bean threads)

FLAVOURING AND BLENDING AGENTS

- apple cider vinegar, or a selection of vinegars
- baking powder
- cashew nuts
- citric acid, especially if you don't always have lemons
- ground salt — your favourite kind
- gelatine (I prefer sheet gelatine, but powdered will do)
- ground spices, including cumin, garam masala, paprika and turmeric
- kecap manis (sweet Indonesian soy sauce)
- miso paste
- nuoc nam (fermented fish sauce)
- olive oil
- peppercorns for grinding
- rennet (vegetarian rennet is available)
- rice bran oil
- sesame seeds
- sherry or other fortified wine
- soda water, tonic water or water kefir
- tamari or shoyu
- tomato paste
- vanilla essence (see recipe, page 26)
- vodka
- wine



MAKE YOUR OWN VANILLA ESSENCE

To make about a cup of strong vanilla essence, all you need are around eight dried vanilla bean pods and a cup of vodka. Chop the pods into small pieces. Put all the pieces into a jar or bottle with the vodka and leave to infuse for a month or so, shaking whenever you remember. You'll end up with a delicious, strong essence.

IN THE FRUIT AND VEGETABLE RACK

• carrots	• lemons
• garlic	• onions
• ginger	• potatoes
• kūmara	

FROM THE FRIDGE

• cheddar cheese	• parmesan cheese
• coconut cream	• ricotta cheese or paneer (see recipe, page 210)
• condensed milk or dairy-free condensed milk (see recipe, page 242)	• salted butter or a butter substitute
• cream or a cream substitute	• tofu
• eggs	• unsalted butter or a butter substitute
• milk or a milk substitute	• yoghurt
• mozzarella	

FROM THE FREEZER

- corn kernels
- peas

Living things in the store cupboard

If you have the time to look after them, it's rewarding to keep some live fermented foods in your store cupboard to go with your foraged foods. You can make endless probiotic creations from them. These are three of the most commonly available cultures:

WATER KEFIR: This colony grows as firm, irregularly shaped, jelly-like grains. They will ferment almost any sugary liquid. They seem to prefer dark, raw sugars, and thrive with added lemon and ginger. You can also make a range of fermented wild cordials with them, or ferment a basic kefir and add a wild-infused syrup.

MILK KEFIR: Slower-growing, more globby-looking grains than water kefir, they are mainly used to ferment dairy products. A spoonful of milk kefir grains in a jar of milk transforms it into a nutritious, yoghurty-tasting drink. In cream, the grains produce an excellent sour cream substitute. Adding finely chopped foraged herbs and greens to fermented cream makes a delicious dip or sauce.

CASPIAN SEA YOGHURT: This lesser-known yoghurt is super-easy to produce with a culture starter. Sometimes it's called *villi*, *matsoun* or *matsoni*. It's different from the yoghurt we're used to, as it's not solely bacteria-based. It's fermented by a symbiotic colony of bacteria and yeast. With its yeasty tang, it can be an acquired taste. However, it's much easier to make than other yoghurts, as no heating or temperature control is needed. It ferments and thickens in an almost foolproof way at room temperature. The warmer the room, the faster it ferments.

Starters for all these cultures are available from suppliers online, or try asking your local Weston Price chapter.

Useful kitchen equipment

❖ baking paper	❖ lidded casserole dish
❖ blender	❖ measuring cups
❖ bowls	❖ measuring spoons
❖ heavy-bottomed frying pan	❖ mortar and pestle
❖ heavy-bottomed pot	❖ oven tray

• pie dish	• storage jars
• rolling pin	• swathes of muslin for filtering
• scissors	and covering
• sharp knife	• tin foil
• sieve	• whisk

Of foragers and farmers and false dichotomies

Embracing a diet that incorporates a mix of wild and cultivated foods is a time-honoured way of life. Most cultures around the world have lived this way for centuries. Indeed, as Zareen Bharucha and Jules Pretty noted in their article, 'The roles and values of wild foods in agriculture systems', published in 2012: 'Many of these wild foods are actively managed, suggesting there is a false dichotomy around ideas of the agricultural and the wild.'



THE TREASURES

Introduction

Some of the most readily forageable plants in New Zealand are native, but most are introduced species. Where possible I've tried to give the Māori name, the common English name and the botanical name — in that order. The plants are grouped in their botanical families to make it easier for you to compare and contrast different members of the same family.

For more identification images, see foragerstresury.blogspot.nz.

Taxonomy in a nutshell

Botanists divide the plant kingdom into orders, the orders are divided into families, the families are divided into genera, and the genera are divided into species. Many species divide into smaller groups of subspecies and variety. Note that 'genera' is considered the correct plural of genus, but the anglicised plural 'genuses' is used increasingly often.

A plant's botanical name is generally made up of two words: the genus, which has a capital letter, followed by the species which begins with a lower-case

letter. The name is italicised. For example, wild parsley is *Petroselinum crispum*. (*Petroselinum* is the genus name and *crispum* the species name.) A subspecies or variety name may follow, also in lower case.

Sometimes a genus name has passed into everyday, informal English — for example, we talk about begonias, pelargoniums and brassicas. In this case the genus doesn't need to be italicised or capitalised.

Cultivars are plants that humans have selected, in cultivation or from the wild, for desirable characteristics, then maintained through continued propagation. The word 'cultivar' is usually thought to come from the words 'cultivated' and 'variety'.

ADOXACEAE Muskroot family

In New Zealand, Adoxaceae that grow wild include *Viburnum*, one genus that is rarely on the foragers' radar, and another, *Sambucus*, which sets the radar on high alert.

Some species of *Viburnum* have moderately edible berries, or specialised medicinal uses, but others are toxic.

Sambucus nigra, also known as elderberry, has many uses.

The Adoxaceae family is closely related to the Caprifoliaceae family, or honeysuckle family, and until recently was considered part of it.

ELDERBERRY *Sambucus nigra*

Spotting it

Elderberry bushes grow throughout the country but prefer cooler temperatures, so you'll mostly find them in the South Island and the southern half of the North Island.



They are deciduous and grow in unmanicured parks, old gardens, on farms and along country roads.

Their jagged-edged leaves — which grow darker as the season progresses — are distinctive, but their flowers are their showiest feature. These cover the bushes from around November to January. From afar the flowering bushes look as if they're covered in bright white saucers.

Once the flowers finish, they give way to clusters of berries that start green and gradually turn to deep, dark, reddish purple — almost black.

While many elderberry plants grow as shrubs, some end up as trees over time.

Using it

Only the flowers and berries are edible. All the green bits are mildly toxic. Some people find the raw berries indigestible even when ripe.

Elderflower syrup and cordial is expensive in shops so it's satisfying to make your own at home for little more than the cost of the sugar.

As well as making delicious syrups or drinks, the flowers can be infused as a tisane, either fresh or dried. They're also stunning as the star of a flower fritter (see recipe, page 236).

There's something surprisingly moreish about sweet, creamy things flavoured with elderflower. Infuse milk and cream with elderflowers to make panna cotta, try elderflower syrup over vanilla ice cream, or use the syrup as a flavouring for milkshakes or ice-cream sodas.

You can also make syrup, jam and jelly from the berries or add them to fruit pies. For some they are an acquired taste. My children, for example, can taste a single elderberry in a litre of smoothie and will reject said smoothie instantly.

Both the flowers and the berries have cooling properties, making them a great drink on a hot day. I try to save some loose berries plus some elderflower syrup in the freezer throughout summer for those extra-sweltering days that crop up as late as March. If you can save some even longer, for the flu season, it's better still.

Syrups and tisanes made from *Sambucus nigra* flowers and berries are used in many cultures for colds, coughs, fevers and inflamed sinuses. Anti-inflammatory, they also promote sweating and work as an expectorant. As well as this, they contain certain anti-viral compounds, and some recent research strongly suggests they are effective against symptoms of certain strains of flu.

Elderflowers have traditionally been used in natural and hand-made skin toners.

AIZOACEAE

Ice plant or fig marigold family

This family grows around the world on beaches and in deserts, and includes many succulents. Only a few Aizoaceae members grow wild in New Zealand, but most of those that do are edible, including ice plants, New Zealand spinach and its close relative, beach spinach.

Ice plants

HOROKAKA — NEW ZEALAND ICE PLANT

Disphyma australe

SEA FIG

Carpobrotus chilensis



FIG MARIGOLD

Carpobrotus edulis



Spotting them

Ice plants sprawl in mats across beaches around the country. *Carpobrotus edulis* is the big, yellow-flowered ice plant with thick, finger-like leaves that are three-sided in cross-section. It's an invasive pest from South Africa that vanquishes native plants and changes sand-dune structure. A purple-flowered species, *Carpobrotus chilensis*, is also naturalised.

Our native species, *Disphyma australe*, needs to be cherished. It has smaller, pink flowers and its leaves are smoothly curved like tapering tubes, rather than

three-sided. *Disphyma* fruits open in the rain, while *Carpobrotus* fruits don't. *Carpobrotus* species prefer to grow in sand, while *Disphyma* are more likely to be found on stony beaches. There is some overlap though, and *Carpobrotus edulis* plants can overrun native *Disphyma* or hybridise with them. You may be able to recognise the hybrid children. They're not quite as big as *Carpobrotus edulis* and their flowers are pink, orange, yellow or creamy white. They don't produce seeds like their parents, but can propagate from pieces of stem.

Carpobrotus edulis and its hybrids are on the National Pest Plant Accord, so it's good, when you can, to do your bit and pull up a few by the roots and dispose of them. Just be sure you're not pulling up *Disphyma*.

Using them

Succulent ice-plant leaves are harshly tannic and only barely edible raw, but they can be sliced and pickled. The plants flower all year, but most prolifically from around October to February. When a flower dies back the plant produces a fruit which, when ripe and yellowish, can be peeled or squeezed to reveal an edible, interestingly sweet mucilage. In South Africa ice-plant fruits are a valued jam and syrup ingredient.

New Zealand Europeans haven't used ice plant so much, but Māori uses are recorded, and foragers sometimes pick them as a wild treat. Greg Bennett from the Dune Restoration Trust of New Zealand says, 'When the flower dies off, pick the receptacle, and carefully squeeze it. A pinkish liquid will ooze out. This is very sweet and delicious.'

The astringent and antiseptic properties of ice plant juice have been appreciated by many cultures. It's used neat or in preparations such as syrups and vinegars. Applied externally, the juice soothes and protects grazed, irritated or inflamed skin. It can also be gargled or taken internally for stomach upsets.

Kōkihi

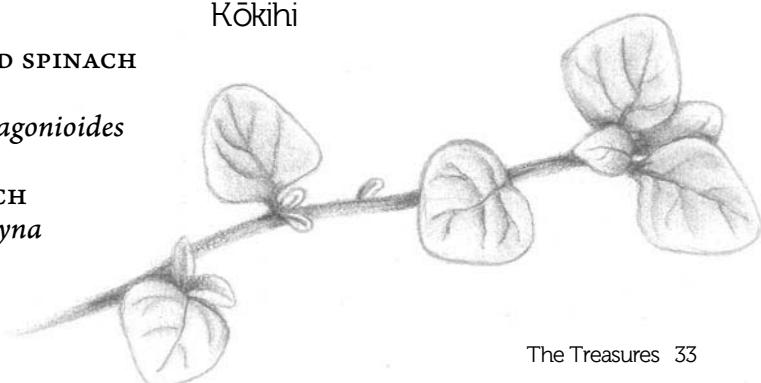
NEW ZEALAND SPINACH

(RIGHT)

Tetragonia tetragonoides

BEACH SPINACH

Tetragonia trigyna



Spotting them

These two closely related species form spreading bushes around the coast, preferring slightly shady places such as the dips between dunes. Beach spinach looks almost identical to New Zealand spinach and is easier to find, at least where I live.

The leaves of both are dark and fleshy and have a sour, salty taste. They produce small red berries that taste like the leaves, but are just a little sweeter and juicier. There are far fewer references to eating the fruits than the leaves, and some sources even describe the berries as inedible. However, my friend Lynda Eichler showed me that, at least in moderation, they seem to be fine. No one I know who has tried them has been adversely affected.

Using them

New Zealand spinach, native to New Zealand and other parts of the South Pacific, was first taken to the northern hemisphere by Captain James Cook, who recognised its value to his crew in helping prevent scurvy.

In the 1920s it was being promoted in the United States in Burpee's seed catalogues as 'the hot weather spinach', suggesting that it basked luxuriantly in the heat while other spinaches sagged and wilted.

It was imported into France and other parts of Europe as well as Britain and the United States, but it never caught on hugely, and to this day remains something of a cult vegetable. Overseas cooks sometimes refer to it as tetragon, which I think makes it sound as if it comes from another planet.

I love New Zealand spinach and beach spinach. If you find a good lush patch, treasure it. As with many plants, pick the young, growing tips. They make the best eating, and picking them encourages the plant to grow more voluminously.

What is so glorious about beach spinach is its vigour. Once picked, it lasts for days, especially in water or in the fridge. It also holds its shape and volume when cooked. It reminds me of a salty, sour kale, and I like to strip the leaves from their stems and use them in the same ways I use kale: boiled or steamed and served either on their own, or with butter or sauce; chopped and thrown into soups, sauces and casseroles; or shredded into salads.

Their tanginess is from oxalic acid, so bear in mind the 'Oxalates warning' on page 21.

AMARANTHACEAE

Amaranth family

This large and diverse family includes spinach, beets and quinoa. The edible species that grow wild in New Zealand demonstrate the widely varying forms taken by different family members; for example, lamb's quarters is a nondescript but very nutritious little garden weed, while samphire is a distinctive-looking succulent that hangs around water.

Chenopodiums

Spotting them

Numerous species in the *Chenopodium* genus grow wild in New Zealand. Some are hard to find. Some have small, barely edible leaves. Others smell terrible. But two that you'll find commonly throughout the country with decent-sized, pleasantly edible leaves are *Chenopodium album* and *Chenopodium murale*. Both have a

LAMB'S QUARTERS OR FAT-HEN
Chenopodium album



NETTLE-LEAF GOOSEFOOT
Chenopodium murale



potentially bamboozling array of common names, but I've heard *C. album* most commonly referred to as lamb's quarters, fat-hen or goosefoot, and *C. murale* most often called nettle-leaf goosefoot.

Lamb's quarters is well known as a wild edible, while nettle-leaf goosefoot is something of an unsung hero. Both are annual plants that form ball-shaped flowers in clusters huddled round stems. Nettle-leaf goosefoot is erect and can grow to about 75 cm tall. Lamb's quarters is often erect but can also spread, depending on the conditions.

Using them

When chenopodiums are young, you can use both the leaves and the stalks. Cook them or eat them raw in salads. As they grow larger and older, the stalks toughen and you need to strip the leaves off. The flowers and seeds can also be eaten cooked.

Treat them like their relative spinach: boil, steam or sauté them. They lose volume fast and really need only a minute or two of cooking. Lamb's quarters and nettle-leaf goosefoot both work well in any of the recipes for wild greens (see page 208). Like many greens with a sourness to them, they can be particularly delicious in a cream sauce.

Food writer Elizabeth Schneider describes lamb's quarter's flavour thus: 'Raw it tastes quite different from cooked, with a suggestion of peanuts, grass, and oddly, fruit. Cooked, the slightly waxy, fleshy, flavourful leaves have an earthy, walnut-like savor, and although green and spinachy, lack that vegetable's iron tang.'

Again, like spinach, the chenopodiums generally contain oxalic acid. *Chenopodium murale* is particularly rich in it. For more information, check the 'Oxalates warning' on page 21.



GARDEN ORACHE OR MOUNTAIN SPINACH *Atriplex hortensis*

Spotting it

Originally introduced by settlers as a culinary herb, garden orache has spearhead-shaped leaves that can range from green through to red. In fertile soil it can

grow to 2.5 m high. It's not widely grown these days to eat on its own, but is often found as part of a mesclun mix. Having escaped settler gardens, it now grows wild in many parts of the country, including Canterbury, Otago, Wellington and Hawke's Bay.

Using it

Garden orache is a bitter green — so bitter it's best mixed with other milder greens or boiled for just a minute to reduce its bitterness. As with chenopodiums, use whole young plants or older leaves stripped from the central stalk.

GLASSWORT OR BEADED SAMPHIRE

Sarcocornia quinqueflora

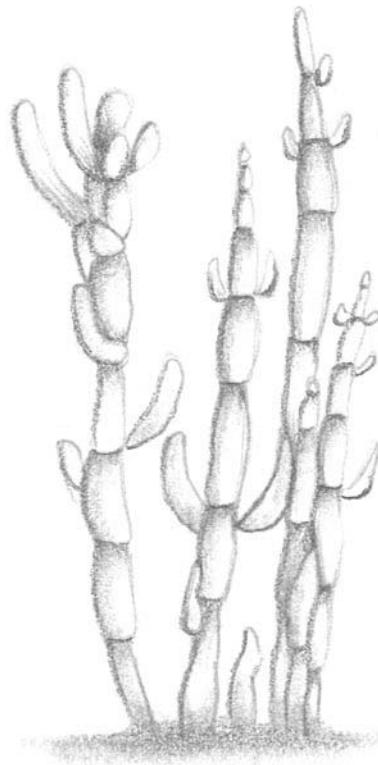
Spotting it

Around the world 'samphire' and 'glasswort' refer to various species in the *Salicornia* and *Sarcocornia* genera. These herbaceous plants have succulent, jointed stems and no leaves. They are salt tolerant and grow around beaches and salt marshes.

In New Zealand the species *Sarcocornia quinqueflora* grows around the North Island and parts of the South Island. The stems make the best eating in spring and early summer; after that they become tougher. Nonetheless, in Wellington at least, I have managed to find some that had some stalks quite tender enough to eat in early autumn.

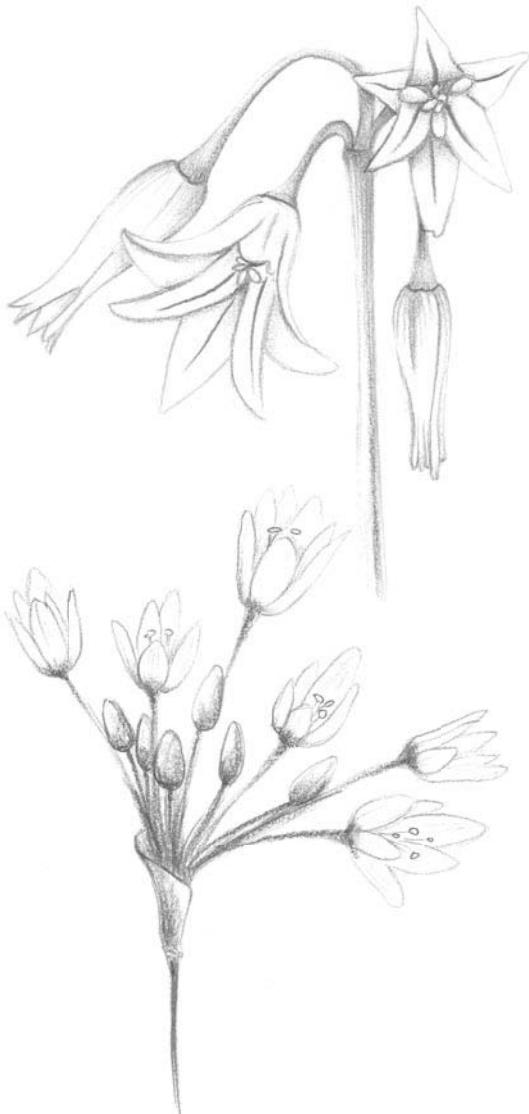
Using it

Samphire can be sliced and added to salads for salty crunch. In quantity it can be almost overpoweringly salty, but boiling it in a decent amount of water reduces this. It's delicious boiled or steamed for 2–5 minutes and served hot with a lemon-butter sauce or simply slathered in unsalted butter, perhaps with a dash of lemon juice or a sprinkling of lemon zest.



Potato is a good friend to samphire. Try adding samphire to a potato frittata, a warm or cold potato salad or crushed potato.

Samphire lends itself well to pickling, as well as frying in a tempura batter. It's great in soups and creamy pasta sauces. Whatever you add it to, remember to taste before adding extra salt, as you may find the dish is salty enough already.



AMARYLLIDACEAE

Amaryllis family

This family gives us popular flower genera including *Agapanthus* and *Amaryllis*, but it is perhaps most beloved for containing the edible *Allium* genus. Alliums include everything oniony, from chives and leeks to garlic and onions. They can be over-enthusiastic plants sprouting up where they're not welcome but they are good pickings for foragers.

Alliums

ONIONWEED OR THREE-CORNERED GARLIC (ABOVE)
Allium triquetrum

NAPLES ONION
Allium neapolitanum

ROSY GARLIC (LEFT)
Allium roseum

WILD ONION
Allium vineale

Spotting them

More and more introduced alliums, including garlic and chives in some places, are becoming naturalised in New Zealand. The four listed above have all been growing wild in New Zealand for many decades.

These bulb plants with grass-like leaves have clusters of flowers at the top of leafless stalks. Rosy garlic has pink flowers and the other three have white flowers. However, their most readily recognisable feature is the oniony or garlicky smell evident when you snap or crush a leaf.

The wild allium that many New Zealanders are particularly familiar with is *Allium triquetrum*, onionweed. It's said to have escaped from the gardens of European settlers who brought it here as a culinary herb. It's a native of Europe, and also common in the wilds of Britain.

Of the four, onionweed grows most rampantly throughout the country, often popping up in home gardens as well as around parks and farms, and announcing its presence from a distance with clouds of onion smell.

However, it's the less obvious *Allium vineale* that's taken most seriously as a problem. It's a pasture pest and growing where cows graze, it gives their milk an oniony taste.

Using them

If you know of a patch, dig up onionweed's small bulbs from the soil in winter and pickle them. It's best to soak them in water first and rub off the papery skins.

You can also steam or sauté the bulbs or chop them into salads. If young and tender, the grown plants can be sautéed whole or chopped and used just as you'd use spring onion. Chop the stringy larger stems very finely.

Onionweed flowers are a decorative addition to any salad or meal, with an oniony taste that's more delicate than the rest of the plant. They also make excellent tempura. Cut the stalk about half a centimetre down from the flowers. That's just enough to hold the flower cluster together, but isn't enough of the stalk to make it stringy. See the tempura recipe, page 220.

Chopped finely, onionweed leaves and flowers can be mixed into butter to make a more delicately flavoured garlic butter substitute. It's delicious spread on French bread and baked like garlic bread or daubed over fish. It's also good in combination with other wild herbs such as wood sorrel or parsley.

While onionweed is the allium you'll probably find most often, you may also come across others growing wild throughout the country. Both *Allium roseum* and *A. neapolitanum* can be used in the same way as onionweed.



STIR-FRIED TOFU & WILD ALLIUM

GF DF V

1 x 250 g packet tofu, drained
a pinch or two of chilli powder
1 tablespoon rice bran oil
1 teaspoon grated fresh ginger
1 cup onionweed or other wild allium chopped
1 tablespoon tamari or shoyu
½ teaspoon sugar
½ teaspoon sesame or peanut oil
a dash of kecap manis or fish sauce (optional)

Pat the tofu dry and sprinkle chilli powder over it.

Preheat the wok or pan, then add the oil.

Add the grated ginger to the pan and fry for a few seconds.

Add the tofu and fry till browned on each side.

Add the onionweed and fry until soft.

Add the tamari or shoyu, sugar and sesame or peanut oil, and kecap manis or fish sauce if using. Stir gently to coat the tofu.

APIACEAE

Carrot or parsley family

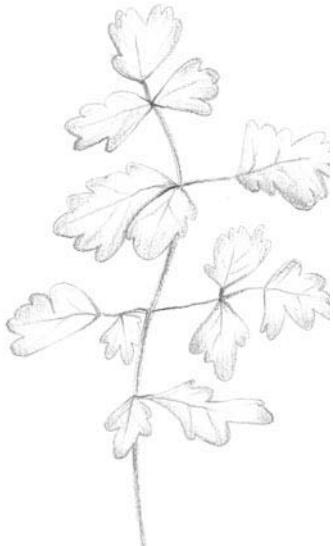
Here's another family that gives us a cornucopia of commonly cultivated species — parsley, carrot, celery, fennel, dill, coriander, parsnip and more. This family used to be called Umbelliferae because of their umbels — umbrella-like clusters of flowers on short stalks that radiate from a central point.

Usually the plants are herbs rather than shrubs or vines, and they're often aromatic. Many are edible but others are highly poisonous and can kill you. Most notorious is hemlock, and people gathering wild Apiaceae are warned to take extreme care to identify the plants they collect. (For a list of common poisonous plants, see page 19.)

Of the commonly foraged members of the Apiaceae family, wild carrot (*Daucus carota*) — often used in Western herbal medicine for bladder, kidney and menstrual

Celery

TUTAE KOAU —
NEW ZEALAND CELERY
Apium prostratum



WILD CELERY
Apium graveolens



problems — may be particularly likely to be confused with hemlock. One of the ways wild carrot is distinguished from hemlock is by its noticeably hairy stems.

Spotting them

Tutae koau is native to New Zealand as well as Australia and some Pacific islands. It grows around the coast and looks a bit like parsley, but more definite and substantial, with thicker, more markedly ridged stems and fleshier leaves. It's an immediately rewarding plant, and was one of the greens that Captain Cook harvested on his voyages here, in his efforts to prevent scurvy among his crew.

Wild celery on the other hand is an introduced plant that has escaped vegetable gardens. It's the same species of celery that our cultivated varieties come from.

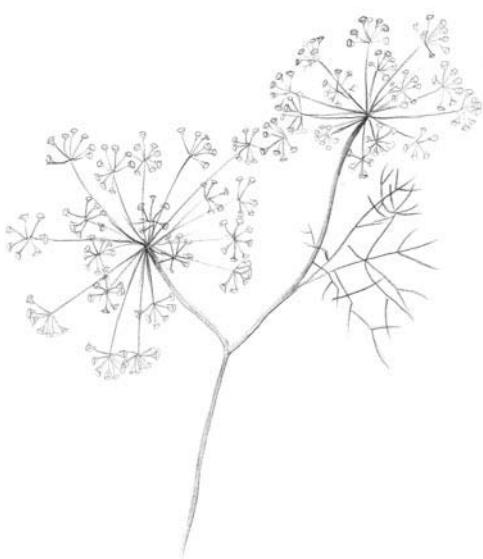
The cultivars have been bred to have enormous juicy stalks, and people often discard the leaves although they're quite edible. However, when *Apium graveolens* cultivars escape to weed-dom, their offspring rapidly reassume the species' original wild form, becoming more leafy and less stalky, much like parsley. They grow in

localised places throughout the country but are not among the easiest wild plants to find.

Using them

Both plants can be used like a robust parsley and are marvellous teamed with carrots and onion in traditional *mirepoix* combinations.

Tutae koau's complex and aromatic flavour is particularly entrancing. It's a lot like parsley, and a little like celery, but with an indefinable New Zealandness to it. Maybe it's my imagination, but I've come to think that if flavours were voices, then New Zealand native herbs would have a definite accent. There's a certain similar aromatic twang to the flavours of kawakawa, horopito, mānuka and tutae koau.



FENNEL

Foeniculum vulgare

Spotting it

Fennel is a perennial that grows prolifically in waste places, along roadsides, in weedy gardens and anywhere else it gets a seed-hold. It can grow up to 2 m high. With its crisp, strongly aromatic green stalks, feathery leaves and bright yellow flowers sending out clouds of aniseedy scent, it's hard to miss.

The fennel roots or bulbs you buy in stores are really the fleshy bases of the stalks from Florence fennel, a variety specially bred for this purpose. In the wild, fennel is much more stalky and leafy.

Using it

Fennel was introduced to New Zealand by settlers, probably as both a culinary and medicinal herb. It may have arrived with the sealers on Whenua Hou or Codfish Island, just off Rakiura or Stewart Island, where Māori and sealers formed a community. One hundred years later fennel was reportedly growing rampantly on the island.

Wild fennel has edible stems, leaves, flowers and seeds, and the pollen is considered a delicacy. Grainy and yellow, it's highly flavourful and can be used any time you'd use the finely chopped leaves, bearing in mind that it's stronger tasting.

Fennel has a natural affinity with dairy in both sweet and savoury dishes. Add the pollen or very finely chopped young fronds to buttery shortbread. Milk or cream infused with any part of the plant is ideal for making panna cotta, ice cream or junket. Use the pollen or very finely chopped fronds in butters, oils, creams, sauces or marinades for chicken, pork, fish or vegetables.

If you like, whether the dish is sweet or savoury, add a little orange zest as well. Fennel and orange is a classic combination.

You can roast, grill or barbecue wild fennel stalks with other vegetables to serve hot or to add to a cold roasted vegetable salad. Choose the younger, lighter coloured, more tender stalks and cook them only for about 10 minutes. You may want to strip away the outer layer of a stalk if it's a bit stringy.

The chemical that makes fennel smell aniseedy is anethol. Fennel also contains coumarins, the compounds that give drying hay its scent. As fennel pollen dries, the fresh aniseedy fragrance of the anethol gives way to a pervasive coumarinic scent reminiscent of fenugreek, which also contains coumarins. However, when you crush the fennel pollen or taste it, the anethol aroma is still strong.

Partly due to anethol, fennel is considered helpful for digestion. It's most famous as a carminative, meaning it gets rid of gas. Fennel essential oil is used in aromatherapy and perfumery.

How to gather fennel pollen

Gather fennel pollen in summer, shaking the flowers into a plastic or paper bag. The easiest way is to cut off the flowers first, place them upside down in the bag with stems sticking out, grip the stems and bag in your fist, and shake. Store the pollen in an airtight bag or container.



FENNEL & WHITE-CHOCOLATE BUTTONS

250 g block of white chocolate

1 tablespoon very finely chopped young fennel fronds OR
1 teaspoon fennel pollen

Break up the block of white chocolate.

Place it in a heatproof bowl.

Place the bowl over a saucepan of boiling water.

Add the fennel fronds or pollen to the chocolate and stir gently until
the chocolate is just melted and the fennel mixed through.

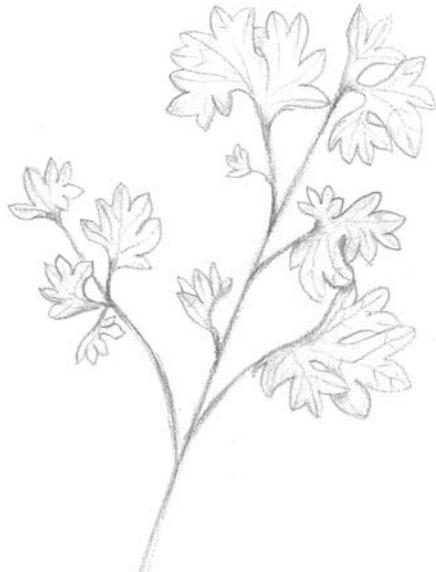
Remove the bowl from the saucepan.

Use a teaspoon to swirl little flat circles of the fennel-flavoured white
chocolate onto an oven tray lined with baking paper.

Leave to set.

Store in an airtight container in a cool place,
but not in the fridge.

You can alter the ratio of fennel to chocolate according to taste.



GARDEN PARSLEY *Petroselinum crispum*

Spotting it

Wild garden parsley grows in many parts
of the country, often in waste places,
round bush edges and near the coast.
Occasionally in the wild it's curly leafed,
but usually it's flat leafed. That's because
parsley's natural wild form has flat leaves.
Curly-leaved parsleys have been bred
to that form and parsley that escapes a
garden and ends up self-seeding returns
to its wild form quickly.

Using it

Wild parsley can of course be used just as you'd use 'tame' parsley. Every part of the plant is nutritious — the leaves, stems, flowers, seeds and roots.

The beauty of finding wild parsley is that there's often a lot of it, so you can feel free to dig it up by the roots. 'Bartowich Long' is a cultivated variety grown specifically for its long roots, but there's no reason why you shouldn't also use the roots of the wild versions for soups, sauces and roasts.

The siren call of parsley

My second pregnancy gave me a new perspective on an ancient tale. Consumed with a craving for raw dark greens, I ate bags of mesclun salad as if it were popcorn, and devoured bunches of parsley at a time. Unbeknown to me at the time, my iron levels were, in the midwife's words, 'in my boots'. All I knew was that I had to have those greens.

I thought of the story of Rapunzel and suddenly comprehended how a mother-to-be, staring over a wall at the lush greens in a witch's garden, might feel such a strong bodily need to eat those plants that, in a moment of desperation, she or her panicked husband might say or do almost anything.

In many versions of Rapunzel, including the Brothers Grimm's, the green is rampion, the name given to edible plants of the *Phyteum* genus in the Campanulaceae family. However, in an earlier version of the tale from Naples, the plant is parsley and the baby is named not Rapunzel but Petrosinella.

Despite the story and my own gorging on parsley, pregnant women are not supposed to consume too much parsley or its close relative celery, especially not the oil-rich seeds, as they contain known abortifacients. I've often wondered if behind the Rapunzel and Petrosinella stories — of hunger for nourishing greens — are coded warnings about the loss and grief that could be caused by eating too much of a particular species.

ASPARAGACEAE

Asparagus family

As well as the vegetable asparagus, this family gives us popular cultivated flowering plants, such as hostas and hyacinths, and also agave, from which the sugar alternative agave syrup is derived.

In New Zealand, the most celebrated member of the family is *tī kōuka* — the cabbage tree. Its relationship to asparagus is not surprising once you taste its edible leaf shoots.

Rengarenga or New Zealand rock lily (*Arthropodium cirratum*), which has edible rhizomes, is also a member of this family. Rengarenga grows wild throughout the North Island and the top of the South Island. With its vigorous clumps of green leaves and small, attractive white flowers, it has found favour as a garden ornamental.

Cabbage trees

Tī KŌUKA — CABBAGE TREE (LEFT)
Cordyline australis

Tī NGAHERE — FOREST CABBAGE TREE
Cordyline banksii

Tī RAURIKI — DWARF CABBAGE TREE
Cordyline pumilio

Tōī — MOUNTAIN CABBAGE TREE
Cordyline indivisa

Spotting them

Trees in the *Cordyline* genus grow all round the Pacific. Many people have noted that they resemble Dr Seuss's truffula trees, with their explosions of flax-like leaves atop straight or branching trunks. The one exception is tī rauriki, which is an explosion without a trunk.

The iconic native tī kōuka is the most common in New Zealand. It grows in open places throughout the country, often on farmland or bursting up through areas of native scrub.

Using them

In New Zealand, Samoa, Tonga, Hawaii and many other island groups, cabbage trees have a long history as a source of food, medicine and fibre. Across the Pacific 'Ti' is part of the local name, indicating that knowledge of these trees dates back to the earliest Pacific people. Māori selectively bred and cultivated tī kōuka.

Tougher and more weatherproof than harakeke, the leaves were used to thatch roofs and were woven into mats, ropes and sandals.

The leaves are highly flammable. They catch fire fast and make great kindling, even when slightly damp. Collect dried fallen leaves, and bunch them together as fire-starters.

To harvest food sustainably, reach inside the 'leaf explosions' for the central growing shoot, snap or twist it off, and leave the plant to grow new shoots.

Peel back the tough outer leaves of the shoot. Inside are delicious paler leaves surrounding a 'heart'. Cooked, these shoots offer up a beguiling mix of sweet and bitter tastes with similarities to artichoke and asparagus, and you can use them in recipes as substitutes for both. Boil them for about 6 minutes or roast them. If you throw them in with roasting vegetables, put them in towards the end, when there's about 10 minutes left to go.

Trial and error during cooking will tell you how far you need to peel back the leaves until you find the tender edible bits. It's better to strip away too few than too many leaves to start with. Before cooking a shoot, remove the stem from its middle.

Chef Charles Royal recommends harvesting them before the tree starts to seed.

Cordylines produce big creamy clouds of flowers in spring and summer. The scent is heady, distinctive and highly indolic. See page 96 for information about indoles. Cordyline flowers have potential in perfumery, and you can make some beautiful products at home, using just a few stalks of the flowers. Bear in mind that cordyline flowers don't tend to tincture well, but they make a divine pomade (a scent-infused fat) if this is the kind of earthy scent you like. For a pomade recipe, see page 265.

ASPLENIACEAE

Spleenwort family

This is one of many fern families in New Zealand. Ferns are plants that don't have flowers, but instead reproduce by spore. A lot of ferns contain carcinogens and it's not advisable to eat them. However, Māori culinary traditions include several that are safe, including mouku (hen and chickens fern) and pikopiko (common shield fern). 'Pikopiko' is also sometimes used as a generic term for any fern with edible fiddleheads.

MOUKU — HEN AND CHICKENS FERN

Asplenium bulbiferum



Spotting it

This fern has characteristic little bulbils on the tips of its leaves. These curled babies — the chickens — grow furled, then drop to the ground and grow into new ferns.

Mouku, also known as mother spleenwort, is common in lowland bush, especially near streams. The growing season is through spring and summer but varies from region to region.

Using it

From Native Americans to the Japanese, people around the world eat a wide range of fiddleheads from ferns. These are also

known as fiddlehead greens. The fiddleheads are the coiled shoots that burst up from the ground. Once they've unfurled, they're no longer edible.

Mouku fiddleheads are a delicious vegetable, raw or cooked. Raw, they're crisp with a mild, ever-so-slightly tart taste and are juicily mucilaginous as you chew them. They are mildest near the base and become slightly more bitter as you nibble up to the top of the spiral. They can be chopped into salads or boiled for about 2–5 minutes, steamed, stir-fried or baked. You can treat fiddleheads like asparagus.

Chef Charles Royal's advice is to harvest fiddleheads by snapping them off at the weak point near their base, only taking those that are less than 25 cm long.

To prep the fiddleheads, remove the small fern-shaped leaves along the main spiralling fiddlehead stalk and discard them. Then wash the main stalk well, rubbing off as many of the little brown spots along it as you can, as those spots are bitter.

The Japanese cook fiddleheads and serve them at room temperature, with shoyu and sesame seeds sprinkled over the top. They can also be puréed with a little butter, cream, cream cheese, oil or stock and perhaps a dash of lemon juice, then served as a sauce or side dish like any other vegetable purée.

With their curls and twirls and flourishes they are a beautiful food, offering many possibilities for gorgeous presentation.

Pikopiko will play tricks on you. Always look back after you have harvested an area, and I guarantee you one or two will be waving at you, smiling! You will be amazed you missed them.

CHARLES ROYAL, *COOKING WITH CHARLES ROYAL* (HUIA PUBLISHERS, 2010)

ASTERACEAE

Daisy or lettuce family

The enormous Asteraceae family includes daisies, lettuce, sunflowers, marigolds, thistles, chamomile, artichokes, salsify, chicory and foragers' favourites pūhā (sow thistle) and dandelion.

Most members of this family are herbaceous, but a few grow into shrubs or trees, and are known as tree daisies. A well-known native tree daisy is rangiora, with its large, soft, and smoothly hairy white-backed leaves. When we were children my sister and I loved to use those leaves as notepaper for secret messages.

Asteraceae species have composite flowers. This means the flowers are really clusters of much smaller flowers. For example, the centre of a daisy flower is made up of many tiny disc flowers, and the things that look like petals are, in fact, ray flowers encircling them. In contrast, dandelions have no disc flowers, only ray flowers.

The leaves of plants in this family are often highly edible but they can also be bitter, just like old bolted lettuce. The bitterness comes from the milky sap known as latex.

Nutritional experts often say we need more bitter in the modern diet. It's a taste we're not used to anymore, as our diets have shifted towards sweet and salty tastes, but bitters are vital aids to digestion.

Bitter tastes trigger a set of responses in the body that stimulate and enhance the digestive process, and help the body absorb nutrients. For the best effect at a meal, some people recommend you should eat something bitter about 15 minutes before the rest of the food.

All the same, it's possible to minimise the bitterness of these plants to reveal their subtle underlying flavours. Crushing the leaves and stems under running water as you rinse them will release some of the latex. Otherwise, you can boil the leaves in a large volume of water. If you boil them in just a little, more latex remains sitting in the leaves.

If you have ulcers or a reflux condition, avoid eating too many bitters, or at least check with a medical professional first.



Plants in the Asteraceae family contain a milky sap called latex. Latex is found in many plant families, but Asteraceae are particularly rich in it. In fact, *Lactuca*, which is the name of the lettuce genus, comes from the Latin word *lac*, meaning milk.



DANDELION

Taraxacum officinale

Spotting them

Dandelions are notoriously tricky to identify at first, because of the many look-alikes also growing wild. Collectively, plants with dandelion-like flowers have been nicknamed DYC_s — damn yellow composites.

Dandelions are distinguishable from other DYC_s by their smooth, usually highly toothed leaves, in combination with hollow, unbranching flower stems. But never fear if you get a different DYC, because they're all more or less edible.

Using them

Dandelions are extremely nutritious, and often described as a wild superfood. You can eat every part of the plant.

They're a diuretic, and in Western herbal medicine the leaves and roots, often taken as a tisane, are used to cleanse the kidneys and liver. Meanwhile, from dandelion flowers comes a gentle yellow dye for animal fibres.

Dandelion leaves are best to eat in spring before the flower comes up, and can be cooked quickly — wilted in hot oil or steamed — or eaten raw as a bitter salad green.

The leaves are often at their most bitter in autumn and winter. They're still perfectly edible, but you'll probably want to get lots of them and boil them in a good quantity of water. I've never found I needed to boil them for more than 10 minutes to get rid of the bitterness, but some people say you should boil them for up to half an hour.

To cut dandelion leaves, pull up the youngest leaves, which are the central ones in the rosette, and snip them off. If you're collecting lots, try to place them stems down in the bag so they don't ooze latex onto each other from their cut ends. Note that latex stains as well as tastes bitter.

Throughout the year, the new flowers and the flower buds of dandelions are edible, but they're most abundant in summer. The newest dandelion flowers are delicious. They really do need to be new ones, because they soon begin to produce the fluff for dandelion clocks, which can be hard to see when examining the flower, but can definitely be felt in your mouth.

To use the flowers as a vegetable, boil, steam or sauté them or dip them in batter and fry them as appealingly small, round fritters. Try tempura or a sweet fritter recipe sprinkled with icing sugar. You can also pull apart the flowers and sprinkle the yellow parts into or onto whatever food you like.

When it comes to flowerbuds, you can harvest them two ways. If you look at the base of a dandelion that's flowering or getting ready to flower, right in the centre of its rosette of leaves you'll often find one or two new buds getting ready to rise up on their stalks. Pluck them. The plumpest, yummiest buds come from the biggest dandelions, and these are often the plants in the longest, lushest grass.



Boil them, steam them or sauté them for just a few seconds. You can also pickle dandelion buds.

Alternatively, harvest the buds after they've grown a bit larger and begun to sprout up on their stalks. Cut them with several centimetres of stalk left on, and steam or boil them, stem and all. Serve them with seasoning, butter or a sauce like any other cooked green vegetable, or cool them quickly in cold water to serve in a salad.

When harvesting, be careful not to confuse the buds with the spent flowers that have closed and are getting ready to turn into dandelion clocks — they are far less appetising!

Dandelion coffee

The secret to making dandelion coffee, which is caffeine-free, is to oven-roast the roots on a low temperature for a long time. They shrink a lot, so start with a decent-sized bowlful.

Use a trowel to dig up the roots, either whole or leaving a little in the ground to regrow. Most people say the colder months are best for digging up and using the roots — that's when they are biggest and sweetest. However, legendary US forager Euell Gibbons wrote that he preferred to dig them in spring.

Give the roots a good wash and scrub, and if they're big, slice them horizontally into thick pieces. Roast them at 100°C for about 4 hours. Enjoy the smell that fills the kitchen!

They're ready to take out of the oven when the insides are a darker brown than the outsides and they snap easily between your fingers. You may find you can remove some before others.

Keep the dried roots whole in a jar until you're ready to use them. Pound the dried roots with a mortar and pestle or grind them in a spice or coffee grinder and use them in a plunger, just like ground coffee.

Pūhā — Sow thistles

NEW ZEALAND SOW THISTLE

THISTLE

Sonchus kirkii

COMMON SOW THISTLE

(RIGHT)

Sonchus oleraceus

PERENNIAL SOW THISTLE

Sonchus arvensis

PRICKLY SOW THISTLE

Sonchus asper

Spotting them

Sow thistles are DYC_s and

commonly called pūhā in New

Zealand. A sow thistle starts as a rosette of leaves, then sends up a strong central stalk, with smaller branches coming off it. It tends to grow flowers in little bunches, and grows best in moist, fertile places with a little shade.

Even within species, the plants can look quite different from each other. It depends on age, growing conditions and genes. In ideal conditions pūhā grows huge and lush. I've met a few plants that were taller than me. However, pūhā plants forced to lead a harder life often have small, sparse leaves with a purplish tinge.

Using them

Every above-ground part of pūhā, including the buds and flowers, can be eaten raw or cooked in a very similar way to dandelions.

The young leaves and stalks are quite bitter. As the plant grows older, the stems fill with more bitter, oozing latex, but the older leaves often seem to lose some bitterness. If you're using older stalks, do bruise or crush them as you rinse them to let the latex wash away, then boil them.

You can substitute pūhā for spinach in any recipe. As with spinach, allow for it to lose a lot of volume when cooked.

Sonchus species grow in numerous parts of the world and are regularly consumed in many different cultures. They are a vital part of Māori cuisine.



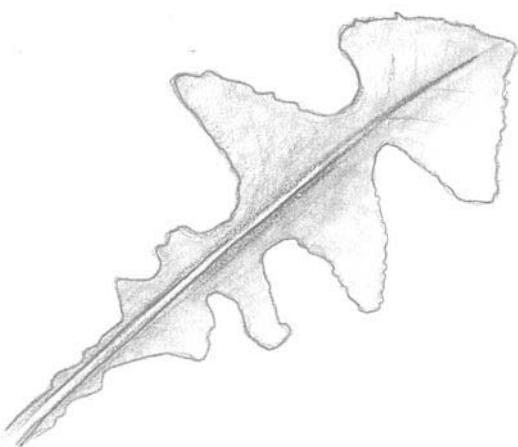
More damn yellow composites

ACRID LETTUCE
Lactuca virosa

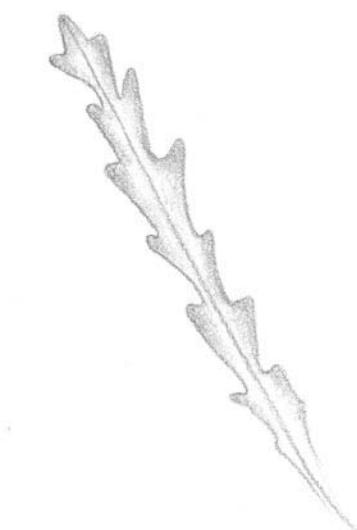
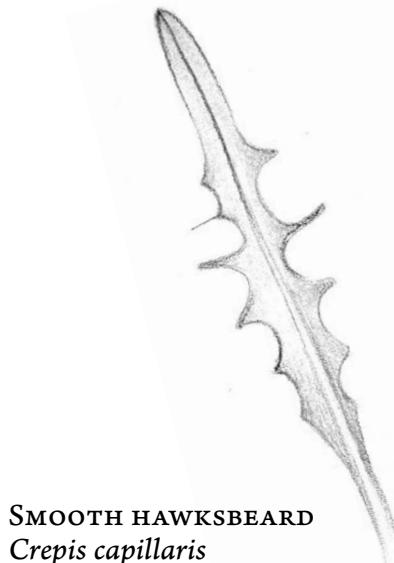
PRICKLY LETTUCE
Lactuca serriola

BEAKED HAWKSBEARD
Crepis vesicaria

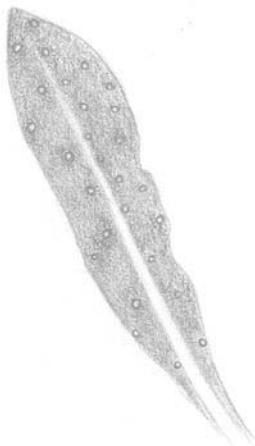
AUTUMN HAWKBIT
Leontodon autumnalis



HAWKBIT
Leontodon taraxacoides



BRISTLY OX-TONGUE
Picris echioides



CATSEAR
Hypochaeris radicata



BEARDED HAWKSBEARD
Crepis barbigera

SMOOTH CATSEAR
Hypochaeris glabra

Spotting them

Damn yellow composites (DYCs) are all those Asteraceae plants that have yellow dandelion-like flowers. Even common garden lettuce is a DYC.

It's interesting how many are named after bits of animal anatomy, even dandelion itself, which comes from the French for 'tooth of the lion.' They all start as a basal rosette of leaves that sends up stems, and they're all more or less edible.

I was determined at first to provide a comprehensive guide to almost all the DYCs growing wild in New Zealand, but I soon gave up. The epithet 'damn yellow composite' was not bestowed lightly. Not counting dandelions and pūhā, there are more than 30 DYC species growing wild in New Zealand — some hairy-leaved, some smooth, some branching, some unbranching, some with wavy or toothy leaves, others with smooth-edged leaves; some are annuals, some biennials, some perennials.

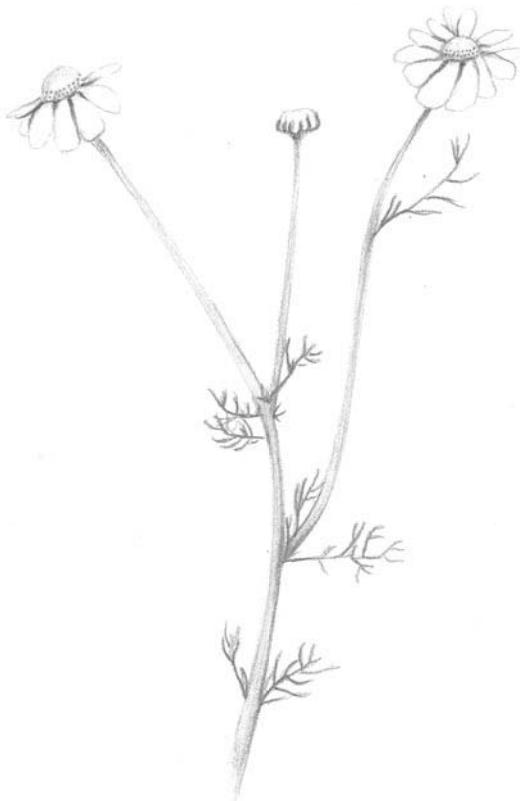
The ten I've listed above are some of the most widespread in New Zealand. Others grow more locally. Unless you're a botanist, take DYCs as they come, and use the entries on dandelions and pūhā as inspiration for how to treat them.

Using them

When you find a new one, experiment with it. Nibble its leaves to see how bitter they are. Decide if you could eat them raw or whether they might be nice cooked. Experiment with the difference between old and young leaves. See if they produce flowers or flowerbuds you could use. And see if the roots look big enough to roast and use to make a coffee substitute. Catsear and hawkbit can certainly be used this way; see page 52 for the recipe.

As ever, before experimenting be very sure you have a DYC. The best method to do that is to first inspect the plants when they're in flower.

Chamomiles



GERMAN CHAMOMILE (LEFT)

Matricaria recutita

RAYLESS CHAMOMILE OR PINEAPPLE WEED (OPPOSITE, TOP)

Matricaria discoidea syn.
Matricaria matricarioides

ROMAN CHAMOMILE *Chamaemelum nobile*

Spotting them

Roman chamomile is a sprawling or creeping perennial plant with a fruity, apple-like scent. It has feathery green leaves and white flowers with raised, cone-shaped centres.

German chamomile looks and smells quite similar to Roman chamomile, but it's an annual that grows upright. In New Zealand, it's found wild only occasionally in localised patches, although it self-seeds readily in a garden.

Rayless chamomile, an annual in the same genus as German chamomile, grows commonly throughout the country, and is easily distinguished. It has feathery leaves and a yellow cone-shaped flower centre; however, the white petals edging the centres are vestigial, barely there at all. The plant has an almost pineappley scent. In a lawn it's tiny, trying to cram its entire life-cycle into the period between mows. In long grass it grows to a more useable size.

Using them

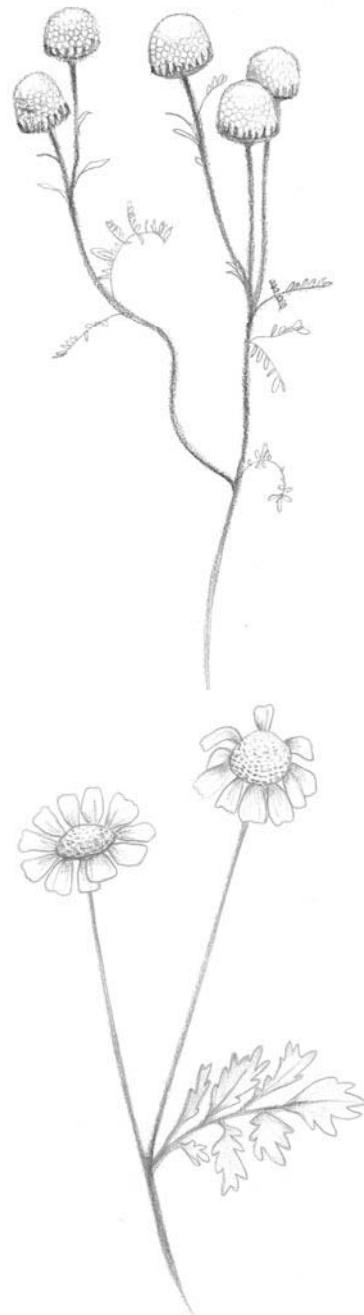
German chamomile is the most popular, but all three have some similar properties. Their medicinal uses are numerous. Some people call them 'a pharmacy in a flower'. The flowers are the part most often used medicinally — the yellow centres contain high concentrations of active ingredients.

Chamomile tisane is particularly noted as a mild and gentle sedative, and also a soothing treatment for a stomach upset by nerves. Note though that a few people find this tisane has the opposite effect — it makes them queasy or outright nauseous.

Chamomile flowers and leaves can be eaten either raw or cooked. The flowers can also be used as a flavouring to infuse alcohols, vinegars, oils or syrups, imparting a mix of fruity, green and bitter notes.

More damn white composites

FEVERFEW (RIGHT)
Tanacetum parthenium





OXEYE DAISY (LEFT)
Leucanthemum vulgare

STINKING MAYWEED (BOTTOM)
Anthemis cotula

Spotting them

Not only do foragers have to contend with DYC_s, but DW_Cs — damn *white* composites. These are the numerous plants that have daisy-like flowers with yellow centres and white ‘petals’. The chamomiles may be to DW_Cs what the dandelion is to DYC_s.

In New Zealand, there aren’t quite as many DW_Cs as DYC_s, but here are three of the most common.

Feverfew is an aromatic perennial that grows as a very small bush. Some flowers are double, others are single. The leaves and petals tend to be slightly shorter and wider than those of many other similar plants.

Oxeye daisy has a relatively flat centre — while many DW_Cs have cone-shaped centres. Its leaves are not as feathery as those of most other DW_Cs.

Stinking mayweed looks very similar to Roman chamomile, but has a strong smell that many people find unpleasant.

Using them

These plants are generally safe to ingest in moderate amounts, although some people do have allergies to members of the Asteraceae family. The flowerbuds can be pickled and the open flowers can be used for making fritters, in salads or as edible garnishes.

Feverfew has several applications in herbal medicine, most notably as a preventative treatment for migraines.

POT MARIGOLD

Calendula officinalis

Spotting it

This easy-care plant is widely grown in gardens and sometimes finds its way over the fence and into the wild. It looks like a big, cheerful orange or, sometimes, pale yellow daisy.

Using it

Most marigolds have edible flowers. Generally the petals are pulled off and sprinkled into salads or across other dishes, or added into infusions or baked goods for colour and extra nutrition.

The flowers are important in herbal medicine, having antimicrobial properties. They are also used in skincare products; a calendula infusion is often recommended as a wash for acne.

YARROW

Achillea millefolium

Spotting it

Yarrow has feathery leaves and tiny, usually white, composite flowers in wide clusters. The flowers can also be pale pink.

Using it

Yarrow contains many active compounds and is used in herbal medicine for numerous ailments. As with chamomile, an infusion of the flowers makes a calming, sedative tisane.

Yarrow is particularly well known as a herb for treating wounds, as it contains antiseptic and blood-clotting compounds. Some people make a poultice from the leaves and flowers for this, while others use only the leaves.

You can also cook and eat the leaves.





BORAGINACEAE

Borage or forget-me-not family

This family is a hairy lot. Almost all of its 2000 species have hairy leaves, although the forms vary widely from shrubs and trees to herbs. Many have blue flowers. Pretty forget-me-not is a well-known family member.

BORAGE

Borago officinale

Spotting it

An annual or sometimes biennial plant that can grow up to 60 cm high, borage has hairy stems and hairy leaves with a wrinkly texture. It has distinctive star-shaped flowers that are usually a shade of blue, although some cultivated plants have white flowers. It's the flowers that will help you identify it most reliably.

Wild, it's found here and there throughout the country, and in gardens it often self-seeds.

Using it

Many people like to plant borage in their gardens as a companion plant and to attract bees. The leaves are crisp to eat and have a distinct cucumber flavour. As with other hirsute-leaved plants, if you're eating them raw, disguise their texture in a sandwich or wrap, or by slicing them finely in salads.

They also make a delicious cooked green. Whole, cut or torn, the leaves can be boiled just for a minute or two to soften them or they can be very briefly sautéed in oil or butter.

The leaves contain very low levels of toxic pyrrolizidine alkaloids (PA), so some people advise that you enjoy them sparingly. Note that borage doesn't contain PA in anywhere near the same high quantities as its relative comfrey can.

Borage flowers, either plain or candied, are a much-loved garnish. Like the leaves, they make a dainty sandwich ingredient. They are pretty in salads, and you can freeze borage flowers in ice cubes to put in party drinks. UK food writer Frances Bissell makes a striking blue pesto by using handfuls of borage flowers instead of any greens.

Comfreys

COMMON COMFREY

Symphytum officinale

ROUGH COMFREY

Symphytum asperum

RUSSIAN COMFREY

Symphytum x uplandicum

Spotting them

Russian comfrey is a cross between the other two comfreys mentioned above, and grows wild more often around New Zealand than either of its parents.

Comfreys can grow 80–100 cm tall. They have large hairy leaves and attractive bell-like flowers in drooping clusters. The flowers of rough comfrey are purplish, while those of common comfrey are creamy white or pale pink, although when they dry they become more purple. Russian comfrey may have pink *or* purple flowers.

Using them

Not so long ago some people liked to eat comfrey plants like any other leafy green, and the leaves and roots were also widely used in herbal medicine. A tisane was drunk as a general tonic, and poultices, ointments, washes and other preparations were enthusiastically applied to wounds and broken bones. Comfrey contains a number of medicinal compounds, including powerful allantoin — which stimulates healthy tissue growth and helps injuries heal.

Around the 1980s and 1990s, concern grew about the toxicity of pyrrolizidine alkaloids (PA), which comfreys contain in quantity. Since then many herbalists recommend avoiding comfrey altogether or keeping its use to a minimum — especially its internal consumption.

For the benefits of allantoin a safer alternative, as far as we know, is plantain. (See page 109.)

There are, however, less fraught ways to use comfrey. Organic gardeners value it as a mulch and make it into a liquid fertiliser by fermenting the leaves in water for 3–5 weeks.

BRASSICACEAE

Cabbage or mustard family

This family of plants has given humans the raw material from which to cultivate many popular vegetables, including broccoli and cauliflower, selectively bred for giant edible flowerheads; kale for firm, delicious leaves; radishes, turnips and horseradish for swollen edible roots; and a number of species for their seeds.

Several species of Brassicaceae grow wild round New Zealand. Many are cultivated varieties that have escaped from gardens and then, over one or more generations, reverted to their wild form.

The naturalisation of Brassicaceae began soon after the crew from Captain Cook's second voyage to New Zealand planted gardens in Totaranui, or Queen Charlotte Sound, and gifted vegetables to Māori leaders. Plants that went wild early on included cabbage, turnip and radish. Professor of Anthropology Helen Leach says: 'This process would have been encouraged by the withdrawal of European seed selection practices, as well as Māori interest in maintaining scattered and sometimes infrequently visited gardens.'

Almost all Brassicaceae are rich in glucosinolates — compounds that contain sulphur and nitrogen. Sometimes called mustard oils, the glucosinolates give the plants their mustard flavour.

Most wild Brassicaceae are edible, but to be on the safe side, avoid gathering them from places that are subject to farm run-off or may have been very heavily fertilised. Many Brassicaceae can absorb and retain large quantities of nitrates, and they are toxic in very high doses.

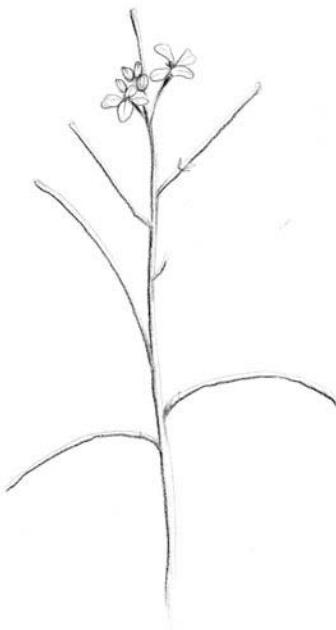
Wild mustards

Spotting them

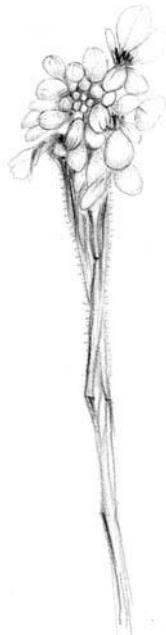
You can recognise Brassicaceae most easily when they're in flower. They have distinctive flowers with four petals in the shape of a cross, and six stamens. Their former family name, Cruciferae, means cross-shaped. The flowers are usually yellow, but can also be white or pink. They grow all over the place, very often on wastelands and roadsides.

It can take a season or two to recognise the different Brassicaceae. Once you've identified their flowers, you can keep a close eye on the plants throughout the year and you'll begin to recognise their various stages before they flower. They begin as

ORIENTAL MUSTARD, INDIAN
HEDGE MUSTARD OR EASTERN
ROCKET
Sisymbrium orientale



HEDGE MUSTARD
Sisymbrium officinale



rosettes close to the ground. The rosettes send up stalks with leaves that can look quite different to the leaves of the rosette, and often become more bitter.

Wild turnip and twiggy turnip look similar to each other, but twiggy turnip has smaller leaves with slightly more rounded, curvy edges and a smoother feel. Twiggy turnip also has paler flowers and smaller seedpods than wild turnip.

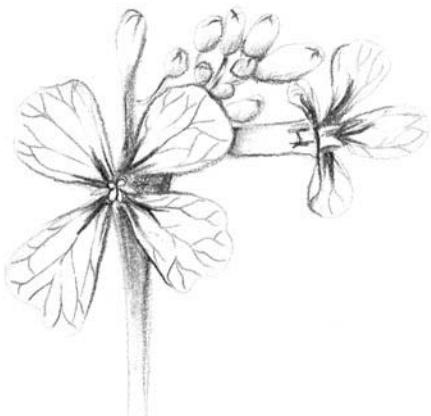
Radish and wild radish are distinguishable from the others because they have hairy leaves and stems.

Using them

All parts of the Brassicaceae species are edible. The leaves and roots are best to eat during the rosette stage, so it's worth getting to know what the plants look like in this form.

RADISH

Raphanus sativus



WILD RADISH

Raphanus raphanistrum



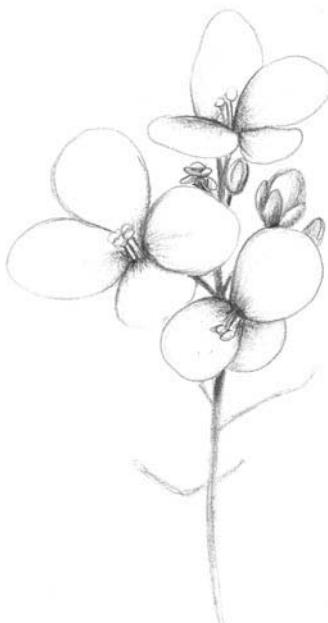
TWIGGY TURNIP

Brassica fruticulosa



WILD TURNIP

Brassica rapa ssp sylvestris



The young leaves that have just emerged from the ground in a rosette are bitter and mustardy — good raw or cooked. You only need to fry or steam them for a few seconds, as they quickly lose volume, along with a lot of their distinctive mustardiness when cooked.

Before they flower, wild mustards form little clusters of edible flowerbuds that look like mini broccoli heads. These are edible, too, and need only the tiniest amount of cooking — from a few seconds to a minute, boiled, steamed or sautéed. They are usually more bitter than the broccoli we're used to, so you may want to add a little salt or sugar during cooking.

The flowers themselves are quite edible and a colourful addition to any dish. Once they've flowered, they form seed pods, or racemes, that can be collected and dried until they release their hot, edible seeds.

The roots of the young plants are edible, but older ones are too stringy.



Harvesting mustard seeds

Gather the seed pods and spread them on a plate to dry in the sun. As the pods dry, they split and release the seeds. Collect the seeds and store them in an airtight container.

Use them just like store-bought mustard seeds. To make a basic mustard paste, soak the seeds in vinegar for 1-2 days, topping up if they absorb it all. Then simply pound to a paste.



FRESH MUSTARD

This recipe is from a healthy food cookbook by New Zealanders Anna and Roger Wilde. Real Fresh Food: Healthy Meals for Busy People, published in 2009 by New Holland, is an eclectic and sensible approach to healthy eating, full of healthy, yummy, but genuinely quick recipes to make. I love the way the Wildes seamlessly incorporate foraged foods whenever they can. If you haven't got a blender you can use a mortar and pestle to grind the seeds.

½ cup mustard seeds
½ cup water
¼ cup apple cider vinegar
½ teaspoon sea salt
½ small apple grated
1 tablespoon raw honey

Soak mustard seeds in water overnight. The seeds will absorb all the water.

Drain soaked mustard seeds. Place in blender along with other ingredients. Blend till well combined.

Use this as a substitute for wholegrain mustard in dressings and sauces. It will keep in the fridge for at least two months.



SHEPHERD'S PURSE *Capsella bursa-pastoris*

Spotting it

Shepherd's purse generally grows as a smaller plant than the wild mustards. Its four-petalled flowers are white and so small you can only just see that they are arranged like a cross.

The easiest way to recognise this plant is by the little heart-shaped seed pods that it's named for — a ram's testicular sac, sometimes called its 'purse', has a similar shape. Whether in that context the word purse is used simply in the sense of a container for valuables, or whether shepherds really did make purses from ram's testicles, as some sources claim, is debated!

Using it

Shepherd's purse isn't as useful as the other mustard greens. Its lush new leaves are good in salads and cooked, and can be treated just like other mustard greens, but its seeds are too small to do anything with.

The shepherd's purse-ginger substitute myth

Shepherd's purse roots have been recommended many times as a substitute for ginger. This always puzzled me, as the roots are almost odourless, save for an odd musky, mustardy scent they sometimes release when you dig them up. Nor do they taste anything like ginger. They're just bitter and a bit mustardy.

I was delighted to read in *Edible Wild Plants* by John Kallas that he'd been equally bamboozled, and had gone in search of an answer. He discovered it all went back to someone misquoting Nelson Coon's book *Using Wayside Plants*, published by Heartwind in 1960. The misquote was then repeated by numerous sources.

Cresses

BOG YELLOWCRESS

Rorippa palustris

CREEPING YELLOWCRESS

Rorippa sylvestris

MATANGOA — NEW ZEALAND

WATERCRESS

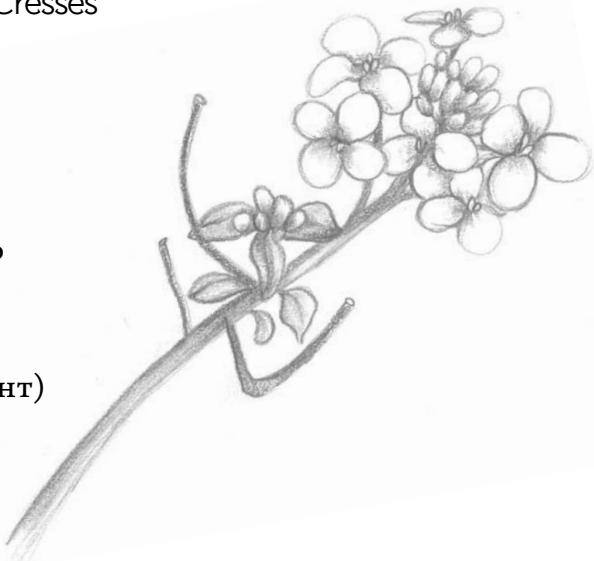
Rorippa divaricata

ONE-ROW YELLOWCRESS (RIGHT)

Nasturtium microphyllum

WATERCRESS

Nasturtium officinale



Spotting them

The mustardy, small-leaved greens we call cresses often love damp places.

Nasturtium officinale and *N. microphyllum*, both watercresses, look very similar to each other and grow throughout the country in streams and ditches.

Rorippa sylvestris and *R. palustris* grow in streams, riverbeds, marshes and boggy paddocks. *R. divaricata*, the rarest in the wild, prefers drier places.

Rorippa genus and *Nasturtium* genus are closely related to each other. Not so long ago all five of the plants here were classified *Rorippa*.

The *Nasturtium* genus is not to be confused with the plant that has big round leaves and orangey flowers and is commonly called nasturtium. That nasturtium is actually in the genus *Tropaeolum*.

Using them

- ➲ Be careful where you harvest from as, sadly, these days many New Zealand waterways are polluted.
- ➲ Test the stalks to see how tough or stringy they are, then decide whether you want to leave them whole, finely chop them or pick them over to remove the coarsest bits.
- ➲ Cresses are marvellous salad ingredients, and with their petite leaves also make good garnishes. They're great in soups, sauces and casseroles and can be added at the last minute to ensure they don't lose too much volume or mustardiness.

CARYOPHYLLACEAE Pink or carnation family

Most Caryophyllaceae are herbaceous. Two genera in the family — *Dianthus* (carnations) and *Gypsophila* — provide floristry staples.

Another species, *Colobanthus quitensis* (Antarctic pearlwort), is one of only two flowering plants in Antarctica. As Antarctic air temperatures have increased, the pearlwort has spread to new territory and begun to grow more lushly. Researchers are keeping a close eye on this species to see how it continues to respond to global warming.

Two particularly useful plants of the Caryophyllaceae family — chickweed and soapwort — grow wild in New Zealand.

COMMON CHICKWEED *Stellaria media*

Spotting it

Chickweed likes to grow wild in gardens and will quickly take over a bed of soil you've just cleared. It pops up in the unmowed areas of parks and reserves, starting life as a mat of tangly stems with small teardrop-shaped leaves. The stems and leaves often get bigger and bushier, and if you cut it back it regrows more lushly.

Its tiny, star-like white flowers look as if they have ten petals, but if you peer closely you can see they have five petals with splits down their middles. Another distinguishing feature that can be difficult to see is the single row of hairs on the stem.

Using it

It's hard to grab a handful of chickweed without also bringing bits of other unwanted weed. The easiest way to harvest it is to find the tips, pull them upwards, and snip off the best-looking bits.

Chickweed contains B vitamins, as well as vitamins C and D. It's also a respectable source of iron, copper, calcium and sodium.

Raw chickweed snipped up into little pieces 2–3 cm long is a healthy and yummy salad ingredient, and reminds me of alfalfa sprouts. It's valuable in wild salads because it has such a mild taste and can balance out more intense-tasting wild greens.

You can also cook it in a stir-fry or add it to a soup, sauce or casserole at the last minute. For cooking, I like to cut it up into shorter pieces, 1–2 cm long, to avoid a stringy mouth feel. Chickweed can also be puréed before being added to a cooked dish.

Chickweed contains saponins — compounds that lather up like soap. That makes it an especially creamy pesto ingredient. You can throw it into a smoothie for added nutritional value as well as extra frothiness!

The saponins also make chickweed medicinally valuable as a soothing and healing skin treatment. In herbal medicine, chickweed poultices or compresses are used for eczema, insect bites and other itchy skin conditions.



MOUSE-EAR CHICKWEED

Cerastium fontanum

STICKY OR ANNUAL MOUSE-EAR CHICKWEED

Cerastium glomeratum

Spotting them

Mouse-ear chickweeds look very similar to regular chickweed, with small-leaved stems and white flowers with five split petals, but the leaves are hairy and the plants don't grow so abundantly and lushly.

Using them

Although mouse-ear chickweeds are not as appealing as regular chickweed, they're quite edible. Pounded into a pesto or chopped into very short pieces and cooked with other things to disguise the hairy texture, they make a nutritious addition to a dish.



'Chickweed is an old friend that has sustained me through thick and thin. I pick it and usually eat it on the spot'

SANDOR KATZ, AUTHOR, TEACHER, FOOD ACTIVIST,
FERMENTATION GURU



SOAPWORT

Saponaria officinalis

Spotting it

Soapwort does sometimes escape from gardens, but it doesn't seem to travel very far, so patches are localised. Soapwort has been spotted growing wild in Tauranga, Picton, Moutere, Christchurch, Darfield, Inangahua and around Alexandra.

It has opposite leaves on strong stems and pink flowers in clusters. Single flowers have five petals, but soapwort can also produce double flowers.

Using it

Soapwort is valued for its root, which is full of saponins. To make a gentle fabric cleaner or shampoo, grate the root and boil it in water.

SWEET WILLIAM *Dianthus barbatus*

Spotting it

If you're lucky, you might come across sweet William in a grassy field or clearing. These plants have spear-shaped green leaves with flowers on stalks, in dense rounded clusters. The flowers have five petals with serrated edges.

While cultivated sweet Williams come in all manner of pinks, whites and reds, when the species reverts to its wild form, the petals are red with a white base.

Using it

The spicy, scented flowers are edible. You can use them in salads, as garnishes or to infuse syrups, cream and other desserty things.

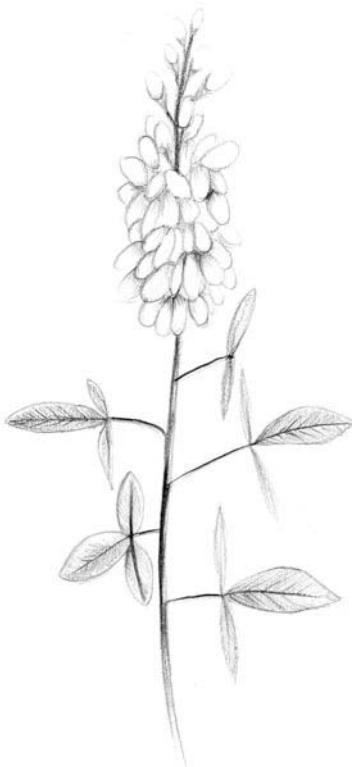


FABACEAE Pea or legume family

Fabaceae includes 18,000 species, so there is a huge variety of plant forms within the family. Many of the plants — including peas, beans, chickpeas, soya beans, clover, peanuts, alfalfa, licorice, gorse, broom and many more — have been important to humanity. The family is best known for two particular qualities.

The first is that as the plants grow they fix atmospheric nitrogen, thereby increasing soil fertility.

The second is that many species in the family contain isoflavones — plant oestrogens. This inspires mixed feelings. Isoflavones mimic the effect of human oestrogen in the human body. While some Fabaceae plants, notably red clover, are revered for their isoflavones and used medicinally in a targeted way, other isoflavone-rich plants in the family, such as soya bean, make people uneasy.



Broom

BROOM, COMMON BROOM OR SCOTCH BROOM
Cytisus scoparius

MONTPELLIER BROOM
Genista monspessulana

SWEET BROOM (LEFT)
Genista stenopetala

SPANISH BROOM
Spartium junceum

Spotting them

Numerous plant species around the world are called broom. When I asked botanist Philip Garnock-Jones to define 'broom', he replied, only half jokingly, 'Any shrub in the Fabaceae family that you could imagine bundling together the branches of and using as a broom'. Indeed, *scoparius*, the species name of common broom, means 'one who sweeps'.

Brooms are a group of closely related genera that grow as shrubs, have numerous stems with small leaves, and small, pretty flowers that are almost always yellow. This includes the four named above.

In New Zealand, several brooms have escaped from cultivation to become naturalised. *Cytisus scoparius* and to a slightly lesser extent *Genista monspessulana* are particularly widespread, and have become despised pests in some regions.

Meanwhile *G. stenopetala*, which grows throughout the country but in a more localised way, has not upset too many people. For that I'm grateful. This is one of the most lusciously scented plants you will ever encounter. It turns on flowers for most of the year, but most profusely in summer. When the sun warms its petals, an almost impossibly sweet and fruity scent fills the air. Its scent distinguishes it from similar-looking brooms, which are unscented.

Spartium junceum is another broom identifiable by its unusually good, strong scent. It can grow up to 3 m high and its mature rounded green twigs have few, if any, leaves.

Using them

A 2007 European study in the *Journal of Ethnobiology and Ethnomedicine* found that across Bulgaria, Italy, Macedonia and Romania about 108 different species of plant were used to make brooms, belonging to 37 different families. Eight of those species were from the Fabaceae family.

The other common application for broom plants — those that are fragrant — is in perfumery. *Spartium junceum*, in particular, has a whole industry built around it. An extract made from the flowers of this species is a very fine and expensive perfumery ingredient known as genêt, the French for this plant. Genêt has a floral fragrance mingled with notes of honey, hay and tea.

Both Spanish broom and sweet broom make marvellous ingredients in hand-made perfumes; see page 271 for more information.



A short history of brooms

Historically, and still in parts of the world where there are no vacuum cleaners or other modern cleaning products, a broom is an essential implement. Brooms keep order around indoor-living and working spaces, as well as in farmyards, on streets and around areas used for spiritual rituals.

A household may prize an array of brooms of different sizes, textures and densities, created from different plants for different purposes. Making them is a valued craft.

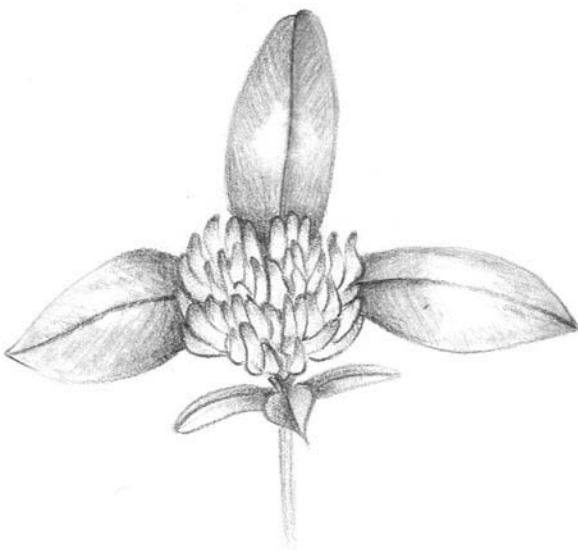
Brooms for sweeping hot hearths and ovens are sometimes made from aromatic plants, because they release their aroma as they brush the hot surface. For that reason, I think mānuka branches would make great hearth brooms.

DIY brooms

You can make a simple traditional broom by gathering the branches of a broom plant and bunching them together. Wind cord tightly around the top half or two-thirds to hold the branches together as a handle, while leaving the bottom part open as the brush end. Use it fresh or leave it to dry. A slightly more sophisticated method requires attaching a separate broom handle.



Clover



ALSIKE CLOVER *Trifolium hybridum*

RED CLOVER (LEFT) *Trifolium pratense*

WHITE CLOVER *Trifolium repens*

Spotting them

There are several clovers of the *Trifolium* genus growing wild in New Zealand, but the three above are probably the most common. They're distinctive for their three-part leaves and orb-like flowers.

Using them

City folk sometimes overlook clovers, tending to think of them as common lawn flowers and cow food. Children see them as more special — often including them in the small bouquets they like to lovingly gift to family members.

When I was growing up, I would spend ages poking through clover patches trying to find four-leaved clovers, until we discovered a motherlode beside the garage. We then suspected that any number of these mutants could be created with a little exposure to petrol, rubber or exhaust!

Clover petals have sweet nectar at their bases, and can be pulled apart and sprinkled into salad or onto biscuits, cakes and desserts as edible garnish. The leaves are quite edible, too, although most people are underwhelmed by that thought.

Where they grow lushly, red clover flowers have a gorgeous honeyed fragrance, but it doesn't last long after picking and is hard to capture. It's probably best enjoyed on the plant.

Dried or fresh red clover flowers also make a pleasant mild-flavoured tisane. They're highly valued by some for the oestrogenic isoflavones they contain, and are said to help with troublesome symptoms of menopause. Many over-the-counter treatments contain red clover extracts.

GORSE

Ulex europaeus

Spotting it

You can hardly miss gorse. Introduced by settlers as a hedge plant because it was easier and cheaper than building fences, it soon ran wild.

This spiky pest does have one redeeming feature — it acts as a good nursery plant for areas of regenerating native bush. Leave a field of gorse alone for a few decades, and natives will seed and grow in the nitrogen-rich soil under its prickly protection. Eventually the natives burst through and shade out the gorse. Having served its purpose, the gorse dies.

Using it

Gorse flowers are edible, although I'd exercise moderation, as there are health concerns around consuming flowers from related broom species.

These flowers have a sweet, coconutty smell that fills the air on a warm day. Many foragers have tried unsuccessfully to capture this aroma in wines, cordials and ice creams. It may be one of the great foraging challenges of our times.

If you're not up for it, just use them for their sunny colour as a garnish, thrown into salads, pickled or steeped in liquid to impart a golden hue.

FAGACEAE

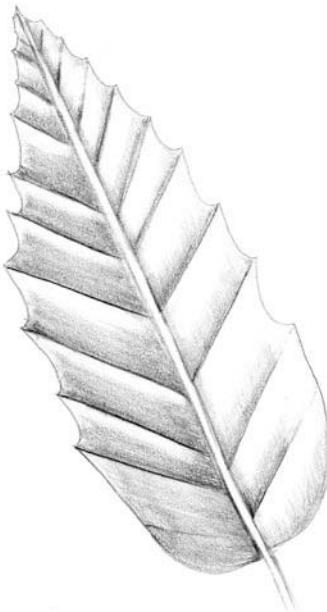
Beech family

Fagaceae is a family of trees and shrubs that have catkin flowers. Some are deciduous, some evergreen. The most well known family members, in the West at least, are oaks, beeches and chestnuts. Chestnuts, trees in the *Castanea* genus, are great foragers' fare.

Chestnuts

JAPANESE CHESTNUT

Castanea crenata



SWEET CHESTNUT OR MARRON

Castanea sativa

Spotting them

Old chestnut trees, many planted by settlers, grow throughout New Zealand. There are several species of chestnut worldwide, but those in New Zealand are usually Japanese chestnut, sweet chestnut or a hybrid of the two.

Chestnuts can be recognised by their green fruits with many porcupine-like spines. These fruits are called burrs.

Edible chestnuts are not to be confused with horse chestnuts, which have burrs with sparser spikes — looking more like cats' teeth than porcupine spines. The horse chestnut is poisonous; see 'Allergy alert', page 18.

Using them

Let chestnut burrs ripen on the tree. After they fall in autumn and winter, allow the burrs a few days to open. Then the nuts will be riper and you can extract them more easily. You may need gloves to protect your hands from the spines. Good shoes are useful too, so you can gently roll and press the burrs under your feet, to help release some of the nuts.

Once the nuts are out of the burrs, you need to remove their shiny brown shells. Score the shells with a knife, or cut the whole chestnuts in half with a heavy knife. Then drop them into boiling water — shell and all. Boil them for 5–10 minutes if you're in a hurry, or for up to half an hour for very easy peeling.

Drain the liquid and, when the chestnuts are cool enough to handle, remove the loosened shells, which should now be easy to pull off.

You're not finished yet! The nuts inside the shells have a fuzzy brownish skin, which is unpleasantly tannic and needs to be peeled off. While the cooked nuts are still warm, use a combination of knife and fingers to do this. You could also buy a chestnut peeler.

If the nuts cool before you finish, they get harder to peel. Just reheat them in water and try again. Once peeled, they can be eaten as is. Another popular way to eat chestnuts is roasted in their shells for 20 minutes in an open fire or an oven heated to 200°C. Score the shells or cut them in half first, so the nuts don't explode.

In his book *Food For Free*, Richard Mabey notes that the traditional way to gauge roast-chestnut readiness is to put one unpierced nut in the fire with the rest, make sure everyone is sitting well back, and wait. When the unpierced one explodes, all the others are ready.

You can eat chestnuts raw, but people seldom do, probably because it's hard to get the skin off when the nut is cold.

Chestnuts are best eaten as soon as possible after harvesting. They contain a lot of water, so they don't store well fresh. However, you can peel them and air-dry or oven-dry them to keep them longer; see page 187 for more information. You can also grind dried chestnuts to make flour.



PEKING DUST

Peking dust is a simple, classic, delicious Chinese dessert. Whip 1¼ cups of cream with 4 tablespoons of caster sugar till thick. Divide the cream between individual dessert bowls or glasses, and sprinkle a thick layer of chestnut 'dust' over the top.

You can make the chestnut dust by pushing well-boiled, peeled chestnuts through a sieve. As with peeling, it's easiest to push the chestnuts through when they're warm and soft. Alternatively, grate the chestnuts, or even chop them finely.

Other variations on the recipe include adding a splash of vanilla essence or brandy to the cream; garnishing each individual dessert with a sugared walnut; and placing the cream on top of the 'dust', rather than vice versa.



Chestnuts as a superfood

Chestnuts are high in protein and starch but much lower in fat than other nuts. They're the only commonly eaten nuts that are rich in vitamin C. They're also good sources of vitamin B6, potassium, magnesium and iron. What's more, chestnut flour is great in gluten-free baking.



GERANIACEAE Cranesbill family

The large Geraniaceae family includes the genera *Geranium*, *Pelargonium* and *Erodium*. All three were lumped together in the genus *Geranium* until 1789, when the pelargoniums and erodiums were given their own classification. Confusingly, pelargoniums are still often called geraniums.

True geraniums are commonly called cranesbills, while pelargoniums are called storksills and erodiums are called storksills or heron's bills. The names are inspired by the long, beak-shaped columns that emerge from the flowers to hold their fruit capsules.

Pelargoniums all have edible leaves, but the scented pelargoniums, from South Africa, are especially exciting for foragers, offering numerous possibilities for cooking and perfumery. The *Pelargonium* genus owns a whole palette of aromatic chemicals, and different aromas and aroma combinations come to the fore in different species, varieties and cultivars.

Scented pelargoniums

LEMON-SCENTED PELARGONIUM
Pelargonium crispum

NUTMEG PELARGONIUM
Pelargonium x fragrans

PEPPERMINT PELARGONIUM
Pelargonium tomentosum

ROSE-SCENTED PELARGONIUMS
(LEFT)
Pelargonium x asperum
Pelargonium capitatum

Spotting them

The scented pelargoniums listed are among those that most commonly grow wild in New Zealand. You'll also find



them, and others with more domestic natures, in cultivated gardens. They persist in old, neglected or abandoned patches and, like lavender and rosemary, often lean into public spaces because people like to grow them along fencelines.

Of them all, *Pelargonium x asperum* is perhaps the most common wild pelargonium in New Zealand. It's thought to be a hybrid of two other rose-scented pelargoniums, *P. graveolens* and *P. radens*.

When you pass a pelargonium that you think might be scented, stop, rub a leaf between your thumb and forefinger, then sniff your finger to see what it's offering you. It's the scented-pelargonium secret handshake.

Generally pelargoniums have five petals with ten stamens. The upper two petals on the flower are usually larger and brighter than the bottom three, and there is only one line of symmetry through the flower.

Look for wild pelargoniums in coastal places, where they tolerate wind and salt.

Using them

The fragrant compounds in scented pelargoniums run plentifully through the leaves, stems and flowers but are most abundant in the green parts, which practically drip aromatic oils. Pelargonium flavours and aromas are strong and often linger. Some have musky undertones.

The leaves and stems generally have a tough, unpleasant texture for eating, but you can utilise them for flavouring:

- ➲ Use them to infuse butter, alcohol, vinegar, syrups and oils.
- ➲ Use the leaves, fresh or dried, as a herb to flavour both sweet and savoury dishes.
- ➲ Crumble or pound dried leaves to use as a rub, or mix with salts, sugars or dukkahs for dipping or sprinkling.
- ➲ A time-honoured trick is to line cake or cupcake tins with scented pelargonium leaves to impart their flavour during cooking.

The flowers are more mildly aromatic than the rest of the plant, and they're not too tough to eat. They're great in salads and dainty sandwiches, pressed into your fresh homemade pasta or used as a garnish on desserts.

If you find a scented pelargonium you love, see if you can take a stem or root cutting. Pelargoniums are a generous, hard-working bunch and they'll try to grow for you from a cutting if they possibly can.

There are numerous species, varieties and cultivars available from nurseries, too. One of my favourite cultivars is 'Orange Fizz', which has a genuine orange scent and flavour with just a background hint of rose and less muskiness than many pelargoniums. I love its flavour in combination with jasmine. It would probably work well with fennel, too.

The pelargonium kids

If scented pelargoniums were people, they'd be that big, rambunctious family down the road that you always secretly wished you were part of.

The loud, outgoing sibling that you have most fun with is rose-scented pelargonium. Lemon-scented pelargonium is her sidekick. Cinnamon pelargonium is the worldly intellectual you could listen to for hours, and mint pelargonium, with soft, furry leaves, is always cuddly and comforting. There's the quiet, intense one that you like in small doses — that's nutmeg pelargonium — then there's coconut pelargonium who's painfully shy, but lovely once you get to know him. Apple pelargonium is the sibling who breezes in and out of the house, always doing her own thing.

'Rose Rewhaunga is a special favourite. A piece was taken from the graveyard where my great-great-grandmother's grave is, in Kaikoura. She married an early whaler and they are buried together.'

MARILYN WIGHTMAN, CO-PROPRIETOR OF THE FRAGRANT GARDEN ONLINE HERB STORE, ON HER FAVOURITE SCENTED PELARGONIUM

HIPPOCASTANACEAE

Horse chestnut family

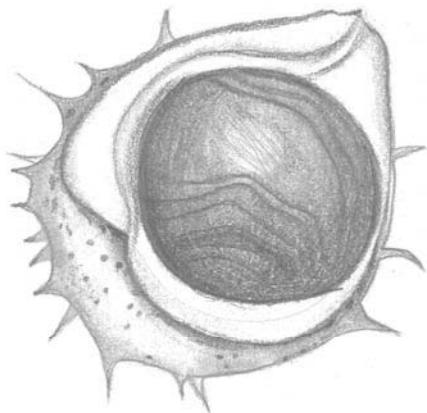
This small family of trees and shrubs is closely related to another family — *Sapindaceae*, which includes lychees and the *Sapindus* genus, from which soap nuts are obtained. Many members of *Hippocastanaceae* and *Sapindaceae* are known for high levels of saponins — soapy compounds that lather up. The common name for *Sapindaceae* is the soapberry family.

HORSE CHESTNUT *Aesculus hippocastanum*

Spotting them

Horse chestnuts are large trees that produce spectacular clusters of pink and white flowers. These give way to spiky green fruits called burrs, which contain nuts with shiny brown shells.

The nuts look a lot like sweet chestnuts, but they're toxic. Still, they have their uses.



Using them

Play conkers! See page 299, in 'Wildly entertaining'. You can also use the nuts as big, smooth beads. They're effective either painted or left plain.

A fabric soap can be made from horse chestnuts, by chopping up the flesh of the nuts and boiling it in water. The nuts contain large amounts of soapy saponins and also a whitener. Some people say this soap is very effective, but I won't be using it myself. See 'Allergy alert', page 18.

IRIDACEAE

Iris family

This family of bulb plants includes the popular garden flowers iris, crocus and gladiolus. It also contains a number of small, flowering pasture plants found in New Zealand, including the *Sisyrinchium* genus, known as blue-eyed grass, and the *Romulea* genus.



ONION GRASS

Romulea rosea

Spotting it

Romulea rosea is a small plant that grows in fields, along roadsides and in wastelands. It's more common in the North Island. It has flowers with yellow centres and six pink petals. The shade of pink varies. Its grass-like leaves can grow up to 10–30 cm long.

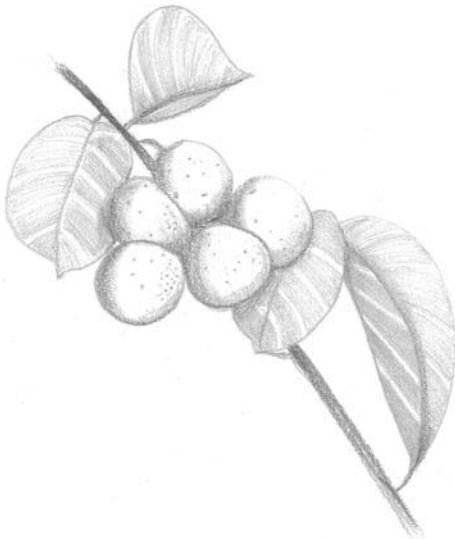
Using it

Come spring, the unripe fruits, which are about 1 cm long, grow on the ends of drooping stalks.

In South Africa, their native country, they are a popular wild-food snack called knikkertjies that children, especially, enjoy. Filled with sweet little seeds, the fruits are sometimes called puddings or plum puddings.

The corms — swollen underground stems — can also be eaten raw or cooked.

My South African friend Sophia du Toit tells me that with urban expansion *Romulea rosea* has become harder to find. Along with many other plants that grow on the flat lands, they are under threat.



JUGLANDACEAE

Walnut family

This family of trees and shrubs contains a number of species valued for nuts and/or hard, strong wood. It includes walnut, pecan and hickory.

Walnut

COMMON WALNUT (LEFT)

Juglans regia

JAPANESE WALNUT

Juglans ailantifolia

Spotting them

Walnut trees grow in many very old gardens and self-seed near parent trees and in plantations. The two species above are the most common in New Zealand, but there are others. The highly invasive Japanese walnut is on the National Pest Plant Accord, so you may not sell, propagate or distribute it.

Using them

In summer, when the outer husks are green, walnuts can be brined and pickled. You have to catch them before they develop an inner shell. Some people test this while the nuts are still on the tree by making sure they can push a darning needle through the green walnut from the end opposite the stalk.

Later in the year, the hard nuts can be gathered. Wild and self-sown walnut trees tend to produce nuts with thicker shells than cultivated trees, and foraging for walnuts is unpredictable. What's inside a shell can vary from a curvaceous, fleshy treat to a bitter, shrivelled disappointment.

However, bad walnuts are not a lost cause. You can make a natural dye from walnut shells that provides a pale, rosy brown colour; see 'Local colour', page 292.

Good walnuts — soaked overnight to make them more digestible, drained, dried and oven-roasted on a very low temperature — make an extra-crisp and delicious treat. You can grind them to make flour but in my house they always disappear before I get the chance.

With their high oil content, walnuts can quickly go rancid. To keep them very fresh, don't shell them until you're just about to use them. Many people also recommend keeping them in the fridge or, if you want to store them for several months, in the freezer. This especially applies if you live in a hot climate.

LAMIACEAE

Mint family

This much-loved family includes myriad aromatic herbs — mint, catnip, sage, thyme, basil, marjoram, oregano, rosemary, lavender and more. Many have stems that are square in cross-section, and often the flowers have petals that are fused to form two lips.

Dead-nettles

HENBIT

Lamium amplexicaule

RED DEAD-NETTLE (LEFT)

Lamium purpureum

STAGGERWEED OR FIELD WOUNDWORT (BELOW LEFT)

Stachys arvensis

Spotting them

The dead-nettles probably take their name from the fact that their leaves have a superficial resemblance to nettles, but they're 'dead' because they don't sting. Small unassuming herbs, they're among the more unaromatic members of the Lamiaceae family.

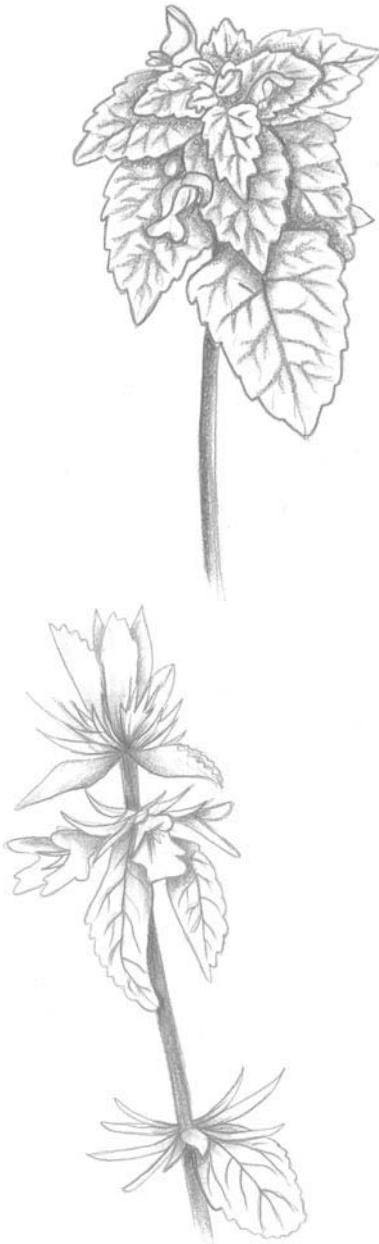
These three all grow throughout New Zealand, springing up in parks, pastures, wastelands and home gardens. Recognise them by their square stems, small hairy leaves and mauve flowers, each with an upper and lower lip.

Red dead-nettle can be distinguished from the other two by the blush of purple that colours the leaves around its flowering tops.

Staggerweed has hairier stems than the other two, and distinctive long, thin, pointy sepals around the flowers, often darker coloured or with a dark stripe down the middle of each sepal.

Using them

The stems, flowers and leaves are all edible, raw and cooked. They have a very mild taste. Cut off the flowering tops and use them whole, or strip leaves and flowers from the stems. They shrink a lot when cooked, but may feel unpleasantly hairy



when you eat them raw, so use them in ways that bear this in mind. Throw them onto pizza or into omelettes, chop them finely into salads, pound them into pesto, let them bed down in sandwiches or cook them in a stir-fry or casserole for just the briefest time.

Actually *Stachys arvensis* is not really a dead-nettle, although it looks very similar. In herbal medicine, plants from the *Stachys* genus are sometimes collectively called the woundworts. People make them into poultices and apply them to wounds to help with healing. The *Stachys* plants also make an astringent tisane for diarrhoea and other ailments.

While many people consider *S. arvensis* edible, and eat it happily, I always feel nervous about it because it's a dangerous plant for grazing stock and contains a nerve toxin that makes the animals lose co-ordination. It gives them the staggers, hence the plant's colloquial name, staggerweed.

It also has a smell that lingers on your skin when you crush the leaves. It didn't bother me until someone pointed out its resemblance to mouse pee, and now that's all it smells like to me. Having once lived in a drafty, Victorian-era cottage right next to a field, I know this aroma all too well.

Lavenders

ENGLISH LAVENDER

Lavandula angustifolia

FRENCH LAVENDER (RIGHT)

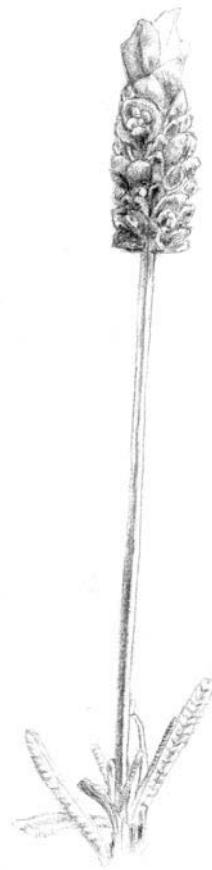
Lavandula dentata

SPANISH LAVENDER

Lavandula stoechas

Spotting them

Everyone recognises lavender, with its purple spike flowers and strong, often medicinal aroma. Lavender doesn't really run wild, but it can self-seed. Generally, it stays close to home. It's often found growing around old homesteads or planted along suburban fence lines or beside gates and porches.



Using them

Lavender has been a staple of cuisine, medicine, cosmetics and perfumery worldwide for centuries, and the *Lavandula* genus includes many species, varieties and cultivars.

English lavender is widely cultivated and is the most common species used in herbal medicine and perfumery. It's also popular as a garden ornamental. However, here in New Zealand, French lavender is the species grown most often, especially for ornamental uses. French lavender can be recognised by its delicately tooth-edged leaves, which give rise to its species name, *dentata*.

Any lavender can be used in cuisine — as a herb in savoury dishes (often along with thyme or as a replacement for it), a flavouring in desserts or as an ingredient in hand-made cosmetics. You can use both the flowers and the leaves.

Be sparing with lavender, and if you're unsure, start by using less than you think as its aroma can be overwhelming.

Even within the same species or variety of lavender you'll find differences in flavour and aroma. The time of year and time of day alter the scent, too. The best thing to do is get to know your local bushes, and experiment.

For a fragrant garden

Marilyn Wightman of The Fragrant Garden, a nursery in Feilding, explained to me that French lavender is not susceptible to mildew so it works well in New Zealand's temperate, moist climate. It's also one of the longest lasting lavenders, and a hedge in the right place gives ten years or more of good growth. It can bloom all year round and is appreciated by bees in winter.

English lavender, on the other hand, needs a lot of cutting and trimming to keep it tidy, and is straggly over winter.

Marilyn's favourite species is *Lavandula stoechas* and she has bred many cultivars over the years.

Hīoī — NEW ZEALAND MINT *Mentha cunninghamii*

Spotting it

New Zealand mint grows in open places such as cliffs, grasslands and beside lakes and rivers. It's a groundcover with creeping stems, small rounded aromatic leaves and tiny white flowers.

Using it

New Zealand mint can be challenging. Only the leaves and flowers are aromatic, not the stems. Even if you find a lushly growing patch that looks full of leaves, each individual stem carries only a few. You'll have to gather a lot of stems to get a small quantity of leaves.

The stems are quite harmless, but bulky, so if you try to make an infusion using stems, leaves and all, you'll extract very little aroma. You're best to either:

- ☛ painstakingly strip the leaves from the stems, and use only the leaves so the aroma is concentrated in a smaller amount of plant matter; or
- ☛ dry the leaves and stems before using. That way everything shrivels and takes up less space, but the aroma remains.

Another challenge in using the leaves is their texture. They might be small, but they're fibrous. Cooked or raw, they feel 'bitty' in your mouth. Finely chop them or use them in foods where their texture will be disguised.

The taste of New Zealand mint leaves is much milder than that of garden mint, but it's complex. It has distinct petroleum notes that might remind you of the love-it-or-hate-it Mexican herb epazote, although it's not nearly as strong.

My favourite thing to do in the kitchen with New Zealand mint is use it with Turkish flavours. Various mints are used in Turkish cuisine, and New Zealand mint seems to slot in perfectly. A simple wrap or pita pocket filled with hummus and finely chopped New Zealand mint is delicious. It's a good combination on toast, too.

You can also use New Zealand-mint infusions in homemade cosmetics. Macerating the leaves in glycerine is a method that works particularly well for extracting their gentle scent.



New Zealand mint flowers are tiny and decorative. If you find some on a bush, try plucking them out of their sepals, and eating them base-end first so you get the sweetness of the nectar, followed by the mild deliciousness of the minty petals.



ROSEMARY

Rosmarinus officinalis

Spotting it

Rosemary, like lavender, rarely grows wild, but does often inhabit the margins between domestic and public spaces. Rosemary bushes have highly aromatic needle-shaped leaves and lipped purple-blue flowers. Some cultivars stand tall and imposing, others are low and sprawling.

Using it

Rosemary leaves are packed with aroma and best used sparingly in strong dishes that can take it. Infuse dishes with a sprig, then remove before serving, or finely chop the leaves.

The flowers are also aromatic, but more mildly so. I love to use just the flowers when I need a milder flavour, or a delicate texture.

Rosemary branches can be used as kebab sticks to impart extra flavour to whatever you have on the skewer.

In hand-made cosmetics, rosemary is especially popular for haircare products. Additionally, rosemary oil's antioxidants make it an excellent preservative in fragrant or cosmetic products.

MALVACEAE

Mallow family

Mucilage runs thickly through the veins of the Malvaceae family — in their roots, their leaves and their seedpods. Okra is one family member, and has long mucilaginous seedpods which are used to thicken soups and stews. Meanwhile, the marshmallows in every dairy are pale simulacra of true marshmallow sweets, once made from the mucilaginous root of the marshmallow plant *Althaea officinalis*.

Mucilage

A thick slime produced by many plants, mucilage absorbs and holds water. It's used in many culinary, medicinal and cosmetic products.

Slime doesn't sound very appetising, but I've found it an addictive food texture. I rapidly acquired a taste for it once I tried it. I wish there was another word for it, though. Mucilage is not a pretty word — unless you say it with a French accent. It could be worse. The Dutch call it *planteslijm* and in German it's *pflanzenschleim*.

Herb mallows

COMMON MALLOW

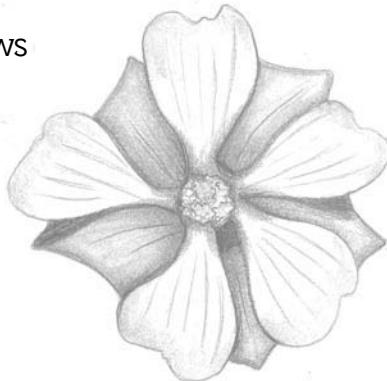
Malva sylvestris

DWARF MALLOW

Malva neglecta

SMALL-FLOWERED MALLOW (RIGHT)

Malva parviflora



Finding them

These herbaceous plants are recognisable by their soft, roundish, slightly hairy leaves, which look as if they want to fold up along the main veins that radiate from their centre. The flowers have five pale cream, pinkish or purplish petals, with darker rays emanating from the centre.

Using them

The leaves are mild tasting with little or no aftertaste. Raw, they're perfectly safe and nutritious to eat, but their hairy texture can be offputting, so shred them or slip them in between other interestingly textured things.

Herb mallows shine in cooked dishes. They don't work particularly well if they are sautéed or fried unless they are included in a fritter, but they are delicious boiled. The mucilage swells, giving them a rich, melty texture in soups, casseroles or sauces.

Mallow flowers make a beautiful, almost melt-in-the-mouth garnish or addition to any salad. They can also be cooked just for the briefest time. After the flowers die away, the mallow produces little round seedpods which are also edible. They almost look like mini pumpkins. US forager and author John Kallas calls them 'mallow peas'.

Pick mallow peas while they're still green and tender — before they begin to dry out and get stringy. Extract them from their husks, then eat them raw or boil them as a vegetable to be eaten plain or with butter or sauce. Throw them into stir fries, soups and casseroles.

Mucilage is soothing, and a tisane of mallow leaves will soothe an inflamed throat or digestive tract.

In the gut, mucilage absorbs water and binds everything together, as well as bulking it up and pushing it all through. So adding mucilaginous foods such as mallow to the diet can help with both diarrhoea and constipation. Mucilaginous plant extracts are widely used in commercial treatments for digestive troubles.



Extracting mallow mucilage

Mucilage is easy to extract from herb mallow leaves. Renowned UK forager Fergus Drennan uses plant mucilage as a nutritious, fat-free salad dressing. It can also be used in homemade conditioners and skin treatments. See the recipes on pages 278–84.

Gather several handfuls of mallow leaves. Cut or tear them up, and place them in a jar or bowl. Pour enough water over them to cover. Poke them down now and then to keep them as submerged as possible.

Sometimes if you let this stand for an hour or two, the mucilage will seep out into the water. Other times you may want to encourage it out by giving it a good stir or even a bit of a mush and squish. Some people like to use warm or hot water, or boil the plant material to get the mucilage to flow. I find cold water works perfectly well — perhaps better.



Mucilage meringues and marshmallows

Making marshmallow or meringue with mucilage from any bit of any mallow other than the root of true marshmallow, *Althaea officinalis*, is a challenge that has frustrated many a forager. It's tough to turn the mucilage into a froth that's firm and stable enough to match beaten egg whites.

John Kallas has come up with an ingenious solution that uses fewer eggs rather than no eggs.

He makes his mucilage by boiling mallow peas in water (at a ratio of one part mallow peas to three parts water, by volume).

To make the meringue mix, he beats a single egg white to soft-peak stage, as a starter.

He adds around half a cup of mallow mucilage to the egg white in a slow, thin stream, while beating continuously. The single egg white gives the mix enough structure to hold together. He then beats in a quarter teaspoon of cream of tartar to stabilise the mix further.

Once all the mallow mucilage is incorporated, Kallas slowly adds around half a cup of caster sugar, still beating.

When the mix is beaten stiff (which takes longer than egg whites alone would), he drops blobs onto a tray. He cooks them for 20 minutes at 165°C to make meringues — or dehydrates them to make marshmallows.

I have tried his technique, but instead of using mallow peas I used mucilage from mallow leaves extracted using the technique above. It certainly works and you make a huge amount of creamy, frothy stuff, with an interesting pale green tint. However, you do have to work fast once it's beaten, because the mixture doesn't hold its structure for as long as a pure egg-white meringue.

Vegans can't eat these but using fewer egg whites is cheaper and you don't end up with as many yolks to find a use for!



Tree mallows

CRETAN MALLOW (RIGHT)
Lavatera cretica or *Malva linnaei*

TREE MALLOW
Lavatera arborea

Spotting them

These two may be the most common tree mallows in New Zealand. They can grow up to 2 or 3 m high, and their leaves and flowers have the same



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attributes as herb mallows. *Lavatera arborea* often shoots up on a trunk like a tree, but somehow it still looks like a bush trying to be something it's not.

Using them

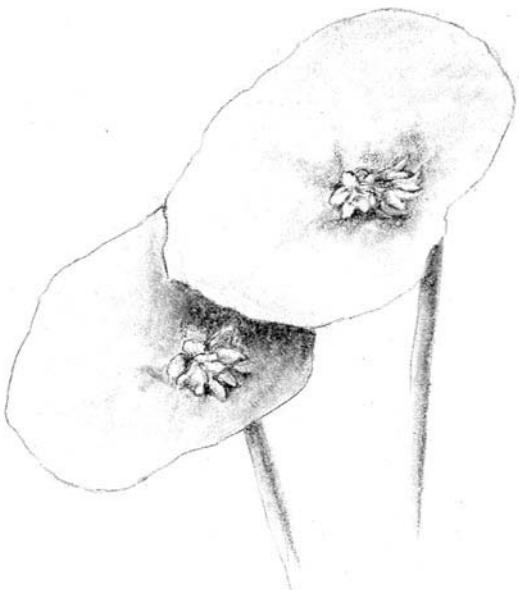
The enormous, floppy, fuzzy leaves of tree mallows are known as an emergency toilet paper substitute, but I can say from experimentation that they have a nasty, squeaky, water-repellent feel, like 1970s velour, and 'emergency' is the operative word.

The leaves are not quite as appetising as the leaves of herb mallow. Even boiled, their stringy fuzziness does not quite disappear as it does with the smaller species. Nonetheless, chopped fine in a stew or soup, a few are perfectly nice.

I haven't tried extracting mucilage from *L. cretica* leaves, but my experiments with *L. arborea* didn't yield nearly as much mucilage as the herb mallows.

The flowers and mallow peas of tree mallows can be used in the same way as those of herb mallows.

MONTIACEAE Miner's lettuce family



This family and others closely related to it have been going through a bit of taxonomic upheaval lately, but what's certain is that Montiaceae contains a number of edible greens that grow wild around the world, including those in the *Claytonia* genus. At least in New Zealand, the most famous of these is miner's lettuce, *Claytonia perfoliata*, previously called *Montia perfoliata*. Until recently, miner's lettuce was placed in the closely related Portulacaceae family along with purslane, and it's still sometimes nicknamed winter purslane.

MINER'S LETTUCE *Claytonia perfoliata*

Spotting it

It grows most abundantly in the South Island, but also in the cooler southern parts of the North Island. It sends up stalks with two juicy leaves at the top that are fused to look like one round leaf wrapping, parasol-like, about the stalk. Above these leaves tiny white flowers appear. It's an annual that grows from the end of winter, through spring, and into summer.

Using it

Miner's lettuce is a delicious, mild, nutrient-dense salad green that's also good cooked. If it doesn't grow wild near you, I highly recommend attempting to grow it in your garden.

MYRTACEAE Myrtle family

The trees and shrubs in this family are evergreen and usually have distinctive flowers with numerous prominent stamens, often red. The family includes pōhutukawa, bottlebrush, feijoa and the medicinal tea trees — Australia's melaleuca and the New Zealand natives mānuka and kānuka. Eucalyptus trees are also members of the myrtle family.

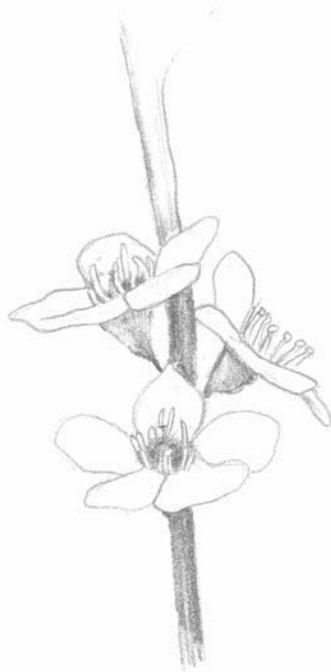
MĀNUKA (RIGHT)
Leptospermum scoparium

KĀNUKA
Kunzea ericoides

Spotting them

Mānuka is a shrub or tree that can grow up to 15 m tall, but doesn't usually. It bears lots of small, thin spiky leaves and small five-petalled flowers that are white or pink.

It's easy to confuse mānuka with its relative kānuka, but kānuka has noticeably softer leaves. It also generally grows larger than mānuka, lives longer, and has



smaller flowers — white only — that tend to grow in clusters. On mānuka the flowers are spread more evenly over the branches.

There is enormous genetic variation in both wild mānuka and wild kānuka, and they are highly adaptable to different environments. Mānuka's capacity for wildly varying forms has made it a popular cultivated ornamental. Red-flowered, pink-flowered, double-flowered, and prostrate or ground-hugging forms are all cultivated.

Using them

Mānuka is the go-to tree for smoking food. Mānuka chips or sawdust can be used to smoke meat, fish, cheese and anything else you like. You can also try using the dried twigs or seedpods for smoking.

Mānuka leaves make a delicious flavouring for both savoury and sweet dishes. Use slim branches to infuse the cooking liquid, then remove them, as you would rosemary. Alternatively, dry the leaves and powder them to use like any other dried herb.

Kānuka on the other hand is rarely used in cuisine. It generally has a more harshly medicinal flavour and aroma than mānuka. However, there's no harm in experimenting with it. Its softer leaves make it easier to use fresh. Try young, new leaves, stripped from their branches and finely chopped in any recipe where you'd normally use thyme, lavender or mānuka. You can use older branches as you'd use mānuka.

Both mānuka and kānuka contain potent antimicrobial compounds. They've long been used in rongoā (Māori medicine; see also page 290) and can be drunk as a pleasant and/or medicinal tisane.

EUCALYPTUS

Eucalyptus species

Spotting them

With their striking blue-grey leaves, sometimes round, sometimes long and thin, these Australian imports are hard to miss. You can often see both types of leaf on the same tree — the round ones are the juvenile leaves. On warm days eucalyptus trees send their delicious scent far and wide.

Now and then you may spot eucalyptus leaves that are either edged in red or red all over, as if the trees are flying a flag for their big, dry home country.

Using them

Keep a few branches of eucalyptus, fresh or dried, around the house in case of colds, flu and blocked noses. See page 285.

These trees are also among the most exciting dye plants around, providing a range of vivid, colourfast reds, oranges, browns and yellows when you heat the leaves in water; see page 294 for more information.

Often when dyeing with eucalyptus leaves, you'll notice the colour they produce gradually changes from yellow to orange to reddish as you simmer the leaves. Experimenting with this is always worthwhile: you can dye one item pastel yellow, another apricot and a third item fiery orange, all in the same session, just by removing the items from the dyepot at different times.

OLEACEAE Olive family

The olive family includes not only olives, but also jasmine and lilac.

Jasmines
PINK JASMINE (RIGHT)
Jasminum polyanthum

COMMON JASMINE OR
POET'S JASMINE
Jasminum officinale



Spotting them

True jasmines are any plant in the *Jasminum* genus. New Zealand has several growing wild. Jasmine flowers are often small and white with five or six petals. There are, however, species with yellow, pink and red flowers, and some have more petals. All jasmine flowers have two stamens that emerge from a tubular centre. Common and pink jasmine are New Zealand's two most fragrant wild-growing jasmines.

Pink jasmine hails from China and has become a popular cultivated plant in Britain, Europe and America. In Britain, it's very well behaved and the

Royal Horticultural Society even gave it one of their Awards of Garden Merit. Unfortunately, when pink jasmine reached the colonies — New Zealand and Australia — it went off the rails and started propagating all over the place. It grows prolifically throughout this country, most rampantly in warm climates such as Auckland and Nelson. It isn't on the National Pest Plant Accord but is listed as a pest plant in some regions.

It has pink flowerbuds that open into white five-petaled flowers with pink blushes on their undersides. They have a heady, musky scent. In warmer parts of the country the flowers turn into purply black berries, which birds eat, dispersing the seeds.

In other parts of New Zealand it's rare for pink jasmine to berry. Around Wellington and the Wairarapa, where I live, I've seen only an occasional surreptitious cluster. However, this plant doesn't need seeds to reproduce. Hydra-like, bits of chopped vine easily grow into new plants. Gardeners are strongly exhorted to burn rather than dump the hacked bits.

Common jasmine is much less rampant — it doesn't spread too far from where it's planted, and can often be found in old gardens. It looks very similar to pink jasmine, but the flowers are pure white. Its scent is beautiful, but lighter and fresher than that of pink jasmine.

Using them

For centuries, jasmines have been pillars of the perfumery world. Today the most commonly used species in perfumery — and aromatherapy — are *Jasminum grandiflorum* and *J. sambac*. Two others grown and processed commercially are *J. auriculatum* and *J. flexile*, but much more rarely.

Presumably these are the species that have been the easiest to cultivate and process on a large scale in the countries that provide most of the raw materials for perfumery. However, there are many others, including common and pink jasmine, that can be used to make divine fragrant products.

Often jasmines have a love-it or hate-it fragrance, partly due to their particularly high levels of indole — a strong-smelling molecular compound that's found in many flowers, but also in faeces.

While it's probably indole that repels the jasmine haters, others find this flower's grubby notes seductive. In fact, a bit of dirt and a hint of animal are blended into many of the great perfumes. The trick is getting the balance right, but there's no right balance for everyone — some people can take more indole than others.

Both common jasmine and pink jasmine can be tinctured or enfleuraged for hand-made perfumes. They also have intriguing culinary uses.

Remove jasmine flowers from their green sepals to throw into salads or use as a garnish. Syrups or alcohol infused with jasmine make great dessert flavourings and toppings.

You need to be selective about what you combine jasmine with. If you pair it with anything else that has a slightly animal quality, the jasmine will heighten it, potentially to an unpleasant level. For example, when using jasmine to scent a milk dish like panna cotta, if your milk is anything but farm fresh, the jasmine will exacerbate the barnyard taste. Likewise, pairing jasmines with scented pelargoniums in perfumery or cuisine is risky. Many scented pelargoniums have musky or tom-catty undertones which, on their own, may be acceptable, but when teamed with jasmine, smell or taste like a badly maintained public toilet.

Blending jasmine with fresh bright scents such as citrus, mint and apple works well to cut through the indole. Rose and jasmine are a classic duo in perfumery, and there's no reason not to combine them in desserts, too.



MAKE YOUR OWN JASMINE TEA

The result will be a deep, complex jasmine tea, which can be a great hand-made gift.

a medium-sized jar or tin partly filled with black, green or white tea (leave room for the jar's contents to be shaken around)

15–20 freshly picked jasmine flowers

Make sure the jasmine flowers are dry.

Add them to the tea in the jar. Close the lid
and give a little shake.

Leave for 24 hours while the scent of the jasmine infuses the porous
tea leaves. Shake a few more times if you remember.

Remove the jasmine. The tea should already be lightly scented, but
for a more strongly scented tea, repeat once, twice or three times,
removing the flowers after 24 hours and replacing with freshly
picked flowers.

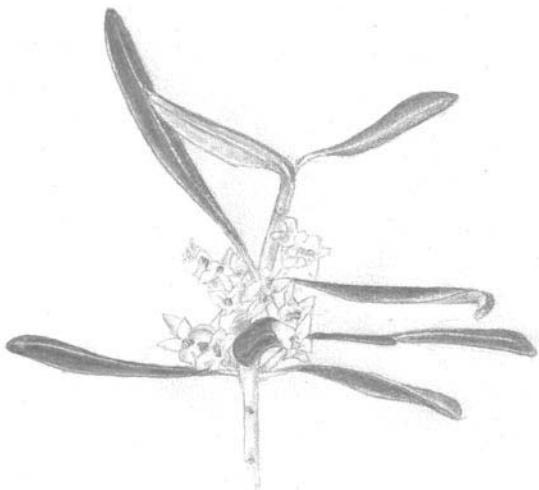
Star jasmine — a warning

Star jasmine, *Trachelospermum jasminoides*, has become popular in New Zealand. However, it's not a true jasmine; it's not even in the olive family. It's a member of the dogbane family — Apocynaceae. It's not known to be edible, and may be toxic. Don't confuse it with jasmine or use it in anything to be consumed.

As always, make sure you carefully identify any plant you're planning to use.

OLIVE TREES

Olea europaea



Spotting them

In recent years the number of wild olive trees in New Zealand has increased as a result of a boom in our country's olive oil industry and seeds being spread from the new plantations.

These evergreen trees have long, thin, grey-green leaves and masses of white flowers in clusters that give way to bunches of olives. Olives are ripe when they reach full size. They begin 'green ripe' then change to a pinky colour, then to brown, before turning black. They can be picked at any stage of ripeness, depending on the end use.

Using them

Raw olives are extremely bitter and need to be lengthily cured before they're edible. The curing method depends on when the olive has been harvested — green olives are cured differently from black olives. Some people like to cure olives using lye, commonly known as caustic soda, which works faster than the more basic and traditional salt or vinegar. While it removes more bitterness, it possibly also removes other more subtle and complex flavour components.

If you don't have the time or inclination to cure olives, consider harvesting the leaves instead. Olive leaves have recently attracted a lot of attention, as research has confirmed their anti-inflammatory and antimicrobial qualities. You can pick olive leaves at any time of year, although bear in mind that a tree needs plenty of leaves left on it to grow good-quality olives.

A tisane of olive leaves is prescribed for all sorts of ailments, from colds and flu to shingles.



SIMPLE DRY-SALT CURING FOR FULLY RIPE BLACK OLIVES

This is an easy recipe if you've only gathered a few ripe olives. It can be scaled up for bigger hauls. You'll need a sterilised jar, big enough for the olives, and a clean muslin square to cover the jar.

2 cups salt, plus extra for bottling
2 cups freshly picked, unblemished black olives

Mix the salt and the olives together well in a large bowl.

Pour or spoon the olives and salt into the jar.

Pour extra salt over the top so the olives
are well covered.

Cover the jar with muslin.

After a week, pour the whole jar out into a bowl,
and give the olives and salt a cursory mix or shake.

Place the olives and salt back into the jar,
and add a layer of new salt over the top.

Cover with muslin again.

Repeat this every week for 4–6 weeks until the olives
are edible. Note that they will always be a little bitter.

When you're happy with the taste, pour the mix into a sieve and
shake to get rid of the excess salt.

Lay the olives out to dry at room temperature for 12–24 hours.
To store them, mix them with a little more salt and cram them into a
sterilised jar.

They should keep for 3–4 weeks in a pantry, or up to 6 months in the refrigerator.

You can eat them straight, or use them in cooking. For eating as is, you may want to rinse off the salt and soak or slather them in oil and herbs — perhaps foraged.

ONAGRACEAE Evening primrose family

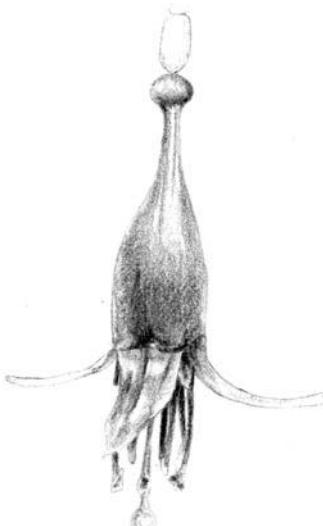
This family includes many decorative, edible and medicinal flowering plants. The *Fuchsia* genus and evening primrose, or *Oenothera* genus, are the best known. Most members of *Fuchsia* hail from South America, but New Zealand has three native species that are quite special.

Native fuchsia

CREEPING FUCHSIA
Fuchsia procumbens

KŌTUKUTUKU — TREE FUCHSIA
Fuchsia excorticata

SCRAMBLING FUCHSIA
Fuchsia perscandens



CULTIVATED FUCHSIA

Fuchsia species

Spotting them

Fuchsia have distinctive drooping, often colourful flowers with four large sepals, four shorter, wider petals and long, dangling stamens. Some are evergreen, others are deciduous. Most are shrubs, but endemic to New Zealand is the largest fuchsia in the world — kōtukutuku, the tree fuchsia. Also endemic is *Fuchsia procumbens*, an unusually tiny, creeping species that grows around coasts and has flowers that stick straight up rather than dangle down. Compared to introduced fuchsias, the Zealand natives have very small petals; sometimes they don't have any.

Here and there you'll find an introduced or cultivated *Fuchsia* species growing wild, but more often than not they'll still be growing quite respectably in ornamental gardens, where few people realise they make good food.

Using them

All fuchsia berries and flowers are edible, but just as they look different so, too, they offer a wide range of flavours and textures. Some are more appetising than others.

Kōtukutuku berries, called kōnini, are especially good eating, but don't neglect the plump introduced specimens in suburban gardens. The only way to know if you've found a good one is to try it. You might get a mouthful of bitterness or a sweet surprise.

Ripe, squishy fuchsia berries can be made into jams, jellies, pies and wine, often in combination with other fruits.

When eating the flower, generally the sepals are fleshier and milder, while the petals and the rest of the flower are more bitter. Raw, whole or chopped, the flowers add dazzling colour to salads. Smaller flowers and unpopped buds can be dipped in batter and made into tempura or fritters.

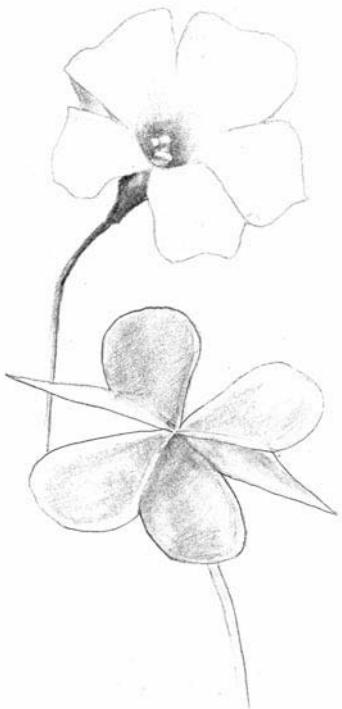
The three New Zealand species and one in Tahiti (*Fuchsia cyrtandroides*) are distinctive in the genus because they have blue pollen, plus some flower and chemical features that are unique. The original description of the bellbird said it had a blue patch on its head, but that was a patch of *Fuchsia* pollen.

BOTANY PROFESSOR PHILIP GARNOCK-JONES

OXALIDACEAE Wood sorrel family

Oxalidaceae typically have divided leaves that spread and open in the light, then fold and close in the dark. Most members are in the *Oxalis* genus.

Oxalis plants are very sour as they're rich in oxalic acid. The sour little root vegetable we call yam in New Zealand comes from *Oxalis tuberosa*. Native to the Andes, it's usually called oca in other parts of the world or, sometimes, New Zealand yam. It was introduced to these shores in the mid-nineteenth century and has become more popular here than in many other Western countries.



Wood sorrels

BERMUDA BUTTERCUP (LEFT)
Oxalis pes-caprae

HORNED OXALIS OR CREEPING
WOOD SORREL
Oxalis corniculata

LILAC OXALIS OR CRIMSON
WOOD SORREL (OPPOSITE)
Oxalis incarnata

WOOD SORREL OR SNOWDROP
WOOD SORREL
Oxalis magellanica

Spotting them

The larger *Oxalis* species can be particularly troublesome weeds in New Zealand. However, the smaller ones are often known as edible wood sorrels. They look like three-leaved clovers, but each leaf is heart-shaped. Like many other members of the wood sorrel family, *Oxalis* species have leaves that open and close, depending on light levels. The flowers have five petals.

Oxalis magellanica is native and non-invasive, and has white flowers. Pink-flowering *O. incarnata* and yellow-flowering *O. pes-caprae* were both introduced from South Africa. *Oxalis corniculata* also has yellow flowers but its country of origin is uncertain.

Wood sorrel often grows around borders and up against rises and mounds.

Using them

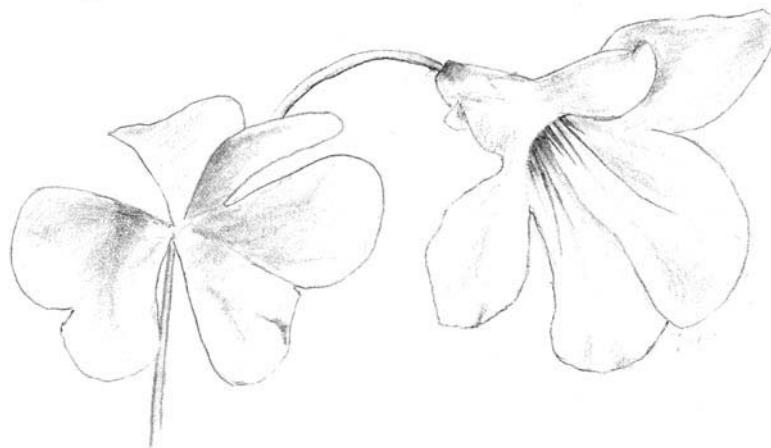
The leaves, stalks and flowers are all edible. They contain oxalates and have a bright, sour flavour that some people describe as lemony. Wood sorrel is tasty on its own, but also mixes well with other foraged herbs.

You can use wood sorrels raw and cooked in both sweet and savoury dishes. They retain their delicious sourness when cooked. The leaves and flowers are nice tossed in a green salad, and the flowers make a good edible garnish.

Wood sorrel goes well with root vegetables, fish and chicken, and its sourness works well with cream. Try chopping up a big handful of leaves, stalks and flowers and adding them to a potato salad with a creamy dressing.

For a simple but delicious wood sorrel gratin, alternate layers of chopped wood sorrel with pre-boiled, sliced potato and kūmara. Pour over enough cream to cover and bake or grill at 180°C until everything starts to brown.

For desserts, try adding wood sorrel to an apple, peach or pear pie. The resulting flavour is a little like rhubarb, which also contains a lot of oxalic acid.



PINACEAE

Pine family

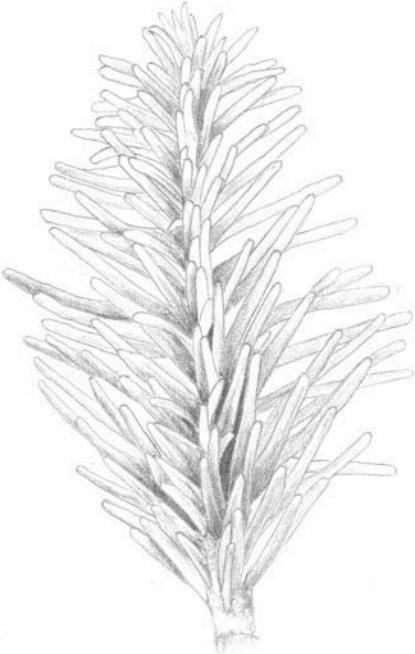


The trees in the pine family, Pinaceae, have distinctive leaves called needles, and cones instead of flowers. The cones are actually modified leaves. Each tree has both male and female cones. The female cones produce seeds between their scales and the male cones, which are normally smaller and shorter-lived, make pollen.

PINE TREES

Pinus species

Spotting them



Pine trees are common throughout New Zealand. You can distinguish pines from spruce and fir by examining their needles, which come in clusters of two to five, joined at the base. The cones are strong and woody. It can be tricky to tell the difference between different species of pine, but the number of needles in each cluster provides a clue. The most common, *Pinus radiata*, has three needles in each cluster. It's resinous and strongly aromatic, making it great to use as a culinary herb.

Scots pine, *P. sylvestris*, and Lodgepole pine, *P. contorta*, both have two needles per cluster while eastern white pine, *P. strobus*, has five.

FIR TREES

Abies species

Spotting them

Unlike pines, which have needles in bunches, firs have needles that sprout singly from their branches. The needles are two-sided and flat.

SPRUCE TREES

Picea species

Spotting them

Like firs, spruce needles emerge singly from the branches. However, the spruce needles themselves have four sides instead of two. To feel the difference, try rolling a needle between your thumb and forefinger. If it rolls, it's spruce. If it's too flat to roll, it's fir. You can use the alliterative mnemonic, 'Fir is flat and spruce is square'.

Using pines, spruces and firs

In the northern hemisphere, Pinaceae species have a long history of both culinary and medicinal use, notably in Japan and Scandinavia, and by Native Americans in North America.

These trees all grow outwards from the tips of their branches, so the oldest needles are those closest to the trunk of the tree. The choicest parts of the trees are the 'tips', which are harvested in spring when they first appear. They are the very new, bright, lush needles produced each year at the ends of the branches.

They should be tender enough to chop finely and add to salads, cooking and baking. You can also add them to pesto or finely chop them into mayonnaise and other dips and dressings for extra flavour.

Older needles are coarser and have the advantage of being available all year round. Use them to infuse a soup, casserole, roast sauce or syrup, then remove them before serving. They also make a refreshing tisane.

Different species of pine, spruce and fir provide an astonishing range of flavours. Many have citrus notes, some smelling and tasting like lime. Jammy, berry notes come through with others.

If you're looking for inspiration, use them anywhere you can imagine a citrus flavour would work well. Or combine them with citrus for a complex mix of complementary flavours.

In natural perfumery, essential oils and absolutes from pines, firs and spruces are used to give fruity, fresh and forestry notes.

PIPERACEAE Pepper family

In the Western world the most significant member of the pepper family is the flowering vine, *Piper nigrum*. The dried fruit of *P. nigrum* is what we call a black peppercorn. Recently, exotic gourmet peppercorns, including fruits from *P. retrofractum* (Balinese long pepper) and *P. cubeba* (Javanese comet's tail pepper), have also reached New Zealand markets.

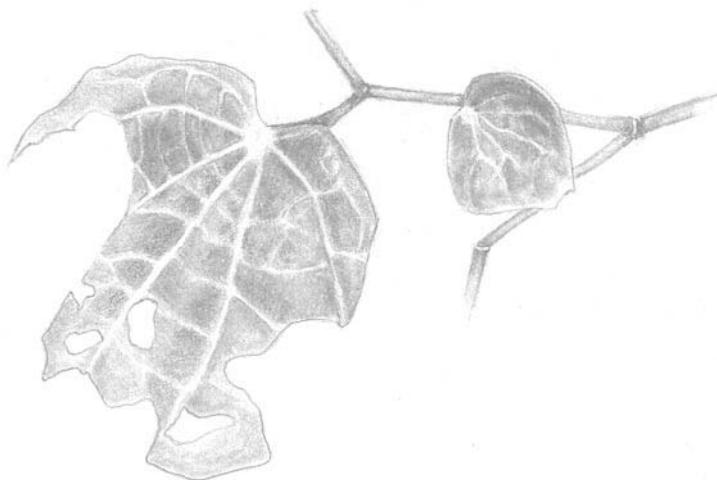
Mexicans use the leaves of *P. auritum* (hoja santa) as a herb, and people in South-East Asia use *P. sarmentosum*. The sedative drink kava, enjoyed throughout the Pacific, is extracted from the roots and stems of *P. methysticum*.

In New Zealand we have two native species of pepper tree, both commonly known as kawakawa. These were once classified as *Piper*, but later given their own genus, *Macropiper*, along with some other Pacific species.

Recently, however, pepper family experts overseas have shown that the *Macropiper* species are extremely closely related to the *Piper* species, and have concluded that the two genera should be recombined into the original single classification. Kawakawa is now being treated as *Piper*, although some botanists have not yet accepted the change.

Pepper trees

KAWAKAWA — NEW ZEALAND PEPPER TREE
Piper excelsum



THREE KINGS ISLAND KAWAKAWA

Piper melchior

Spotting them

Kawakawa is a small tree or shrub with heart-shaped, dark green leaves that are often full of interesting-shaped holes made by very hungry nocturnal caterpillars — *Cleora scriptaria*, commonly called kawakawa looper moths.

Kawakawa can grow up to 4 m tall, although it's often much smaller. It has jointed brownish branches, and the trees are either male or female. Male trees produce long, thin flowering spikes that start green and darken up. Female trees produce shorter, plumper green spikes that ripen to orange fruit.

Piper excelsum grows widely throughout New Zealand, around parks and bush margins as well as in gardens, and likes to be close to the coast. *Piper melchior* is native only to Three Kings Island, but it's also grown on the mainland as an ornamental. It has larger leaves with few, if any, holes. Its fruits are also larger and more bland-tasting.

Kawakawa is susceptible to leaf curl diseases. Don't harvest from trees where the leaves are drying and rolling up.

Using them

Kawakawa leaves and bark are used in rongoā (Māori medicine). The plant has anaesthetic properties, which you can test yourself by chewing a leaf and feeling the resulting tingly numbness inside your mouth. It also seems to be anti-inflammatory and antimicrobial. This combination of attributes makes it useful for toothaches and sore throats. In addition, like other members of the *Piper* genus around the world, it has a long history of use for digestive problems.

It's said that the leaves with the holes are the best, and recent research indicates that when the looper moth caterpillar munches on a leaf, it triggers the plant to produce more active compounds in that area.

Because of its analgesic nature, don't go overboard with kawakawa in cuisine — that is, use it as a herb, not a leafy green.

In Mediterranean-inspired dishes, kawakawa leaves take on faintly basil-like tones. The plant isn't nicknamed bush basil for nothing. For inspiration, you could also look at using the leaves as you would *P. auritum* in Mexican recipes, or *P. sarmentosum* in Thai and Vietnamese recipes.

Chef Charles Royal is a pioneer in the modern culinary use of kawakawa, and has shown how it can be used in many dishes, both sweet and savoury. He has a

nice trick: fried kawakawa leaves. A single leaf fried in oil until it bubbles and turns translucent can then be drained on a paper towel and used whole or crushed as a delicate, crisp, flavoursome garnish. With their oiliness and strong herbal taste, these kawakawa wafers taste to me like delicious, herbed sausages, and I instantly want to team them with a comforting vegetable mash.

Royal has also brought the use of kawakawa as a dessert flavouring into the public eye, using the leaves to infuse meringues, shortbreads, custards and creams.

Kawakawa leaves give an infused food a complex flavour containing both ginger and vanilla notes.

You get an even more intense flavour or aroma by making an alcohol infusion using dried kawakawa peppercorns. The resulting fragrant tincture reminds me a little of labdanum — a complex, magical-smelling resin harvested from the gum rockrose, *Cistus ladanifer*. Labdanum has entranced perfumers and incense makers for centuries.

The orange fruits from female kawakawa trees have sweet flesh with a slightly passionfruity flavour, and are full of peppery little seeds. They have tiny white spears through their hearts that you pull out before eating. Make a sauce from the fruits to use sparingly, add them to a fruit salad, or dip a few in chocolate for a small treat. Don't eat too many at once.

Often kawakawa berries will ripen off the bush, especially if they're starting to blush orange already. They'll complete their ripening sitting in a warm or sunny place, usually within one to four days.



HOW TO MAKE KAWAKAWA PEPPERCORNS

Peppercorns are simply the dried unripe fruit of plants in the Piper genus. Kawakawa fruits closely resemble those of Balinese long pepper, P. retrofractum, in both appearance and aroma.

Gather unripe, green female kawakawa fruits. Always leave plenty on the tree to ripen. You can sun-dry or oven-dry your picked fruits. If you sun-dry them, put them in as hot, dry and sunny a place as possible. If the temperature is too cool or if the air is humid, the drying will take too long and they'll begin to degrade before it's complete. It should take only a few days.

Note that if you sun-dry them, some fruits will probably ripen, rather than dry. It can be hard to predict which way any given fruit will go when it's green, but to get the best strike rate, pick the least ripe fruits you can find.

If you oven dry them, you won't get this problem. Spread them in a single layer on an oven tray and put in an oven set at 60°C until they become brown and brittle. They should snap easily.

Keep an eye on them to make sure they do not burn. If there is any hint that they might, quickly turn down the temperature. It's a good idea to experiment with two or three in your oven before doing a whole batch.

Once they're dry, remove them from the oven and let them cool. Store them in an airtight container. To retain freshness, leave them whole, and pound or grind them just before use.

PLANTAGINACEAE

Plantain family

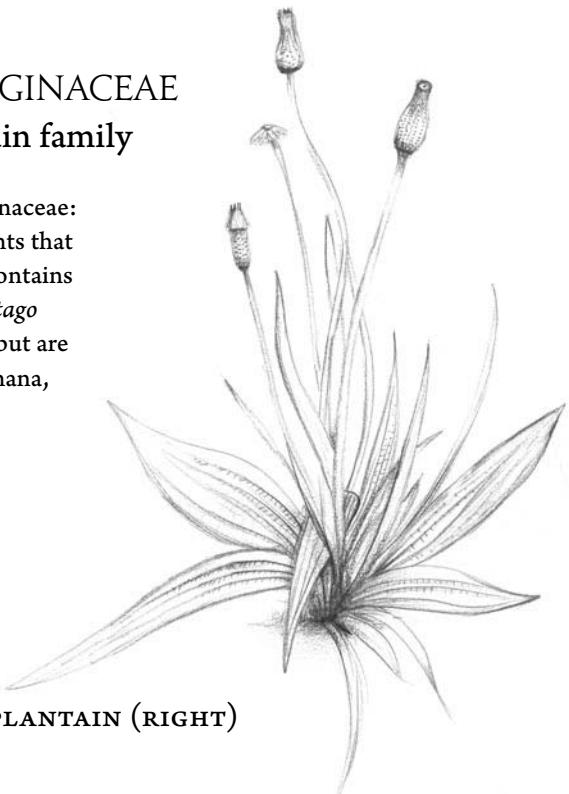
There are only two genera in Plantaginaceae: *Plantago*, a genus of herbaceous plants that grow as rosettes, and *Littorella*, which contains two or three small aquatic species. *Plantago* species are commonly called plantains, but are not to be confused with the cooking banana, also commonly called plantain.

Plantains

BROAD-LEAVED PLANTAIN
Plantago major

BUCK'S-HORN PLANTAIN
Plantago coronopus

NARROW-LEAVED OR ENGLISH PLANTAIN (RIGHT)
Plantago lanceolata



Spotting them

There are numerous species of plantain growing wild in New Zealand, including around eleven natives. Many of the natives are specific to certain regions, and are probably best left alone.

On the other hand, broad-leaved, buck's-horn and narrow-leaved plantain are all introduced, and can be found throughout the country. They're fair game for the forager. Like all *Plantago*, their leaves emerge from a central base point and have distinctive parallel veins running up them. The plants send up stalks with clusters of tiny flowers on a cone or spike.

Plantago major has wide, almost round leaves, while *P. lanceolata* has longer, narrower leaves. Both are found growing as weeds in open places. *Plantago coronopus* has the narrowest leaves of all, and rather than having straight edges like the other two, the leaves are lobed — that is, they have deeply indented edges. It tends to grow around estuaries, lakes, lagoons and coastal areas.

Using them

Plantago leaves are edible as greens, and also widely used in herbal medicine. Buck's-horn plantain is known mostly as a culinary leafy green. The other two are particularly famous for their medicinal uses but their leaves can also be eaten cooked or raw. Choose the youngest, tenderest leaves for eating, and chop them finely if they're fibrous.

Broad-leaved and narrow-leaved plantain have wound-healing properties, and a poultice made with either is a good wound dressing. They both contain blood-clotting agents and also, like comfrey, significant amounts of allantoin, a chemical compound that promotes cell regeneration.

Synthetic allantoin is widely produced and often added to skincare products to soothe itching, heal and smooth as well as moisturise. You can use plantain in your own hand-made natural skin products. As allantoin is water soluble, I like to use plantain in any of the bodycare product recipes on pages 278–84 that are glycerine-, water-, alcohol- or mucilage-based. Use the plantain leaves fresh. Juice them, or break them up and soak them in glycerine, alcohol or hot water, before adding the resulting liquid to the recipe. You can be creative.

Psyllium, a commercially available mucilaginous dietary fibre, often included in high-fibre breakfast cereals, is extracted from the seeds of certain *Plantago* species. Use your own plantain at home in the same way, boiling the seeds to extract mucilage, or grinding them and adding them to breads to enjoy their beneficial effect on your digestion.

POACEAE Grass family

The Poaceae family includes rice, wheat, rye, oats, corn and more, making it one of the most important food families for people worldwide.

The transition of *Homo sapiens* from a race of hunter gatherers to one of agriculturalists, and our subsequent global population expansion, has been directly linked to the organised cultivation of grass grains. We developed a close relationship with the grasses several thousand years ago, and this relationship has become somewhat symbiotic, leading contemporary commentators to ask whether people domesticated grasses, or grasses domesticated people.

Bamboo

ARROW BAMBOO
Pseudosasa japonica

BLACK BAMBOO
Phyllostachys nigra

CANDY-CANE BAMBOO
Himalayacalamus falconeri

GOLDEN BAMBOO
Phyllostachys aurea

GOLDEN SQUARE-STEM BAMBOO
Chimonobambusa quadrangularis

HEDGE BAMBOO
Bambusa glaucescens

MADAKE
Phyllostachys bambusoides

OLDHAM'S BAMBOO (RIGHT)
Bambusa oldhamii





Spotting them

The plants we refer to as bamboo are generally from the Bambuseae 'tribe', a division within the grass family that contains more than 70 genera. Within those genera there are nearly 1500 species.

Bamboo grows from underground rhizomes that send up shoots, which grow into single, straight, hollow stalks with nodes. The stalks become harder and woodier as they age, and are known for their fast growth. As children we breathlessly passed around stories of ancient bamboo tortures that harnessed the powers of some bamboo species to grow, in the right conditions, up to a metre every 24 hours.

Many bamboo species flower only every few decades and some at intervals of over a century. When they do, it's as if a genetic timer goes off, and all individual plants from the same seed source, no matter how old they are or where they are, flower within a few years of each other.

Mass bamboo flowerings can cause chaos. As soon as the plants flower and seed they die, so local industries based around a particular species can be devastated. The sudden bounty of seed can fuel a rodent plague.

Increasingly, certain introduced species of bamboo are becoming naturalised in New Zealand. The bamboos listed above are among the most common growing wild here.

Using them

Bamboos are valuable for furniture making, crafts and garden stakes.

Virtually all bamboo species have edible shoots, and they're an important and nutritious ingredient in many Asian cuisines. Shoots range in taste from sweet to bitter, and many require extensive boiling to make them safe. This is because bamboo species contain varying amounts of a cyanogenic glycoside called taxiphyllin. Cyanogenic glycosides are chemicals that, when eaten, release the poison hydrogen cyanide. Cassava and the pits of stone fruit contain cyanogenic glycosides, too. Different cyanogenic glycosides require different processing methods to break them down. Luckily, bamboo's taxiphyllin is one of the few that can be reliably broken down by boiling.

A small number of bamboo species contain little or no taxiphyllin and can be eaten raw, others take only 10 minutes or so of boiling. However, some contain so much that they require up to two hours boiling to remove all but traces.

Preparing bamboo shoots for cooking

As yet, I haven't harvested wild bamboo shoots, but each of the species above is listed as edible in at least one source I can find, with the exception of *Pseudosasa japonica*, which apparently has shoots that are too small to yield enough meat to be worth processing.

General instructions for turning bamboo shoots into an ingredient you can use in cuisine are not too complicated. However, bamboo shoots don't keep well raw, so harvest as close as possible to cooking time.

Harvest bamboo when it is less than 30 cm tall. Use a shovel to lever the shoot up out of the ground.

Cut the shoot in half lengthwise and peel off the outer layers to expose the white meat. If you know what species of bamboo you are working with, you may be able to find details for recommended boiling times. If you are unsure, start by boiling the halved shoots for at least two hours to be on the safe side, then proceed to use them tentatively.

Gather your own garden stakes

I had been lamenting the recent lack of bamboo stakes in local plant stores when I saw that my friend Madz BatachEl of Manawatu Urban Foragers was harvesting hers from the roadside. Impressed, I asked her for tips.

Here is her reply:

The best garden stakes are from a good wild patch that doesn't get cut back too often — so perhaps someone's back fence rather than a bit on council land. I've found that the patch near me gets cut right back by the council every couple of years or so and the stakes that I collect from there are never very strong. I guess they are just not old enough so don't last the summer without getting brittle and breaking.

I collect thinner bamboo with a pair of loppers or secateurs. If you can find a source of fatter, stronger bamboo you'll need a good pruning saw to get through it. It's usually really long too (often 4–6 m at least), so a plan for how to get it home is a good idea. These bigger poles are great for spring flags, teepees, and other random constructions around the garden. They're too fat to shove into the earth directly but can be lashed onto a warratah, fencepost or other vertical thing.

Obviously, it does pay to ask permission (the standard, you know) but with bamboo, because it is such a notoriously strong grower most people that have a patch of it are more than welcoming to anyone keen to clear out a little bit.

The other thing that some people have concerns about is that if you put it in your garden while it's still green, it could take root. I, personally, have not had this happen to me, and I am notorious for needing stakes three weeks before actually getting around to cutting them, so they invariably go straight in the ground.

I have also heard, if you are the organised type, that the stakes will be stronger and last longer if you do take the time to cut and dry them out well before using them.

Oats

SLENDER OAT
Avena barbata

CULTIVATED OAT
Avena sativa

ALGERIAN OAT
Avena byzantina

**ANIMATED OAT OR
STERILISED OAT**
Avena sterilis

WILD OAT
Avena fatua

SAND OAT
Avena strigosa

Spotting them

Avena sativa is the species most often cultivated in New Zealand and around the world to produce commercial oats. Gardeners also use it as a cover crop. However, all the species of oat listed here grow wild around New Zealand. Some, particularly *Avena fatua*, have become troublesome weeds.

Oats are grasses with small, distinctive clusters of dangling flowers.

Using them

All oats are edible. However, without an industrial strength machine it's near impossible to hull your own harvested oats for eating at home as cereal or porridge. Once the oats are ready for harvest, the hulls are just too hard. Never fear. There are other ways you can use this plant.

Milky oats — the green, unripe seeds — are highly valued in herbal medicine to relax and rejuvenate. They're often prescribed if you're feeling stressed, over-stretched, fatigued or burnt out.

To harvest milky oats, catch oat grasses when the dangling flowers are fresh and green. Pinch a seed inside a flower between your fingers to test it. If it exudes a milky juice, it's at the right stage. If it doesn't, try several seeds on different plants before you despair, as they can ripen at different stages. Harvest the whole flowers, and do it straight away as the milky stage lasts only a short time.

You can make a tisane from the fresh flowers, but because the milky-oats season is short, and drying them removes some of their beneficial components, most herbalists favour tincturing them in alcohol as a way to preserve them. One way to do this is by filling a jar with the flowers, pouring vodka over to cover, and sitting the sealed jar in a dark, cool place for a week or more to infuse. Shake it every now and then, and when the infusion is ready, decant the liquid into a bottle and seal.

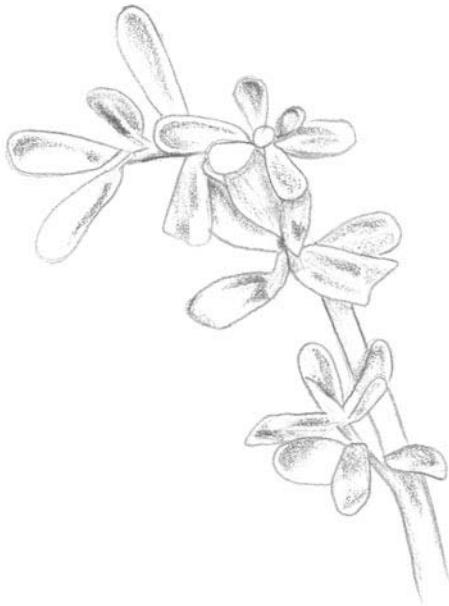
Dosage recommendations vary, but half a teaspoonful three times a day would not be unthinkable. Milky oats are considered very safe, so your main concern is how much alcohol you want to consume!

The dried stems of grasses are called straw, and have many uses. Oat straw is valued for its nutritional and medicinal qualities. It contains minerals, including calcium, silicon and potassium, as well as plenty of vitamins. You can buy bags of it in health food shops, but it's much more satisfying to harvest your own.

Gather the stems of oats while green, then make a healthy infused vinegar from them while fresh, using the method on page 168, or dry them to save for making tisanes.

PORTULACACEAE

Purslane family



This family used to include several genera, including *Claytonia*, which most people know for the species miner's lettuce (see page 92). However, Portulacaceae has recently been split up, and now contains only one genus — *Portulaca* — the purslanes.

PURSLANE

Portulaca oleracea

Spotting it

Purslane grows wild throughout the North Island and in many parts of the South Island. It's an annual that emerges from the ground in summer and dies back in winter. It spreads across the ground, sending out long reddish stems with almost oblong, succulent green leaves. It has small yellow flowers.

Using it

You can eat the leaves, the smaller stems and the flowers, although some recipes call for only the leaves. It has a sour, salty taste, indicating its oxalate content, so check the information about oxalates on page 21.

Purslane is unusual in the world of commonly eaten greens in that it's a succulent. Its fat, juicy leaves have evolved to store moisture and nutrients over long periods of time so, like other succulents, it's full of mucilage. You can break up the leaves and extract mucilage using the same method as for mallow leaves, described on page 90.

Many cultures across Asia, Europe and the Middle East use purslane in their cuisine. It can be eaten raw, and complements cucumber especially nicely. It's also a fantastic addition to many cooked dishes. Fry it quickly to retain its satisfying volume and firmness, or cook it for longer to give it a melting quality.

Health benefits of purslane

Purslane is rich in vitamins, minerals and antioxidants. For a leafy green, it also contains unusually high quantities of omega-3 fatty acids, including alpha-linolenic acid (ALA). This is considered a particularly important omega-3 in the human diet as the body can't synthesise it. The other known omega-3 fatty acids can be synthesised to some extent from ALA, which is also found in high quantities in linseed and the seeds of plants such as kiwifruit.

ROSACEAE Rose family

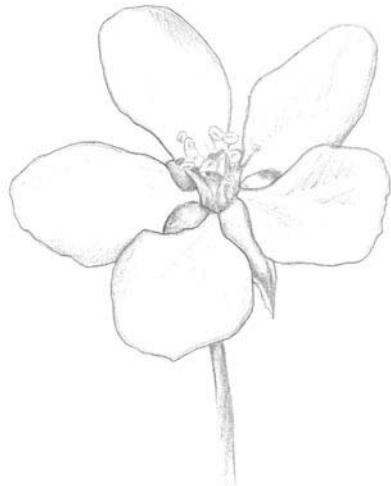
Rosaceae include numerous sweet, aromatic fruits and flowers that are enjoyed by many cultures around the world. The *Rosa* genus contains all roses — perhaps the most widely beloved flower in the world. The *Malus* genus includes the domesticated apple and all its cultivars. *Prunus* includes peaches, plums, nectarines, apricots, cherries and almonds. *Pyrus* includes the common pear. Quince is the sole member of the *Cydonia* genus. Meanwhile *Rubus* includes blackberries, raspberries and strawberries.

The family produces a fascinatingly connected complex of aromas — there are apple blossoms that smell like roses, and roses that smell like berries.

Certain fruit trees in this family, such as apple and cherry, self-seed relatively often and truly do grow wild. Others, like pear and quince, rarely self-seed, but can appear to be growing wild when you come across the remains of an abandoned settlement.

Botanists divide some large plant families into tribes. In the taxonomic hierarchy, tribe falls between family and genus. One tribe in the Rosaceae family that's especially important to humans is the apple tribe — *Maleae* — which contains the plants that produce cored fruits, technically called 'pomes'.

Maleae — the apple tribe



DOMESTICATED APPLES (LEFT)

Malus x domestica

CRABAPPLE

Malus species

COMMON PEAR

Pyrus communis

LOQUAT

Eriobotrya japonica

QUINCE

Cydonia oblonga

Spotting them

These trees all grow in public and wild areas, often in and around old gardens and settlements. They have distinctive white, cream or pink flowers with five petals and a profusion of little stamens in the centre. Often the flowers are delicately fragrant.

Wild apple trees, in particular, can be found growing beside roads and railway tracks, often a fair way from settlements. Researchers are intrigued by the way this shows how readily they grow from a core chucked out a window by a traveller whizzing by. Apples also demonstrate a lot of genetic variation, and don't breed true from seed — they'll always be a surprise.

Botanist Phil Garnock-Jones told me: 'These throwaways are more likely to be bitter and small or to have other undesirable properties, but occasionally there might be one worth propagating. Many of our top commercial varieties were simply discovered among such variable progeny of seed-grown apples.'

Using them

You can store hauls of any of the above fruits in syrup. See page 157 for the recipe. Rather than using the fruits simply to infuse the liquid, you can peel, halve and core them, then briefly boil them in the liquid, before sealing them in jars, liquid and all, to preserve them.

Quinces and crabapples are the only fruits above that can't happily be eaten raw by most people — they're usually hard and sour, and crabapples are also full of

seeds. However, both are rich in pectin and make fantastic jams and jellies. They're also wonderful for chopping and using raw to infuse spirits, wines and liqueurs.

Apples are full of pectin too — especially when they're hard and unripe. Making apple jelly is an excellent way to use a windfall of unripe apples.

Before fruiting, the scented blossoms of all these Maleae trees can be used to infuse a softly aromatic syrup or vodka. Some varieties are much more scented than others.



BUTTERSCOTCH SAUCE

You can use this butterscotch sauce recipe in myriad ways. It's divine with raw or cooked fruit, as an accompaniment for panna cotta, ice cream, a steamed pudding or all three together. This sauce is delicious instead of honey or sugar on porridge in the morning, and with your own foraged walnuts scattered over it is perfection.

50 g butter
1 cup packed brown sugar
¾ cup cream
1 tsp vanilla essence
½ teaspoon salt

Melt the butter in a saucepan over a low heat.

When it's nearly melted, add the sugar. Turn the heat a little higher and stir until the mixture begins to bubble.

Add the cream, and whisk. Boil for 5–10 minutes, whisking occasionally. The longer you leave it, the thicker the sauce will be, but make sure it doesn't catch on the bottom of the saucepan.

Remove from heat, let cool slightly and stir in the vanilla and salt.

Variations

Try making the butterscotch sauce using a butter infused with rose, lavender or scented pelargonium. See enfleuraged aromatic butter recipe, page 170.

A blend of 50–50 butterscotch sauce and infused or fruit honey is delicious. See the aromatic honey recipe, page 177.

To butterscotch sauce you can also add a dash, according to taste, of spirits or wine infused with wild fruits or flowers.



BUTTERSCOTCHED FRUIT

The butterscotch sauce recipe on page 119 can be used to make many different sweet treats with foraged fruits. Here are some of my favourites:

Cut a selection of raw fruit into pieces and thread onto kebab sticks. Drizzle thick butterscotch sauce over the kebabs and serve immediately.

For a more manageable or delicate snack, try mini-kebabs with just two pieces of fruit threaded onto toothpicks.

For a richer treat, use peeled fruit for the kebabs, then coat the kebabs in butterscotch sauce and fry them in butter until they're heated through. Serve immediately. Note that plums don't need peeling.

Add butterscotch sauce to a fruit crumble instead of sugar. See recipe on page 244.

Gooey toffee apples

If you have very small apples, set out a bowl of cooled thick butterscotch sauce (see recipe, page 119), push ice-block sticks or the handles of teaspoons into the apples, and let children make their own gooey toffee apples by dipping the apples into the butterscotch sauce. For extra foraging points, instead of ice-block sticks or spoons, use sturdy apple tree twigs. As a colourful extra, set out one or more bowls of finely chopped foraged flower petals to sprinkle over the caramel.

Prunus genus

PLUM

Prunus x domestica

CHERRY PLUM

Prunus cerasifera

TAIWAN CHERRY (RIGHT)

Prunus campanulata

RUM CHERRY (BELOW)

Prunus serotina

JAPANESE CHERRY

Prunus serrulata

Spotting them

Plums are easily recognised by their fruit. Cherries are sometimes harder to spot, but they have small red or dark fruits and distinctive leaves with serrated edges.

Plum trees are not invasive but their close relatives, the wild introduced cherries, are an increasing problem in New Zealand, spreading readily as birds disperse their seeds. In some areas they are displacing native trees and shrubs. Rum cherry is on the National Pest Plant Accord while Taiwan cherry is listed as a pest plant in some areas.



Using them

Plums are delicious cooked or raw, but develop a much richer taste when cooked. They're wonderfully user friendly as they never need peeling before cooking. They're delicious chopped up in crumbles (see recipe, page 244), as well as in fruit honeys (see page 177). They can be preserved in sugar syrup or vinegar, and they happen to be my favourite fruit for making liqueur (see recipe, page 181).

Small, fresh plums can be stuffed to make a moreish snack. Halve them and remove the pips. Cut up some soft cheese like feta or ricotta and mix it gently with just a little honey and/or balsamic syrup. Heap it into the cavities in the plum halves, and sprinkle with nuts, pine nuts, and/or a favourite herb. Foraged possibilities include fennel and kawakawa.

The cherries that have naturalised in New Zealand often began as garden ornamentals. Their berries are edible, but some are bitter and unpleasant.



Rosa genus

MULTIFLORA ROSE

Rosa multiflora

FRENCH ROSE

Rosa gallica

SWEET BRIAR (LEFT)

Rosa rubiginosa

RAMBLER ROSES

Rosa wichuraiana hybrids and

Rosa semperflorens hybrids

Spotting them

The roses listed above are the ones you most often find growing wild in New Zealand, but there are others.

Roses are perennial, usually deciduous shrubs, and often have prickles. Single roses have five pink or white petals and numerous stamens, like giant apple blossoms. Double roses may sport many petals. Sweet briar is distinguished by the strong apple fragrance of its leaves, but it's listed as a pest plant in some regions of New Zealand.

Using them

Fragrant rose petals are hugely useful as aromatic flavourings in cuisine. However, even unscented or barely scented rose petals are quite edible, and when chopped or shredded can be treated almost like a green.

After flowering, roses produce fruits called rosehips. Treasured culinary ingredients in many cultures, these are noted for being rich in vitamin C. They're taken as a nutritional tisane or, more commonly, a decoction, which is like a tisane but boiled. They contain high levels of pectin and are good to make into syrups and jellies.

They're pesky to process as they have hairs around the seed that many people find itch-inducing. Boiling the hips whole gets around this problem. However, many people still like to cut them in half and remove the seeds and hairs before cooking with them. You may also want to top and tail them.

They are often preserved by drying them, either whole or cut in half. Dried they are still good for tisanes, syrups, vinegars and other infusions.



MOCK ROSEWATER

True rosewater is steam distilled and lasts ages because it becomes acidic through the distillation process. If you don't have a distiller, you can make a lovely mock rosewater, but it will need to be refrigerated and won't last nearly as long as the real thing. You can, however, extend its shelf life if you add it to something with preservative properties such as alcohol, vinegar or glycerine.

several handfuls of fragrant rose petals

2 cups water

Place rose petals and water in a small saucepan.

Bring them to a gentle simmer and turn down the heat to barely simmering. Cover and continue simmering for 5-10 minutes.

Turn the heat off and leave to cool.

Strain the cooled liquid and decant the mock rosewater into a jar or bottle.

Store in the fridge.

Rubus genus



BLACKBERRY (LEFT)
Rubus fruticosus

TĀTARAMOA —
BUSH LAWYER
Rubus australis
Rubus cissoides
Rubus schmidelioides

CREEPING LAWYER
Rubus parvus

RASPBERRY
Rubus idaeus

Spotting them

Blackberries and raspberries, both introduced plants, grow out in the open, and have aggregate fruit — their berries are formed from lots of little ‘fruitlets’.

Raspberries are a good find in the wild, but not nearly as common as blackberries. If you’re planning on harvesting a big blackberry patch, take planks of wood and throw them down over the patch so you can walk into the bushes.

Blackberries are sweetest when very dark and soft. New Zealand’s native tātaramoa prefer to grow in the bush, and have small blackberry-like pink or yellow edible fruits.

Using them

There are many ways to use these berries — they’re even great as a pizza topping, combined with your favourites nuts and some chunks of good cheese.

Some blackberries you pick are full of worms. After harvesting, I soak them in cold water for about an hour, and the worms simply float out of the fruit. Many people like to use water with a little salt dissolved in it for added effectiveness.

Blackberry leaves can also be harvested, as they make a delicious tea that is a good remedy for upset stomachs. Take the very new leaves that are paler in colour — if they’re still a little curled up that’s fine.

RUBIACEAE

Coffee or madder family

Rubiaceae is a vast and diverse family, containing plants with many uses. Coffee is made from the fermented and roasted beans of *Coffea* species. Madder, made from the roots of *Rubia* species, has been an important source of pigment for textiles since ancient times, and quinine, extracted from the bark of the South American tree *Cinchona calisaya*, has been used as an antimalarial medicine since the seventeenth century. Meanwhile deliciously scented gardenia is a popular fragrant ornamental — with a frustratingly difficult scent to extract for perfumery.

In New Zealand an important genus in the family is *Coprosma*. Worldwide the genus contains over 100 species of trees and shrubs, and New Zealand is home to roughly half of them. The first coprosma ever collected and named was the New Zealand native *Coprosma foetidissima*, which gives off a rotten smell when wounded. Thus, the entire genus became saddled with the name *Coprosma*, which is from Greek and means 'dung smell'.

Introduced *Galium* is the other Rubiaceae plant of special interest to New Zealand foragers.

Coprosma

KANONO

Coprosma grandifolia

KARAMŪ

Coprosma robusta

SHINING KARAMŪ

Coprosma lucida

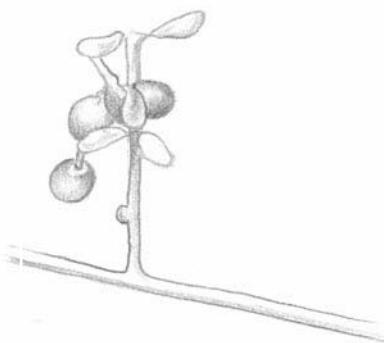
TAUPATA — NEW ZEALAND LAUREL (RIGHT)

Coprosma repens



MINGIMINGI

Coprosma propinqua



translucent white, depending on the species. The flavours can be anything from insipid to sweet and complex.

Australia and other places around the Pacific have their own native coprosmas, and the edible berries are generally well known to the indigenous people in these areas.

One way to help identify coprosma is to look at the leaves. On the underside of each leaf you'll see little pits where the main veins join the midrib.

Taupata is perhaps most instantly recognisable by its strong, super-glossy, almost varnished-looking leaves. Clearly it's well adapted to withstand salty coastal wind, but it grows a fair way inland as well.

Spotting them

The *Coprosma* genus is generally divided into large-leaved and small-leaved species. Listed are some of the most commonly found coprosmas in New Zealand, but there are many others, including hybrids.

Some, like *Coprosma acerosa* (sand coprosma), are becoming endangered and should probably be left alone if you find them.

During summer and autumn the female coprosmas put forth vivid bunches of small, shiny, juicy berries, each with two seeds.

Berries range from purple, red and orange to

‘There are few groups of plants that exhibit such a wide range of adaptations to New Zealand’s varied landscapes as the genus, *Coprosma*. Creeping mats, upright small trees, large leaves, small leaves, berries of many different colours, shade-dwelling or inhabiting open ground; *Coprosma* really has an astounding variety of habits, characteristics and tolerances.’

GEOFF DAVIDSON, FOUNDER, ORATIA NATIVE PLANT NURSERY

Using them

Coprosma berries often have a high ratio of seed to flesh, so while it's fun to pick them off the tree and nibble on them, the most practical use is in cooking. You can boil them up with a little water and some sugar to taste, then push the result through a sieve to make a sauce for either sweet or savoury purposes. If you find the sauce is slightly bitter, consider adding lemon or lime juice to help neutralise it. Add a little at a time and taste after each addition, until you're happy with how much the bitterness has been reduced.

You'll need quite a few handfuls of berries to make it worthwhile. The easiest way I've found is to hold a bag or other container under a branch, and strip off clusters of berries in a sweeping motion. Then I remove any shrivelled berries or bits of debris that have fallen into the container. I like the flavour of taupata berries best, but karamū is enjoyable too.



Coprosma coffee, anyone?

In the 1880s, settler J. C. Crawford was hopeful about the possibilities for a coffee substitute industry in New Zealand, based on roasting seeds from the native coprosmas, karamū and taupata. It never quite took off. Since then, New Zealand foragers like Andrew Crowe and Sheila Natusch have tried making coffee from coprosma seeds, and been underwhelmed by the results. Perhaps some intrepid forager will one day have more luck with their experiments.



CLEAVERS

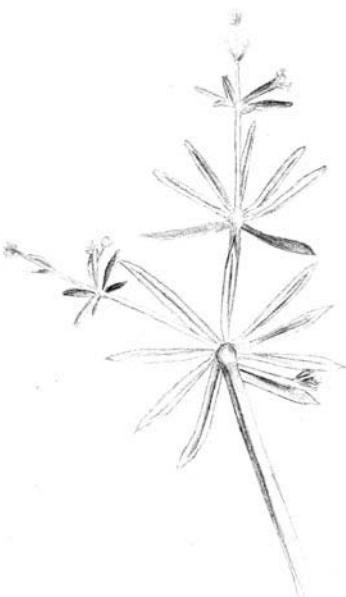
Galium aparine

Spotting it

Cleavers is a scrambling annual, with long, thin leaves growing in whorls on thick stems. The hooked hairs on its leaves stick to your clothes like Velcro.

Using it

The raw leaves taste mild and slightly salty, and some are faintly bitter. The texture is unpleasant though — who wants to eat Velcro? To soften the leaves for eating,



blanch them before using. Alternatively, chop them very fine and add to cooked dishes to disguise the texture. Cleavers leaves are also great for juicing and adding to sweet drinks.

To harvest cleavers, use scissors to snip off the smallest, choicest looking lengths.

Cleavers is nutritious and in herbal medicine is considered to be an excellent cleanser of the lymphatic system. It's used as a general tonic as well as for specific complaints such as swollen glands anywhere in the body.

In natural skincare, it's considered useful for treating dry, itchy skin. A juice or tisane made from the leaves and stems is used as a wash.



CLEAVERS JUICE

This juice can be added to fruit juice, cordial, iced tea, punch or an infused syrup.

2-3 cups cleavers stems and leaves

2-3 tablespoons water, if required, to help processing

Wash your cleavers haul well and pick it over to make sure there are no bits of other plants caught up.

Put the cleavers through a juicer. If you don't have one, put the cleavers in a blender and whizz it up. You may need to add the water at this stage. After whizzing, pour the pulp into a muslin-lined sieve and let the juice drain out. You can help it along by bunching up the muslin a bit to squeeze it through.

This should make at least a quarter of a cup of juice. What you don't use you can freeze for future use. Ice-block trays are good for this, then transfer the ice cubes into freezer bags.

Variations

- >You can also juice and use chickweed in this way.
- See the infused syrup recipes on page 157 for ideas for drinks to blend with cleavers or chickweed juice.

RUTACEAE Citrus or rue family

This family contains many plants with fragrant flowers, including the divinely scented *Boronia* genus, prized in the perfumery world. While boronia are all native to Australia, plantations have recently been set up in New Zealand's Nelson, so the valuable floral extract can be exported.

The most famous aromatic genus in the family is, of course, *Citrus*, which has a bewildering number of species, crosses and cultivars.

It's debatable whether any citrus varieties are truly naturalised in New Zealand. However, the first plants were brought here by missionaries early in the nineteenth century and many grow in old gardens and around abandoned settlements.

Citrus

SWEET ORANGE

Citrus x sinsensis

LEMON

Citrus x limon

MEYER LEMON

Citrus x meyeri

TANGELO

Citrus x tangelo

GRAPEFRUIT

Citrus x paradisi



Spotting them

You can't mistake a citrus tree, with its strong fragrant leaves and twigs, creamy, scented flowers and bright pock-skinned fruit that, when peeled, reveal juicy, translucent segments.

Citrus are the sparkling jewels of the fruit world, treasured wherever they grow for their many applications in cuisine, health-care and perfumery.

Each citrus has its own distinctive aroma that suffuses its leaves, flowers and fruits. If you come across a citrus tree that isn't in fruit, and you're not sure which it is, try crushing a leaf or sniffing a flower. You may find you can identify it. Grapefruit leaves and flowers smell grapefruity, orange leaves and flowers smell orangey, and so on.

Using them

When you eat the fruits raw, enjoy the white pith if you can. Recent studies show it has high nutritional value with lots of antioxidants, vitamin C and fibre.

The fruits are the most obvious culinary treasure, but the flowers are also deliciously aromatic. You can use the petals to infuse syrups, oils and vinegars. They are marvellous ingredients for home perfumery, particularly in enfleurage (see page 266 for more information). Use them straight away, as they can start to exhibit off notes fairly quickly after being picked. If infusing a liquid with them, infuse them for only a few hours — or less.

Even citrus leaves have exciting culinary possibilities. For example, you can put them into a baking-paper or cooking-foil parcel to bake fish, and let them impart their flavour.

Home distillers of essential oils love citrus, as the peels yield a lot of essential oil so there's enough to make small-scale distillation worthwhile. Most other plants are only worth distilling for oil on a large scale.



CITRUS LEAF CHOCOLATES

This is a clever trick, and fun to do with children. The chocolate leaves can be used to garnish cakes and desserts. They're also delicious as small treats in their own right, as the citrus leaves give the chocolate a delicate citrus flavour, especially if you use the very young, fresh ones.

Gather leaves from any citrus tree — young, healthy, well-formed leaves are best.

Spread them on a plate, with their undersides facing upwards.

Melt chocolate of your choice — white, milk or dark — in a heatproof bowl over a saucepan of simmering water. Stir gently to help it melt faster and more evenly.

When all the chocolate has melted, use a knife or paint brush to spread it thickly on the undersides of the citrus leaves. There must be no leaf showing through.

Put the plate of chocolate-painted leaves in the fridge for half an hour or more to set.

Remove the plate from the fridge and carefully peel away the real leaves from the chocolate to reveal beautiful, veined, chocolate leaves.

Variation

For a stronger citrus flavour, grate a little citrus zest and gently but quickly stir it through the chocolate before painting it onto the green leaves.



THREE-STEP METHOD FOR MAKING THE MOST OF CITRUS FRUITS

This is an efficient way to process a haul of citrus fruits to keep over weeks or even months. You'll get three different products — juice, syrup and peel — for different uses. The syrup and peels look pretty in clear glass and, with hand-made labels, they make great gifts.

Step 1: the juice

Cut the fruits in half, and squeeze all the juice into a jug.

Pour the juice into ice-cube trays and place in the freezer.

When frozen, transfer the ice cubes into a zip-lock bag and store in the freezer. Whenever you need citrus juice you'll be able to whip out one or more cubes.

Step 2: the syrup

Pull the pith away from the remaining peels.

Slice the peel into small batons.

Blanch the peel in boiling water for 1 minute.

Drain and repeat once or twice, depending on how much bitterness
you want to remove from the peel.

In a saucepan mix equal parts sugar and water
and bring to the boil.

Add the blanched citrus peel and simmer for 1 hour.

Drain the liquid and leave to cool. Before the peels cool, use them for
Step 3, below.

Pour the cooled liquid into bottles for use as a syrup —
to mix into drinks or use as a sauce.

Store it in the fridge or freeze it for up to a year.

Step 3: the peels

Sprinkle a layer of any crystallised sugar over a dinner plate.

Roll the boiled peels in sugar while still warm, then lay them out to
dry in a single layer on a rack or on a tray lined with baking paper.

Transfer the dried candied peels to a sterilised airtight container.

Stored at room temperature they will keep for up to 3 weeks, and for
a few more weeks in the fridge.

Ceviche

Fish ‘cooked’ by marinating in citrus juice is a dish enjoyed in many parts of the world, especially around the Pacific and in South America. The citric acid coagulates the proteins in the fish, just as cooking does, and the flesh turns white. The result is a fresh, cool, delicious and healthy dish. It’s one of those exciting base recipes that opens itself to many creative variations.

The word ceviche is derived from Spanish but the dish has many other names, including ‘*ota’ika*’ in Tonga, *kokoda* in Fiji and *poisson cru* in France. All ceviche involves chopping about 500 g of fish into cubes, pouring half a cup or so of citrus juice over the top, mixing it round, and leaving it all to sit covered in the fridge for about 3 hours.

In practice, most ceviche dishes also involve adding herbs and vegetables to the mix

before it goes into the fridge, and this is where much of the regional variation occurs.

Usually, there's something oniony added first — finely chopped or grated onion, or chopped spring onion.

My unscientific analysis of a selection of recipes from around the world indicates that the second most important thing to add is something red, often followed by something green: perhaps sliced tomato, capsicum and chilli for red; then fresh chopped herbs, especially parsley, and cucumber for green.

In the Pacific islands, after the fish has turned white, coconut milk is often added to the mixture. The dish is finished with salt and sometimes pepper to taste.

Ceviche can be served with fingers of toast or tortillas.

Variations

Any acidic citrus will do, but lemon and lime are traditional — their sourness and extreme acidity work well. Sometimes orange or grapefruit is mixed in with the lemon. You can also use other citrus when they're unripe and extra acidic — for example, green mandarins.

When it comes to the optional extras, ceviche is a great dish for the forager. Onionweed is perfect chopped into ceviche. Other fresh greens and herbs to try in ceviche include finely chopped chickweed, wild parsley, wild celery, tutae koau, samphire, wood sorrel, borage leaves, piko piko, beach spinach, dead-nettles, watercress and chenopodiums.

Dried and powdered horopito or kawakawa pepper is also a nice addition.



SEAWEED

Foraging along the coast, you find a world of diverse, colourful sea vegetables.

They are just as nutritious as many of the land-based edibles you can harvest. Indeed, some are more so. They burst with flavour and richly salty and umami tastes. Full of a range of soothing mucilages, seaweeds also offer much to medicine and body care. Two of the mucilages commercially extracted from seaweeds are agar and carrageenan, or Irish moss.

Seaweeds are often classified according to colour — there are brown, green and red seaweeds.

New Zealand's long coast hosts too many species of seaweed to mention and

they are all edible except *Desmarestia ligulata* (flattened acid kelp), named for the sulfuric acid it contains and releases as it dies, discolouring other seaweeds nearby. It's brown with feather-like fronds, but as it dies it turns what writer Andrew Crowe has described as 'bilious green'.

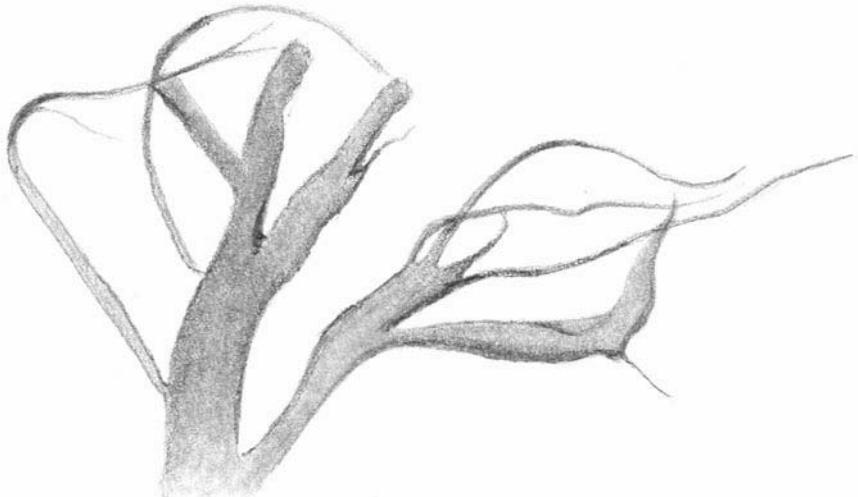
Brown seaweed

RIMURAPA — BULL KELP (BELOW)
Durvillaea species

COMMON KELP
Ecklonia radiata

BLADDER KELP
Macrocystis pyrifera

NEPTUNE'S NECKLACE
Hormosira banksii



Spotting them

Of the brown seaweeds, bull kelp is easy to spot, with its long, thick, almost leathery straps. There are four species of bull kelp around New Zealand. Other readily identifiable kelps include common kelp and bladder kelp, which has

blades emerging from a central stem and gas-filled bladders at the base of each blade.

Another easy one to identify is Neptune's necklace, sometimes called sea grapes, which grows in strings of hollow, textured, brownish or olive-coloured beads. Some have beads with a slightly squared-off shape.

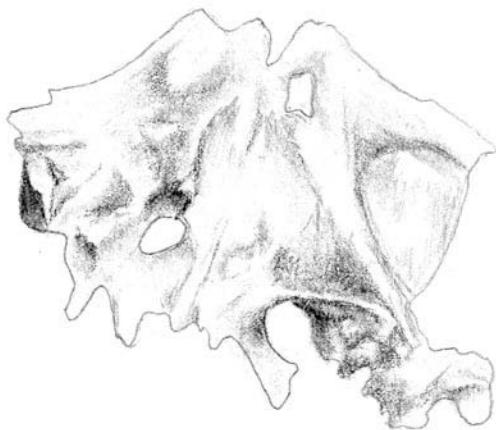
Green seaweed

SEA LETTUCE (RIGHT)

Ulva lactuca

Spotting it

Sea lettuce grows where there is plenty of sunlight. Round New Zealand, sea lettuce is easy to recognise, looking a lot like vividly green, thick, soggy lettuce.



Red seaweed

KARENKO — NORI

Porphyra species

Spotting it

Karengo is considered the choicest red seaweed for eating. You'll find it growing on rocks near the high-tide mark, looking like small torn sheets of purplish cellophane.

Sustainable harvesting

Seaweeds generally attach themselves to rocks with a 'holdfast'. Many people say that to harvest seaweed most sustainably you should snip off a few bits, leaving the seaweed plant attached and growing.

Another way to sustainably harvest seaweed is by gathering what's been thrown up onto the beach after a storm.

Using them all

Seaweeds with a pleasant texture, like sea lettuce, can be washed and eaten fresh. Usually, though, it's better to cook or dry them. When their saltiness is overpowering, boiling them in a decent volume of water to reduce that saltiness

is a good option. Experiment with boiling times. For example, I think sea lettuce is delicious once it has been boiled for 8–10 minutes, but you may prefer it cooked for more or less time.

You can serve boiled seaweeds hot with butter and/or lemon juice, or a sauce, much like any other vegetable. You can also add cooled cooked seaweed to salads. Experiment with how you cut them before boiling. Thin boiled strings or shreds, almost like vermicelli, work well as a hot side vegetable, or cold as part of a salad.

Let your culinary imagination be sparked by the unique shapes and textures of different seaweeds. Use them instead of lasagne sheets, or for an extra layer in a gratin, but be careful because you probably won't need to add much extra salt to the dish. Usually seaweed has quite enough salt for any dish.

Seaweeds dry well, and their flavours can change interestingly with drying.

Follow the methods in the drying section of this book, on pages 187–90, then powder them and use them as a condiment, or keep them in larger dried pieces to use in cooking. In hot liquid, they'll expand to their original size.

Make flavoursome chips by briefly frying or oven-baking small pieces of dried or fresh seaweed until they bubble. The key to making good seaweed chips is removing them at exactly the right time — after they've thoroughly crisped, but before they burn.

Kelp chips are especially popular and sometimes sold commercially. When making chips from bull kelp, choose the thinnest, choicest parts of the straps.

Very mucilaginous seaweeds can be boiled in milk or cream with added honey or sugar for about half an hour to make a milk jelly. Try one part seaweed to four parts milk. Back in the day, this was classic 'invalid food'. Remember that using your own gathered sources of mucilage won't offer the reliable standardised results that using store-bought agar and carrageenan will.

SOLANACEAE Nightshade family

This family includes many widely cultivated edible plants, such as potato, tomato, eggplant and tamarillo. However, it also contains plants that are infamous for their toxicity, such as nightshades, Jerusalem cherry and datura. Even the edible members have their risks. For example, it's not a good idea to eat potatoes that have turned green from exposure to light.

Many species in this family contain powerful alkaloids that are used as medicines and recreational drugs, but in excess these substances can be very poisonous.

POROPORO

Solanum aviculare (right)

Solanum laciniatum

Spotting them

Both species of poroporo grow around the North and South islands in scrub and on forest margins. Occasionally they pop up in gardens. With its lanky trunk, dark, droopy long-fingered leaves, vivid purple flowers and dangling fruits that turn from green to yellow to orange, poroporo is a colourful and dangerous-looking character.

Many foragers have noted that the fruits look like a small orange version of their cousin the tamarillo.



Using them

It is vital to harvest only very ripe fruits. The fruits are ripe when the orange skins begin to split.

The rest of the plant — leaves, flowers and unripe fruits — will, at the very least, burn the mouth. Regard them as poisonous and avoid them.

I've experimented with very ripe poroporo fruits, cooked with a little sugar, and found that although they tasted okay, they irritated the roof of my mouth.

TROPAEOLACEAE

Nasturtium family

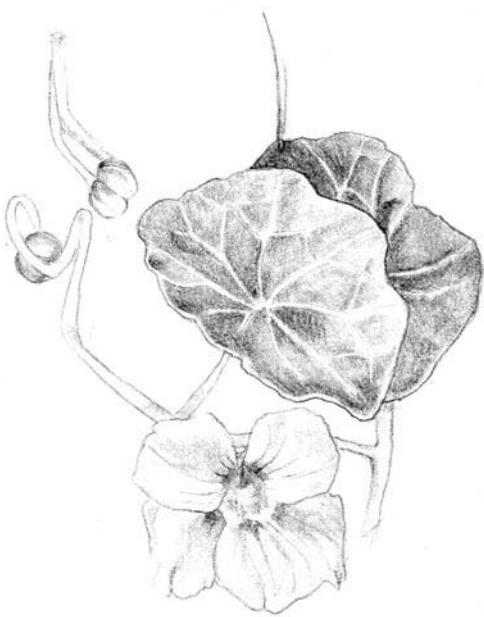
There is a single genus in this family — *Tropaeolum*. These plants are native to the Americas, from Mexico southwards, and are especially prevalent in the Andes, where they apparently grow up and down the mountainsides.

Only two of the family's many species are widely naturalised in New Zealand. *Tropaeolum speciosum* (Chilean flame creeper), which is on the National Pest Plant Accord, is a coiling vine that shades out and smothers native plants. The other is *T. majus*, commonly known as nasturtium, and it's usually quite well liked.

This family is in the Brassicales order. (An order is the next rung up from a family in the taxonomic hierarchy.) Brassicales contains many families that are noted for their mustard oil content, including a favourite foragers' plant family, Brassicaceae. (See page 62.)

NASTURTIUM

Tropaeolum majus



Spotting it

Nasturtium, a herbaceous plant, is easy to identify. Its round green leaves have stems attached to the middle of the leaf's underside and a radiating star pattern of veins on the upper side. The trumpet-shaped flowers generally have five petals and most are a vivid orange. There are also red and yellow varieties.

Using it

Nasturtium likes to party, and is great in a range of snacks and finger foods. Except for the root, every part of the plant is edible. The leaves are slightly mucilaginous. One advantage of nasturtium over the leaves of many wild mustard greens from the Brassicaceae family is that it doesn't have the same bitterness mingling with the mustard flavour.

You can certainly cook nasturtium leaves, but to preserve their mustardy flavour in its entirety, use them raw.

Nasturtium works well with cheeses. You can finely chop the leaves and/or the flowers into a cream cheese, or lay them flat over cheese on crackers or in sandwiches. Nasturtium also goes well with salmon, walnuts, cucumber and chives, and works beautifully in Italian-inspired dishes.

Nasturtium seedpods are often pickled as mock capers; they have a similar flavour and texture to real capers, which come from the caper bush (*Capparis spinosa*), another plant in that mustardy Brassicales order (see opposite). Sometimes you'll have to rummage through the nasturtium leaves and stems to find the seedpods, which grow in groups of three. Choose only the young, green pods to pickle, and use one of the pickle recipes on pages 191–3.



FILLING THE GAP

Filled nasturtium leaves

Pick small nasturtium leaves, leaving a long stem on them. Dollop a delicious filling of your choice onto each leaf, and roll it up, securing it by tying the stem around the roll.

Filled nasturtium flowers

Arrange the flowers on a plate, and drop filling into their centres.
Leave them open.

URTICACEAE Nettle family

This large family contains many species of plant that are used around the world medicinally and for fibre. It includes ramie, a plant with stalks from which spinnable fibre has been harvested for millenia.

The best known family members are those in the *Urtica* genus — the true nettles — which give the whole family its name. Used as food, medicine, fibre and dye, they have nourished and inspired since the beginning of recorded history.

After discovering New Zealand, Kupe is said to have sent an arm of thorny shrubs into the landscape to halt pursuers, including New Zealand's terrifying, gigantic native nettle, ongaonga.

England hosts the World Nettle-eating Championships each year, and nettle festivals throughout the United Kingdom and Europe showcase all manner of nettle

fare. *Urtica dioica*, in particular, and *U. urens* are the most commonly mentioned nettles in today's herbal books. Often considered weeds now, they are excellent culinary greens possessing a rich, earthy taste with tea notes.

Introduced nettle



PERENNIAL NETTLE OR
COMMON NETTLE (LEFT)
Urtica dioica

ANNUAL NETTLE, SMALL
NETTLE OR DWARF NETTLE
Urtica urens

Native nettle

PUREORA — SCRUB NETTLE
Urtica incisa

SOUTHERN NETTLE
Urtica australis

NO COMMON NAME
Urtica aspera

SWAMP NETTLE
Urtica linearifolia

Spotting them

Nettles have upright stems and jagged-edged leaves covered in hairs, which are actually glassy little spines, like syringes. They inject histamine and other chemicals into any skin that brushes them. Nettle's flowers cluster close to its stems.

New Zealand has five native nettles, all of which need to be carefully treasured. Four are edible, and there is also the striking giant, ongaonga (*Urtica ferox*); see page 20 for more information.

Nettles, especially the introduced ones, like to grow in rich, well-fertilised soil, so look for them in gardens, on farms and sometimes around parks or bush margins.

Using them

It's best to gather nettles in spring, before the plants flower. After that, the leaves become more indigestible. And pick the growing tips, just the four to six leaves on the end of each stem. You can also coppice a nettle plant early in spring, chopping it off near the base. Use what you've gathered, and the nettle will regrow.

Most of us like to wear gloves to harvest and process nettles, although some people are able to use their bare hands.

You can throw nettles into any cooked dish without fear, because cooking neutralises their sting. Drying pretty much does, too. I say 'pretty much' because I've experienced tongue tingles from dried nettle tea, although I've been told this shouldn't happen.

Interestingly, they can also impart delicious flavours to desserts. I have local forager and nettle enthusiast Marianne Vella to thank for introducing me to nettle's sweet applications.

The secret to using nettle in desserts is to complement it with vanilla. This is partly because nettle has a lingering aftertaste. However, vanilla has its own aftertaste, strong enough to balance out the nettle. A particularly lovely dessert flavour combination is nettle, vanilla and ginger.

You can finely chop nettle into a dessert, or infuse a cream, custard or syrup with it. If you're unsure how much nettle to use in your dessert, err on the side of caution the first time you try it.

Nettle is widely touted for its health benefits. It's rich in iron, magnesium, calcium, chromium, zinc, potassium, phosphorus and silicone, as well as vitamins A, B2, C, E and K. It's considered an all-round tonic to boost strength and immunity. A cup of nettle tisane, which can be made using dried or fresh leaves, is a simple way to enjoy these benefits.

At least one study has shown that nettle reduces the need to get up in the night to urinate. Another found that people who suffered painful arthritis in their hands could reduce the symptoms by inflaming the skin on their hands with nettles. This benefit was over and above the replacing-one-pain-with-another effect.

New Zealand's five native nettle species tend to hang around on the outskirts of bush and ... along the side of little-used tracks ... You have to be brave to consider planting nettles in the garden. But we must.

Without the nettles our most elegant butterflies will surely disappear. The Admiral Butterflies rely on the nettles for the correct balance of food to feed

their rapacious caterpillars as they grow to become a beautiful gold-encrusted chrysalis.

GEOFF DAVIDSON, FOUNDER, ORATIA PLANT NURSERY



The literary weed

In fairy tales from around the world, nettles have prominent roles.

Shakespeare mentions nettle at least 13 times, in plays from *Hamlet* to *King Lear*. And this quote, from Part I of *Henry IV*, is one of New Zealand writer Katherine Mansfield's favourites:

but I tell you, my lord fool, out of this nettle danger, we pluck this flower, safety.

Mansfield uses it at the beginning of her short story, 'This Flower', written in 1920 after her diagnosis with tuberculosis. These lines also provide the epitaph on her grave.

Meanwhile, in one of my favourite childhood books, *The Piemakers* by Helen Cresswell, first published in 1967, brooding dreamy Jem is miraculously immune to the eye sting of onions. Her secret? She wears a pendant containing a nettle leaf. Her grandmother gave her the charm because 'a big sting chases away a little sting'.

WINTERACEAE Horopito family

This is one of the oldest families of flowering plants on earth. The trees and shrubs of Winteraceae are often aromatic, and populate areas of the southern hemisphere.

In Australia the leaves and fruits of one family member, mountain pepper (*Tasmannia lanceolata*), are gaining popularity as a hot bush-tucker spice. Mountain pepper's Kiwi cousin, horopito, has similar culinary properties.

Horopito

LOWLAND HOROPITO (RIGHT)
Pseudowintera axillaris

MOUNTAIN HOROPITO
(BELOW)
Pseudowintera colorata

Spotting them

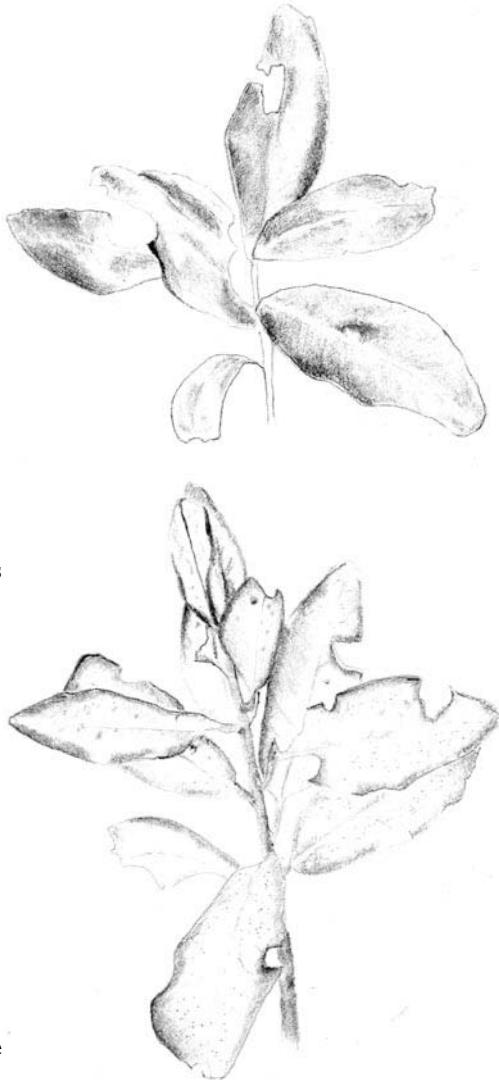
Pseudowintera colorata is the more prevalent horopito, and it's easier to identify. It grows into a shrub or small tree, in and around bush throughout New Zealand, except in the far north. It has ovalish leaves that are a pale matt green. They are very often edged with red or covered in red spots. The flowers are small and faintly fragrant, and grow singly, directly from branches.

The red spots on leaves seem to be a response to injury. You can test this by scratching a small mark into a leaf, then coming back in a few hours. Your mark will now be in red.

Pseudowintera axillaris has similar-looking and -smelling flowers, but they grow in small bunches. The leaves are shiny on the upper surface and nearly white underneath. They don't display the red spotting. It's grown in forests throughout the North Island and in the top half of the South Island.

Using them

Pseudowintera colorata is the most frequently used horopito, but *P. axillaris* is also edible and flavourful. Both horopito species have a heat to them, but *P. colorata* is hotter. Try nibbling lightly on a leaf. You may not feel it at first — the burn has a



habit of developing gradually. And don't overdo it, as the antidote for chilli-burn — milk — doesn't work for horopito!

Horopito leaves make a hot cooking spice, fresh or dried. They also work well as an infusion for pickles and in some recipes as a replacement for chilli, but bear in mind the flavour is different from chilli and the heat creates a slightly different sensation.

The leaves are thick and leathery, and don't soften significantly when cooked, so to flavour a dish, either dry them and powder them, or use them fresh, whole or torn into large pieces so they can be lifted out before serving or spotted easily by diners.

Polygodial, the substance that gives horopito its heat, is used in industrial foods to enhance mint flavours. Horopito also goes well with mint in home cooking. For example, consider adding horopito to a mint sauce for lamb.

Horopito can have the disturbing effect of knocking out some of your tastebuds for a while — the more horopito you have, the greater the effect. It can make everything you eat or drink afterwards taste odd. Note also that research has shown polygodial is an effective deterrent against some bugs that eat your garden plants, as it blocks their sugar receptors.

Horopito has long been used in rongoā (Māori medicine) to treat fungal skin and other infections. Its polygodial has strong antifungal properties. Recent studies show it to be particularly useful against strains of *Candida*, and it can be combined with anethole — found in fennel and other licoricey herbs — for greater antifungal activity. (See the references below.)

Medicinally horopito can also be used in a similar way to chilli. Both are counter-irritants with rubefacient qualities — they dilate blood vessels wherever they're applied and increase blood flow around an area, giving a therapeutic inflammatory response that may help cleanse damaged or toxic tissues. Nettles and mustards do this too.

Wild food chef Charles Royal says horopito can be infused into massage oils by heating the oil gently to help release the active compounds. He also says it works well as an expectorant when used for a steam inhalation.

These are two of several articles on the subject:

M. Himejima and I. Kubo, 'Fungicidal Activity of Polygodial in Combination with Anethole and Indole against *Candida albicans*', *Journal of Agricultural and Food Chemistry*, Vol. 41, No. 10, 1993, pp. 1776–9. doi:10.1021/jf00034a048Y.

Naito, C. C. Wu, M. G. Seal, F. Gelosa, M. Yoshioka, P. Safran and F. Marotta, 'Protective Effect of a Polygodial/Anethole-Containing Natural Product against *Candida albicans* Gastrointestinal Colonization and Dissemination,' *International Medical Journal*, Vol. 8, No. 1, 2001, pp. 3-9.

‘A favourite joke to play on ‘newchums’ was to offer them a taste of something ‘really delicious’ — a horopito leaf. We soon got the rough edge of their burning tongues.’

SHEILA NATUSCH, *WILD FARE FOR WILDERNESS FORAGERS* (COLLINS, 1979)

SWEET HOROPITO SAUCE

Use this sauce as you would sweet chilli sauce. It’s great with the weed pakora and tempura recipes later in the book; see pages 221 and 220, respectively. You could also make Vietnamese rice-paper rolls using foraged greens and serve them with this horopito sauce.

¾ cup water

¼ cup vinegar

½ cup sugar

1 teaspoon salt

a good handful of fresh horopito leaves

3–6 cloves garlic, according to taste

¼ red capsicum

½ medium-sized carrot

1 tablespoon cornflour

10–15 cm fresh ginger

Put the water, vinegar, sugar and salt into a saucepan and bring to a simmer.

Add the fresh horopito leaves. You may want to tear them up

a little to help them release their heat and flavour.

Simmer for 5–10 minutes.

Meanwhile, finely chop or mince the garlic cloves, deseed and chop the capsicum as finely as possible and finely grate the carrot.

Strain the horopito from the liquid.

Add the garlic, capsicum and carrot to the liquid and simmer for another 5–10 minutes.

Mix the cornstarch with a little extra water and stir it into the hot liquid.

Simmer the mix for another minute or so until the cornflour is cooked. The liquid will be translucent.

Remove the saucepan from the heat.

Grate the fresh ginger and, by hand, squeeze the juice from the gratings into the saucepan and stir to combine.

Pour the hot sauce into hot, sterilised jars and seal.

Sealed, it should store in a cool, dark place for up to 6 months, but refrigerate to be certain.

XANTHORRHOEACEAE

Aloe family



Worldwide, *Aloe vera* is perhaps the most valued species in Xanthorrhoeaceae, but in New Zealand, the most beloved family members are harakeke (*Phormium tenax*) and wharariki (*P. cookianum*) — the New Zealand flaxes.

For Māori harakeke has always been a vital source of fibre for baskets, clothing, fishing nets, rope and more. Māori also discovered its medicinal and culinary uses.

New Zealand flaxes

HARAKEKE — NEW ZEALAND FLAX OR SWAMP FLAX
Phormium tenax

WHARARIKI — NEW ZEALAND FLAX OR MOUNTAIN FLAX
Phormium cookianum

Spotting them

With their enormous, fibrous, strap-like leaves and imposing flowering stalks, harakeke and wharariki are easy plants to spot.

Wharariki has slightly shorter and softer leaves than harakeke, but the easiest way to tell the two species apart is to check the flowers and seedpods. Harakeke flowers are reddish, while wharariki flowers are greenish. Harakeke seed pods curve upwards like bananas, but harariki seedpods are slightly twisted and dangle downwards.

The two species can hybridise with each other.

Using them

The flowers of both harakeke (opposite) and wharariki produce a lot of nectar and pollen, both of which can be collected and added to dishes. The nectar is a sweetener that contains several sugars and small amounts of vitamins.

At their base, the leaves produce a soothing, healing gel with antiseptic qualities that you can use like aloe vera gel; see page 285 for more information.

Harakeke seeds are highly edible. When white or greenish, they are sweet and meaty; when black and shiny, they're bitter. The sweet ones are nice on their own, sprinkled on a salad, or ground into a pesto or dip. Sometimes you have to split open a lot of pods (above) to find good seeds, but after a while you may start to predict which pods are likely to contain the sweetest seeds — on harakeke plants they often have a slightly more yellow-brown tinge to them than the others.

Harakeke is treasured as a fibre plant by Māori, while wharariki leaves do not



contain such strong fibres. Iwi and hapū groups around the country are involved in growing and preserving the most valued heirloom varieties of harakeke, and the fibre is widely used by weavers of both traditional and modern items.

Propagating flax

If you find one of those precious flax bushes that has particularly yummy seeds, you could try propagating it by separating a fan of leaves from the side of the bush and planting it directly into fertile, well-drained soil. Here is advice from Landcare Research (<http://www.landcareresearch.co.nz/resources/collections/harakeke/establishing-a-pa-harakeke>) on how best to do this:

Taking fans off the parent bush can be hard work! If possible, choose a time when the soil is moist. We like to use a long-bladed planting or trenching spade, a grubber, or even a crowbar to dig around and get under and behind the fan we are lifting.

Divided fans are usually trimmed of outer leaves, leaving the rito (growing shoot) and the two 'parent' leaves on either side (awhi rito or matua). The parent leaves should be cut back if too long, but it is a good idea to have some protection of the rito. If possible, plant the harakeke fans together in groups of three. This will give them a good start.

The traditional way to plant harakeke is to 'plant the puku to the sun', so that the bulge on the fan faces halfway between the rising and setting sun. This protects the baby fans, which will emerge at the back of the clump, and gives them shade and moisture.

Allow three metres between each clump... This spacing will allow good air movement among the plants as they grow, which helps prevent build-up of scale and fungal diseases, and allows easier access for trimming and harvesting.

If the soil is poor, apply general fertiliser containing phosphate. Plants will also benefit from regular watering. Keep the area around the base of the plants weeded and trim dead leaves.



PRESERVING THE HARVEST

Introduction

As soon as a plant is harvested, its flavours, scents and nutrients have one foot pointed towards the door. How to catch and cage these ephemeral qualities before they flee?

One of the simplest and most fun ways is to use your gathered plants to infuse basic ingredients such as syrup, honey, butter, alcohol, oil and vinegar. Other useful preserving methods include freezing, drying and pickling. With an array of wild infusions and preserves lining a pantry or fridge shelf, you may feel like the keeper of a culinary menagerie. And there's nothing like that most domestic of satisfactions — the feeling of being well stocked up.

In this section of the book you will find a host of simple methods for preserving your wild harvest, along with ideas for using them later. Some infusions and preserves can be enjoyed as they are, but often they're building blocks for other recipes.

There are further recipes in the next part of the book — 'Choose-your-own-adventure cuisine' — and to find out more about the suggested ingredients for each method, you can refer to the previous section, 'The treasures', which contains details about each plant along with tips for harvesting and processing.

Recipe key for dietary requirements

DF – Dairy free or dairy-free versions are possible

GF – Gluten free, or gluten-free versions are possible

V – Vegan or vegan versions are possible

Important notes about hygiene and storage

Many moulds and bacteria are friends, enabling us to make fermented foods and drinks. A few microbes, however, have it in for us. Storing food for any length of time can give these unwanted ones a chance to reproduce to dangerous levels.

The time-honoured storage methods detailed in this part of the book have been developed to keep unwanted microbe growth to a minimum, but remember that unknown variables can always come into play. It's worth bearing in mind a few basic principles:

- ➲ Sugar, honey, vinegar, salt, alcohol and glycerine are all excellent preservatives — oil sometimes less so.
- ➲ The more a preservative substance is diluted with other non-preserved substances, the less well they'll do their job. Note especially that the higher the water content in anything, the less well it will keep. For example, the best syrups for preserving are those with a high ratio of sugar to water — 50/50 or more.
- ➲ The moisture content in plants can promote microbe growth. One way to reduce moisture is to wilt the plants slightly before preserving them in any medium. And when making an infusion (as opposed to preserving whole bits of plant), be sure to strain as many bits of the plant out as possible once the infusion is done.
- ➲ When preserved food is unsealed, store it in the fridge or freezer.
- ➲ It can be an idea to preserve your food in relatively small bottles or jars so you're not opening much at a time, as exposure to oxygen and other substances can promote microbe growth.
- ➲ The most feared microbe invasion is that of *Clostridium botulinum* — the bacterium that produces botulinum toxin, which leads to the very rare but potentially fatal paralytic illness, botulism. Bear in mind that these bacteria cannot thrive in oxygen or in acidic conditions. They need a pH over 4.6. Apples, pears, berries, stonefruits and citrus are generally all too acidic for them. Some, but not all honey is too acidic. Wines and vinegars also have safe acidity levels.

- ➲ Warm temperatures promote growth of *Clostridium botulinum*, but refrigeration inhibits growth, especially if your fridge is at 3°C or lower.
- ➲ There are several types of *Clostridium botulinum* with different attributes. To really familiarise yourself with the associated risks and precautions to take, find a reliable and detailed resource such as (at the time of writing): <http://www.ext.colostate.edu/pubs/foodnut/09305.html>
- ➲ When preserving food, maintaining good hygiene and scrupulous sterilisation of all your implements and containers is important. Placing your equipment in a stockpot full of water and boiling it for 10 minutes before use is a common sterilisation method.
- ➲ Some people prefer to heat preserving jars and bottles in an oven at 121°C — the temperature that kills spores of *Clostridium botulinum*.
- ➲ An alternative sterilisation method is to soak equipment in cold water in which sterilising tablets have been dissolved. These are commonly available. Use them according to the manufacturer's instructions.
- ➲ There is no single authority on how long any given preserve will keep. Indeed, you'll find people have conflicting experiences, and it's hard to untangle the variables that might be contributing factors. The storage times offered in the following methods are guidelines only, based on a mix of personal experience, other people's research and common wisdom. Check your preserves for mould before using them.
- ➲ When in doubt about how long something will keep, freeze or refrigerate it.

TISANES

The simplest infusion you can make is a tea or, maybe more correctly, a tisane, as some people consider the term 'tea' should be used only for infusions of the tea plant, *Camellia sinensis*.

Infuse fresh foraged plants for a yummy, healthy hot drink or dry them to infuse later. If you're trying to give up your favourite caffeinated cuppa, try replacing it with all sorts of wild tisanes. The experimentation and discovery involved can help take your mind off the mental pain!

You can also keep tisanes chilled in the fridge for a couple of days. To keep them longer, freeze them in a container, or as ice cubes.



BASIC TISANE

DF GF V

You can infuse pretty much any wild thing you find, as long as it's edible. Covering the liquid while infusing is important, partly so you don't lose any as vapour but also because, in the case of some herbs like chamomile, molecules change in valuable ways when they convert to steam then recondense. This recipe makes a single serving.

1 teaspoon dried or 2 teaspoons fresh, chopped foraged treasure
1–1½ cups boiling water
honey or sugar to taste (optional)
a slice or squeeze of citrus (optional)

Pour water over plant material in a cup, bowl or teapot.

Cover with a saucer or lid and leave to steep
for about 5 minutes.

Strain into a jug or cup, or pour from the teapot, if using. Adjust
flavour with honey, sugar or citrus, if desired.

Enjoy!

Variations

Dairy isn't usually added to herbal tisanes, but I love milk or cream and honey with lavender and mānuka. Rose and elderflower tisanes are good with milk or cream, too.

Add lemon or lime juice to a tisane that's too bitter for your taste.

Good forageables to use for tisanes

Plant part	Comment
Blackberry leaf	Tart and astringent, good for diarrhoea and upset tummies, and a pleasant drink for its own sake
Chamomile flowers	A classic tisane that has calming effects
Chickweed leaves and stems	Soft and grassy-tasting, soothing to the throat and nutritious
Citrus leaves, flowers or peels	Stunning, unusual tisanes can be made from any citrus
Cleavers leaves and stems	Fresh and grassy-tasting, it will help cleanse the lymph system
Dandelion flowers	A mild-tasting, bright yellow tisane best served in clear cups to make the most of the colour
Elderberry flowers	Be sure to remove the mildly toxic green stems
Fennel leaves or flowers	A strong aniseedy tisane that is supposed to help you break wind
Jasmine flowers	The flavour will remind you straightaway of Chinese jasmine tea, which is made with green tea leaves infused with jasmine
Lavender flowers and leaves	Brimming with volatile oils, it can have a very strong flavour
Kawakawa leaves	Aromatic and delicious, anti-microbial and with a mildly anaesthetic quality
Mallow leaves	Mild, green-tasting and mucilaginously soothing
Marigold flowers	Best served in clear cups to show off the brilliant orange of the infusion

Mānuka leaves	A pleasant, healthy tisane with a long and venerable tradition in New Zealand
Nasturtium leaves, flowers or seedpods	A warming, mustardy tisane that can be good for alleviating the symptoms of a common cold
Nettle leaves or tops	Packed with nutrients, this tisane's deep, earthy flavour is an acquired taste, but once you have acquired it, you may crave it
Oat straw (the stems of oat grass)	Highly nutritious and said by some to have mild calming properties; best decocted (boiled) rather than steeped
Pine, spruce and fir leaves	These plants don't always release their refreshing flavours quickly and can be steeped for longer than 5 minutes or decocted (boiled) instead
Tutae koau leaves and flowers	The flavour is similar to parsley but <i>avoid it if you are pregnant</i>
New Zealand mint leaves	A mild mint flavour with a love-it or hate-it hint of petroleum
Parsley leaves or seeds	Aromatic and strangely delicious, but stick to half a teaspoon or less if using the seeds because they're strong; <i>avoid it if you are pregnant</i>
Rosehips or petals	A gentle aromatic tisane; it's interesting to try different varieties of rose and compare flavours
Scented pelargonium	Strong aromatic tisanes that vary in flavour according to the variety of pelargonium
Yarrow flowers	In the same family as chamomile, yarrow doesn't taste quite as pleasant, but is considered just as useful medicinally, being a general tonic noted for its anti-inflammatory properties

Fruit tisanes

Any fresh fruit can be made into a tisane. Cut or break it up first to allow its flavours out into the hot water and use a good handful of pieces. Fresh fruits make pleasant, refreshing and usually very mild tisanes.

Things to do with tisanes

ICED TEA

Take any foraged tisane, chill it and add an equal quantity — more or less to taste — of fruit juice. Infusions of pine, fir, spruce, lavender, rose, fennel, jasmine, kawakawa, mānuka, New Zealand mint and scented pelargonium all hold their own when blended with fruit juice. Milder tasting wild plants like chickweed, cleavers or dandelion flowers can be nice too.

BIRCHER MUESLI

Rolled oats in a bowl, soaked overnight in a tisane and sweetened with a little juice or honey, make the basis of a delicious breakfast. In the morning just stir in milk, yoghurt or cream then top with chopped nuts and/or fruits. Soaking the oats makes them gentler on your digestive system, and if you soak them in a tisane you get the extra nutritional benefit of those ingredients.

WILD STOCK

A tisane can be used in any soup, casserole or gravy instead of stock. Try tisane stocks made from onionweed, tutae koau, wild parsley, wild celery, nettle, fir, spruce, pine, cleavers, chickweed, dandelion flowers, seaweed or a combination of those.



WILD TEA CAKE

DF V

My friend Wei Siew Leong (herself a keen forager) showed me the virtues of tea cakes. They're straightforward to make, delicious, filling, economic, convenient and very portable — whole or as slices.

2 cups extra strong tisane of your choice
1/2 cup brown sugar or honey
3 cups mixed dried fruit
3 cups standard flour
3 teaspoons baking powder

While the tisane is hot, stir a little of the sugar or honey into it.
Pour the tisane over the dried fruit, and leave to soak, overnight if possible.

When the fruit has softened, preheat the oven to 160°C and grease a standard loaf tin.

Add the rest of the honey or sugar to the fruit and stir to combine.
Sift in flour and baking powder and mix to form a batter.

Pour the batter into the loaf tin and put into the oven, covered with a piece of baking paper or cooking foil.

Bake for around 45 minutes, or until you can insert a knife into the middle of the loaf and it comes out clean.

Remove cake from the oven and stand on a cooling rack for a few more minutes before turning out of the tin onto the rack.

Slice and serve warm with butter, a spread or on its own, or save to slice up cold for packed lunches.

INFUSED SYRUPS

Syrups are not as super-quick to make as tisanes, but as sugar is a preservative, they last longer and are still an easy, versatile way to collect and save flavours.

You can use syrups in myriad ways. Add them to smoothies, use them in fruit pie fillings instead of honey or sugar, pour them over ice cream, or use them to glaze grilled fruit kebabs or roasted meats.



SIMPLE INFUSED SYRUP

GF DF V

You'll need a sieve and a clean muslin square to strain the syrup at the end of the process.

water
white sugar
aromatic foraged treasures

Place equal parts water and sugar in a saucepan over medium heat and stir until sugar is dissolved.

Bring to the boil and as soon as it boils remove from the heat. Meanwhile wash the foraged treasures and pick them over to remove foreign material.

Place cleaned plant material into a bowl or jug.

Pour enough hot syrup over them to cover.

Leave to infuse for 12–24 hours.

Strain the infused syrup through muslin into a bowl or jug.

Transfer the syrup into a sterilised bottle or jar and seal.

Keep refrigerated to be on the safe side.

Variation

Try using honey rather than sugar. Instead of letting honey and water boil, it's best to warm just until the honey dissolves — heat begins to destroy some of the honey's health benefits.

Good forageables to use for simple syrups

✿ chamomile flowers	✿ New Zealand mint
✿ citrus peels	leaves
✿ elderberry flowers	✿ pine needles or tips
✿ fennel leaves, stems or flowers	✿ rosehips or petals
✿ fir needles or tips	✿ scented pelargonium
✿ kawakawa leaves or unripe berries	leaves or flowers
✿ lavender flowers	✿ spruce needles or tips
✿ mānuka leaves	✿ sweet William flowers
	✿ wild jasmine flowers



SIMPLE FRUIT SYRUP

GF DF V

The main difference between this and the simple infused syrup on page 157 is that the foraged fruit is simmered in the liquid. Some of the nutritional compounds in the raw fruit will be destroyed by heat, but you'll extract more of the fruit flavour.

The leftover cooked fruit is delicious with cereal or ice cream or stirred through yoghurt.

This is a useful way to process windfalls of unripe fruit that might otherwise go to waste.

by weight, equal parts of
foraged fruits or berries
sugar or honey
water

Wash fruits or berries and pick them over to remove foreign material.

Place the fruits or berries in a saucepan.

Add equal parts of water and sugar or honey,
enough to cover the fruits.

Place over a medium heat and stir gently
until it comes to the boil. Boil for 10 minutes.

Remove saucepan from the heat and set aside to cool.
Strain the infused syrup through a sieve and clean muslin
into a bowl or jug.

Transfer the syrup into a sterilised bottle or jar and seal. If sealed well, and sugar is used, this syrup should last 6 months to a year in a cool, dark place. If honey is used, results are possibly more unpredictable.

If you are unsure, keep it in the fridge or freeze.

Good forageables to use for fruit syrups

• apples	• fuchsia berries
• blackberries	• ice plant fruit
• citrus fruit peeled and sliced	• pears
• coprosma berries	• plums
• crabapples	• quinces
• elderberries	• wild cherries

Fruits preserved in syrup

Fruits, ripe or unripe, can also be preserved in their entirety in a sugar syrup. Prepare the fruit first to remove all the bits that you wouldn't want to eat, cut fruit into pieces if necessary, then simply follow the recipe above for fruit syrup, but skip the straining.

The importance of citrus

Lemon, lime, mandarin and orange all brighten and lift other flavours. The added acidity, especially of lemons and limes can also extend shelf-life. To add just a hint of citrus to an infused syrup, slice up a peeled citrus fruit and place it in the saucepan with the other plant material before infusing. You can leave the skin on, but it will probably impart some bitterness.

Alternatively, simply add a squeeze of citrus to the infusion when you come to serve it.

Elderflower syrup is especially noted for needing the addition of lemon or orange, but others benefit, too.

No strain no gain?

When it comes to straining, muslin is your best friend. If you don't mind a few bits in your products, then straining through a sieve is fine, but by lining the sieve with one or more layers of muslin first you'll strain the larger bits out. Sometimes this means leaving it to drip for a while over a bowl.

You can also strain without a sieve. Just bunch up the muslin with the pulp or boiled plant matter inside, then tie it, Christmas-pudding style, and hang it over your bowl to drip.

If you're like me, you may sometimes get impatient and swish the pulp round in the sieve, or squeeze the muslin bundle to make it drip faster, but bear in mind that you end up with a cloudy product.

Coffee filters also make excellent sieve liners and they will produce a truly clear, bit-free product.

Things to do with syrups

WILD CORDIAL

Add water to your syrup. Try a ratio of 1 part syrup to 5 parts water for a start and adjust, to taste, with more water or syrup. If you can't get it right, and it feels like it needs something extra, try adding a few squeezes of citrus juice, especially tart lemon or lime. You could also try adding a little vanilla essence.

ICED TEA

Make a jug of black, green or white tea and set it aside to cool. Mix the tea in equal parts with wild cordial and pour it over ice cubes. Serve with a slice of citrus for guests.

ICE BLOCKS

Make ice blocks with cordial. Use commercial moulds or pour into ice-cube trays, then add wooden ice-block sticks. To stop the sticks falling out, stretch plastic food wrap over the top of the tray and make small slits in the plastic above each moulded cube. Slip a stick through each slit and into the liquid.

WILD FIZZY

Instead of adding still water, add soda water or carbonated water. Pour it over a scoop of ice cream to make an ice-cream soda.

FLAVOURED WATER KEFIR

Mix syrup with some of your own freshly brewed water kefir. The interesting tart flavour of water kefir is a perfect foil for a sweet syrup.

THICK SYRUP

Make a thicker syrup for pouring over ice cream or panna cotta. Use 1 teaspoon of cornflour for each cup of syrup. Put a little of the syrup into a small cup or bowl, add the cornflour and mix to a runny paste. Warm the other syrup over a gentle heat and stir in the cornflour paste. Stir gently as it begins to simmer and remove from the heat after a couple of minutes or when the syrup becomes transparent.



WILD JELLY

DF GF

As I discovered at my daughter's birthday picnic one midsummer day, homemade jellies can melt if they get too hot! Keep them cool until you're ready to serve them — it's worth the effort to capture the fresh and fruity flavours of real food. In the recipes below you can use gelatine powder instead of leaves. You can also use agar as a vegetarian alternative. See 'Working with gelatine' (page 163) for details.

2 cups wild cordial, made how you like it

4 gelatine leaves

extra water to soak gelatine leaves

Pour cordial into a saucepan over gentle heat.

Meanwhile, soak gelatine leaves in cold water.

Remove cordial from the heat just before it begins to simmer.

Squeeze the water out of the gelatine leaves and stir the leaves into the warm cordial until dissolved and mixed through.

Pour the cordial jelly into one large bowl or into two to four glasses for individual servings.

Cover, cool and place in the fridge to set.

When set, serve as is, or gently run warm water on the backs of the bowl or glasses before turning out the jelly or jellies onto a serving plate or small serving plates.

If in doubt about whether or not to turn out the jelly, leave it in the bowl!

You can ensure a firmer jelly that will be certain to hold together by adding an extra leaf of gelatine.



SNOW PUDDING

DF GF

The secret to snow pudding is folding the beaten egg white evenly into the partially set jelly. It can be tricky, but if it goes wrong, you can always call it sleet pudding — it'll be just as delicious. It could also be an excuse to make more, and further practise your folding skills.

2 cups wild cordial, made how you like it

3 gelatine leaves

extra water for soaking gelatine leaves

2 egg whites

1/4 teaspoon cream of tartar

1/2 cup sugar

Make wild jelly as on page 161, but use one less gelatine leaf for a softer jelly.

Pour the jelly into a large serving bowl and put in the fridge to set.

When jelly is partially set, beat egg whites until frothy.

Add cream of tartar and beat some more.

Add sugar bit by bit, beating after each addition to the soft peak stage. The mixture should be glossy.

Gently fold the egg white through the partially set jelly until combined.

Put the bowl back in the fridge, or spoon the mixture into glasses for individual servings and store in the fridge until ready to serve.



WILD GUMMY LOLLIES

DF GF

If you like firm, chewy gummies, definitely use 6 leaves of gelatine. This recipe makes a small amount for treats, but you can easily double it.

1 cup wild cordial, made how you like it
4–6 gelatine leaves
extra water to soak gelatine leaves

Pour cordial into a saucepan over gentle heat.

Meanwhile, soak gelatine leaves in cold water.

Remove cordial from the heat before it boils.

Squeeze the water out of the gelatine leaves and stir them into the hot cordial until dissolved and mixed through.

Pour the cordial jelly into ice-cube trays or chocolate moulds or into a container where the mixture will be about 1–2 cm deep.

Cover, cool and place in the fridge to set.

When set, unmould the lollies by gently running warm water on the back of the moulds.

If the jelly is in a single container, turn it onto a board and carefully slice it into small squares or oblongs.

Eat as is, or use to garnish cakes and other desserts.



Working with gelatine

Gelatine can be bought as leaves or powder — each form has its pros and cons. The leaves are much easier to use and don't have the slightly unpleasant aftertaste of gelatine powder. On the other hand, gelatine powder can be easier to find in shops.

USING GELATINE LEAVES

To use the leaves, simply soak them in cold water for a few minutes, so they turn from brittle and crackly to soft and squishy. Then squeeze as much of the water out

of the leaves as you can and add them to any hot liquid you want to set, stirring until dissolved.

The ratio of gelatine leaves to liquid depends on how firm or soft you want the jelly. I use Equagold gelatine leaves in all the recipes here because they're the most easily available to me. The ratio on the packet is simple — 2 leaves per cup of liquid will make a firm jelly, and 1½ leaves per cup will make a soft one.

They don't say it on the packet but 4–6 leaves per cup of liquid makes a very firm jelly (see the recipe for wild gummy lollies on page 163).

USING GELATINE POWDER

At the time of writing, Davis gelatine powder seems to be the most widely available in New Zealand. Each sachet contains 10 g of powder, which can be used to give a medium set to 2 cups of liquid. Use one 10-g sachet to replace about 4 gelatine leaves in any recipes in this book.

To use any gelatine powder, follow the ratios on the packet and remember to soak the gelatine powder in *cold* liquid to soften and swell before adding to the hot liquid you want to set. The instructions on gelatine powder packets don't always tell you this, but it's an essential step.

You can either use a little of the liquid that you want to gel before heating it or use a very small amount of water. Sprinkle the gelatine powder over the surface of the cold liquid and leave to stand while the gelatine swells. Then, as with the gelatine leaves, add softened gelatine to the hot liquid you want to set.

Use more or less powder, depending on how firm you want the jelly.

USING AGAR

Gelatine, which is made from the collagen in animals' skin and bones, is not suitable for vegetarians. Use agar instead for vegetarian and vegan jellies. Follow the instructions on the packet — you generally use a bit more agar, and you need to boil it.

EXTRA TIPS FOR WORKING WITH GELATINE

- ➲ Don't boil the liquid once the gelatine has been added.
- ➲ To allow gelatine to reach its maximum holding power, chill for at least 8 hours, but 24 hours if possible.
- ➲ Uncooked pineapple, figs, kiwifruit and ginger contain bromelin, an enzyme that can stop gelatine from setting. Cooking them first will avoid this.
- ➲ You may need a little extra gelatine if you have alcohol in the mix or an

unusually large amount of sugar. Both sugar and alcohol inhibit gelatine's action.



Tips for beating egg whites

USING A BEATER

Begin with eggs at room temperature.

Some people like to use a copper bowl for the best set.

Others are more comfortable with stainless steel or glass.

If you have a stand mixer you probably won't have a choice.

Make sure there's no oil or fat on the beaters or in the bowl.

Separate the eggs carefully, making sure there's no yolk
in the whites.

Start beating on the lowest speed
and gradually build up to the fastest

Cream of tartar added at $\frac{1}{8}$ teaspoon per cup,
when egg whites are frothy, helps the beaten whites
retain their structure.

'Soft peak stage' is when the peaks of the beaten egg white have little
droopy tips at the top.

To avoid egg whites splitting, beat them just before you
are about to use them.

WHISKING BY HAND

Sometimes I like to prove to myself that I can survive in the kitchen without electricity. The first time I tried beating egg whites without the aid of modern technology, I ended up with an OOS relapse and a broken whisk but, by god, I had nicely beaten eggs.

Maybe you're one of those amazing people who routinely whisks their egg whites by hand or maybe, like me, it's an occasional discipline. I reckon most people should try it once, but be sure to have a strong whisk!

The basic instructions are the same as for using an egg beater. And use small, fast

constant movements to start with, never letting your whisk leave the eggs. As the eggs begin to foam, gradually build up the size of your movements.

Things to do with leftover egg yolks

- Add to a smoothie.
- Make eggnog.
- Make custard.
- Make ice cream.
- Make hollandaise sauce.
- Use in homemade pasta instead of whole eggs.
- Mix through hot, cooked pasta with herbs and seasoning.



WILD WINE

DF GF V

Ferment your wild cordial by harnessing the powers of wild, local yeasts. It's the same principle that underlies making a sourdough starter. The addition of some garden- or wilderness-fresh fruit can speed up and strengthen the process, as the wild yeasts on their skins will help get the fermentation going.

wild cordial

a few unwashed grapes, plums, elderberries
or other berries or fruits (optional)

Place the cordial in a large, wide-mouthed jar.

Add the unwashed berries and fruits, if using.

Cover the jug with a cloth or piece of muslin to keep dust and bugs out, but let more wild yeasts in.

Leave the mix in a warm place for several days, stirring well twice a day or more, if possible.

When the mix begins to bubble, remove the berries or fruits and transfer the mixture to a clean jar or bottle.

You want to keep air out but allow pressure to be released, so put a lid on the fermenting mix only loosely, or use an airlock — which

you can buy from a home-brew supplier. Some ingenious folk instead stretch a balloon over the mouth of the jar or bottle.

Leave until the bubbling slows — probably 2 weeks to a month — then drink straightaway or seal the wine and age it for anything from a week to a year. If you age the wine, try it from time to time to see how it's going.



Using commercial yeast

It's true, relying on wild yeasts can be unpredictable. For some people that's part of the fun. For others, even die-hard foragers, it can be more important to know you're going to get a strong, reliable ferment going. If you feel that way, by all means add a bit of commercial yeast at the start of the process. A pinch of bakers' yeast will give you a rough and ready result. Wine-makers' yeast is likely to taste better and give you a higher alcohol content. There are many wine-makers' yeasts available, suited to different wines. Ask your closest home-brew supplier what they recommend. I use Vintners' Harvest Yeast SN9, as it's readily available and considered a good all-purpose product.



The tradition of floral cookery

During the Middle Ages flowers were widely used throughout England, France and Italy. Right up until the eighteenth century, scented floral extracts were used for flavouring, and bright flowers and petals were scattered into salads.

In the nineteenth century, flowers began to disappear from recorded recipes. It's likely that the Industrial Revolution, and the associated move towards urbanisation, changed many people's lives so much that they could no longer spend so much time growing vegetables and herbs and gathering wild food.



INFUSED VINEGARS

Vinegar has strong antimicrobial and, therefore, preservative properties. This means infusing vinegar is one of the best ways to preserve foraged foods and their flavours for a long time.

Any vinegar will work and bring its own unique attributes to an infusion. Tangy apple cider vinegar, with its widely touted health benefits, is a popular choice. White wine vinegar is not as strong tasting and the flavours of the infusion will shine more brightly. Infusing balsamic vinegar makes a rich, sweet, complex vinegar that is a delicious addition to many cooked dishes.



SiMPLE INFUSED VINEGAR DF GF V

The possible combinations of plant and type of vinegar are numerous. Whatever you use, you may want to add a sprig of the infused plant to the final product for decoration as well as an identifier. Vinegars can take longer to infuse than syrups.

foraged treasures
vinegar of your choice

Wash foraged treasures and pick them over to remove foreign material. Pat them dry with paper towel.

Break or cram your foraged treasures into a jar or bottle, and pour in the vinegar, making sure no bits of plant material are sticking out, as there's a small chance they may grow mould. Store the jar in a cool, dark place for a week or two, giving it a shake now and then.

If, at the end of that time, your vinegar is not as strongly infused as you would like it, repeat the process to make twice-infused vinegar.

Strain the liquid through clean muslin and pour into sterilised bottles. Infused vinegars can generally be stored for a year or more in a cool, dark place.

Variation

With very strongly aromatic plants, such as rosemary and lavender, all you need to do is put a sprig or two into a bottle of vinegar to infuse their heady aroma.

Good forageables to use for vinegar

- chamomile flowers
- elderberry flowers or berries
- fennel flowers, leaves and/or stems
- horopito leaves, torn up
- kawakawa leaves or unripe fruits
- lavender flowers or leaves
- mānuka leaves
- marigold flowers
- nasturtium leaves, flowers and/or seedpods
- nettle leaves and/or tops
- New Zealand mint leaves
- oat straw or milky oats
- onionweed bulbs, leaves and/or flowers, as well as other wild alliums
- parsley leaves, stems, flowers and/or roots
- pine, spruce and fir leaves or tips
- rose petals
- rosemary leaves and/or flowers
- scented pelargonium leaves and flowers
- tutae koau leaves, stems and/or flowers
- wild celery leaves, stems and/or flowers
- wild jasmine flowers

Things to do with infused vinegars

- Add a teaspoonful of infused apple cider vinegar to a glass of iced water for a healthy, refreshing and oddly moreish drink.
- Whisk or shake together 1 part vinegar to 3 parts oil to make salad dressing.
- Add a teaspoonful or two to soups, sauces or gravies. Note that vinegar in bone stocks helps extract the gelatine from the bones.
- Use a dash to deglaze a roasting pan before making gravy.
- Use as the base for a mayonnaise (see the recipe, page 203).
- Mix 2 parts infused vinegar with 1 part oil, plus a little salt and sugar and a crushed garlic clove (optional) to make a marinade for meats or tofu.

WILD BUTTERS

If, like me, you're the kind of person who provokes raised eyebrows and dropped jaws at the quantites of butter you like to slather on toast, hot vegetables and any other food in range, then you'll love these recipes. If you're not such a butter fanatic, perhaps they'll convert you. You can of course use a dairy-free butter substitute for either of these methods. Try a commercial butter substitute, or consider using virgin coconut oil. For enfleuraged aromatic butter you'll need something that's relatively solid at cooler temperatures, such as virgin coconut oil.

It's best to use an unsalted product if you're planning to use your wild butter to make or serve with sweet dishes.



ENFLEURAGED AROMATIC BUTTER

DF GF V

This works with strongly aromatic plants that ooze scent and flavour. If the scent of a plant lingers on your fingers after you've brushed them across its foliage, it's a good candidate for this process, as the butter is infused by the volatile oils exuded by the plant.

250 g block of butter or butter substitute
aromatic foraged treasures

Choose a container big enough to hold the block of butter and line it with your aromatic plant material.

Place the butter on top, then cover it with a thin blanket of more aromatics — you may also want to tuck some down the sides.

Let the butter nestle there for 12–24 hours, keeping it in a cool, dark place. In warm weather the best option may be the fridge.

After 24 hours, remove the block of butter from the aromatic plants, and carefully remove any stray bits of plant stuck to the surface — they can go mouldy quickly if you leave them on.

Wrap the now-aromatic butter in baking paper, or put it in a container, and store it in the fridge or freezer as you would with any other butter.

Good forageables to use for enfleuraged aromatic butter

- ✿ citrus flowers
- ✿ fennel leaves and/or flowers
- ✿ lavender sprigs
- ✿ very strong smelling pine twigs and needles
- ✿ rosemary sprigs
- ✿ scented pelargonium leaves
- ✿ wild jasmine flowers



BLENDED BUTTER

DF GF V

Blended butter is a good thing to make with plants that have a slightly less powerful scent than the highly aromatic plants needed to make enfleuraged butter. These plants should also be soft enough to be eaten.

You can make a savoury butter or one that's good in desserts. There are no hard and fast rules about the ratio of plant material to butter — a handful or two of foraged treasures to 250 grams of butter is about as precise as I'd get, and even that seems slightly too prescriptive! As ever, be creative and work to your own tastes.

250 g block of butter or butter substitute
1 or 2 wild foraged treasures

Soften the butter, and beat it in a bowl until pale and well creamed.
Wash your foragings and pick them over to remove foreign material.

Finely chop or cut up foragings and add to butter.
Cream some more.

To store the blended butter, form it into small patties and place the patties on a tray lined with baking paper. Place in the freezer and, when the patties have frozen, transfer them to a container or freezer bag and return to the freezer until required.

Alternatively, you can spread a sheet of baking paper on a bench and arrange the butter in a 3–4 cm diameter log. Roll the paper around the log and twist the ends to seal. Store in the fridge or freezer and cut off slices as required.

Good forageables to use for blended butter

✿ borage flowers	✿ parsley leaves
✿ chamomile flowers or leaves	✿ pine tips
✿ citrus peel, finely zested	✿ rose petals
✿ fennel leaves, flowers or pollen	✿ scented pelargonium leaves
✿ fir tips	✿ spruce tips
✿ harakeke pollen	✿ sweet William flowers
✿ kawakawa leaves	✿ tutae koau leaves
✿ marigold petals	✿ wild celery leaves
✿ nasturtium flowers or leaves	✿ wild jasmine flowers
✿ onionweed leaves or flowers	✿ wood sorrel leaves, stems and flowers

Colourful additions

Some ingredients, like marigold and borage flowers, are more for colour than flavour. It's fun to combine a colourful flower with some of the more highly flavoured forageables.



BUTTERCREAM ICING DF GF V

Make this icing using any enfeuaged or blended butter or butter substitute that's flavoured with citrus, fennel, fir, kawakawa, lavender, jasmine, pine, rose, scented pelargonium, spruce, sweet William or wood sorrel — all have aromas that work well in sweet dishes.

Buttercream icing can be used to ice cakes, serve with scones, as a sandwich filling, between two biscuits or as a filling for chocolates.

200 g softened butter or butter substitute

2½ cups icing sugar

5–6 teaspoons milk or milk substitute

Whisk or beat the butter until pale and fluffy.

Add the icing sugar a little at a time,
beating well after each addition.

Dribble in the milk at the end, adding just enough to thin the mixture to the desired texture, which will become lighter and fluffier.

Things to do with enfleuraged and blended butters

- Spread on hot bread, toast or scones.
- Make shortbread (see recipe, page 235).
- Use in a foraged fruit crumble (see recipe, page 244).
- Use it to make popcorn in a pan on the stove (a 50/50 mix of butter and rice bran oil works well), or melt over already-made popcorn. To avoid popcorn going soggy when butter is added, clarify butter first by melting over a gentle heat in a pot on the stove. Then pour only the golden oil off the top, leaving behind as much of the white residue as possible.
- Serve with hot corn cobs.
- Melt over hot, boiled or steamed vegetables, just before serving.
- Add to potatoes, kūmara or carrots and parsnip, just before mashing.
- Daub over chicken skin before roasting.
- Fry an omelette in it.
- Use with equal parts oil to caramelise onions.
- Use in dainty tea sandwiches, with or without another filling (see recipes, page 217).
- Use to make butterscotch sauce (see recipe, page 119).
- Use to make aha tortoni (see recipe, page 245).

INFUSED OILS

When making infused oils, mould is one of your biggest enemies, so take precautionary measures during the entire process. Reducing moisture as much as possible is important.

My two favourite oils to infuse are extra virgin olive oil, for its nutritional value and strong delicious taste, and rice bran oil, for its high smoke point and bland taste that allows other flavours their time in the limelight. But any oil will do, so choose one you enjoy.

Some ingredients, like marigold and borage flowers, are more for colour, so try combining a colourful flower with some of the more highly flavoured forageables.



SIMPLE INFUSED OIL

DF GF V

You can use fresh or dried foraged ingredients to infuse oil. It's a bit of extra effort to do the drying first, but for oils that you want to be able to store for a while it can be worth it — the trade-off is a reduced risk of mould.

foraged treasures
oil

Wash foraged treasures and pick them over to remove foreign material.

Pat dry, and either dry fully or leave them flat in a dry place for a few hours to wilt and reduce their water content.

Crush them slightly, or cut or tear them into pieces.

Cram them into a sterilised jar or bottle, and pour oil over them. Be scrupulous about filling the bottle as near to the top as you can, to reduce the amount of oxygen that will be sealed inside the container when the lid is on.

Make sure no plant material is sticking above the surface.
Poke it down if it is.

Place the infusing oil, tightly covered, in a cool, dark place. Give it a shake now and then, and keep an eye on it to make sure no plant material has bobbed above the surface.

Infuse for 1–3 days, then strain through muslin, very gently pressing the plant material to get as much of the oil out of it as possible without causing it to disintegrate.

If you'd like a stronger infusion, recharge with a new batch of plant material for another 1–3 days. Repeat this as many times as you like, until the infusion is as strongly aromatic as you want.

When you're happy with your infused oil, strain it very well,

remembering bits left in the oil may encourage mould.

Decant it into a sterilised bottle and store in the fridge.

An optional step that may help it keep longer is to let it stand for a few days, then decant it again, leaving behind any sediment that has settled.

Good forageables to use for infused oils

- ✿ borage flowers
- ✿ chamomile flowers
- ✿ fennel leaves, stems and/or flowers
- ✿ fir needles, tips and/or twigs
- ✿ horopito leaves
- ✿ kawakawa leaves and unripe fruits
- ✿ lavender flowers and/or leaves
- ✿ mānuka leaves
- ✿ marigold flowers
- ✿ nasturtium leaves, flowers and/or seedpods
- ✿ onionweed leaves and flowers or other wild alliums
- ✿ parsley leaves, stems, roots and/or flowers
- ✿ pine needles, tips and/or twigs
- ✿ rose petals
- ✿ rosemary leaves and/or flowers
- ✿ scented pelargonium leaves, stems and/or flowers
- ✿ spruce needles, tips and/or twigs
- ✿ tutae koau leaves, stems and/or flowers
- ✿ wild celery leaves, stems and/or flowers
- ✿ wild jasmine flowers
- ✿ wild parsley

Things to do with infused oils

- ✿ Whisk or shake up 1 part vinegar to 3 parts oil to make salad dressing.
- ✿ Use to fry or sauté meat.
- ✿ Use to pop popping corn.
- ✿ Drizzle over cooked meat.
- ✿ Use with equal parts butter for caramelising onions.

- Use to make mayonnaise (see recipe, page 203).
- Fry fritters, chips and schnitzels in it.
- Mix 1 part infused oil with 2 parts vinegar or citrus juice, a little salt and sugar and a crushed garlic clove to make a marinade for meats or tofu.
- Use aromatic infused oils as a massage or body oil. See 'Wild perfumery', page 252.

INFUSED HONEY

Every honey has its own distinct and delicious aroma, depending on where the bees have been collecting nectar, so it's fun deciding which wild plant to combine with which honey, then testing the result.

Any runny honey is good for an infusion. The best possible honey you can use is raw honey from a local beekeeper, but this isn't always possible. If you don't have a honey that is sufficiently runny, you could add a little water to a solid honey and stir well to combine, or very gently heat the honey whenever the recipe requires it to be runny.



AROMATIC HONEY

DF GF

Herbs and flowers with robust flavours are best for infusing honey, since the honey has so much strong flavour of its own. To ensure foraged flavours shine very strongly, consider using a mild-tasting honey like clover honey.

honey of your choice
aromatic foraged treasures

Wash foraged treasures carefully and pick them over to remove any foreign material. Cut or chop your foraged finds.

Half fill a sterilised jar with the plant material.

Pour the runny honey over the top, enough to fill the jar. Make sure the lid is tight and leakproof.

Put it in a cool, dark place and leave for 2 weeks, turning the jar upside-down every second day.

After that, pour the honey through a fine sieve into another sterilised jar. How long it takes to drip through will depend on how viscous the honey is. You may have to be patient!

If you feel you need to, place the jar in a bowl of warm water to heat the honey just enough to improve the flow. Stir gently as it warms.

When all the honey has been strained into the clean jar, put the lid on the jar and store in a cool place or the fridge.

Good forageables to use for infused honeys

✿ citrus flowers or peels	✿ pine needles and tips
✿ fennel leaves, flowers and/or seeds	✿ rose petals
✿ fir needles and tips	✿ rosemary leaves and/or flowers
✿ horopito leaves	✿ scented pelargonium leaves, stems and/or flowers
✿ kawakawa leaves and unripe fruits	✿ spruce needles and tips
✿ lavender flowers and/or leaves	



Heating honey

The biggest challenge in working with honey is its viscosity. Heat will make it flow more easily, but the more it heats up, the more of its goodness is destroyed. Pure, raw honey is a strong preservative and antimicrobial, containing many health-giving compounds, but even at 37°C it starts to lose some of its antimicrobial properties.

That's why, especially if you're using raw honey and want to hold onto its qualities, it's good to use honey that's as runny as possible to start with. Then it's easy to work with without having to add heat.

Of course, you may feel it's not the end of the world to lose some of the honey's benefit. Whatever honey you use, and however you heat it, you'll still have a delicious wild infused product with the extra nutrients it's gained from your foraged ingredients. And if you're buying mass-processed supermarket honey rather than raw artisan honey, it's probably lost plenty of goodness already.

Various processing and filtering methods are used to prepare honey. They often include heating, and it's hard to discover exactly which methods each large-scale commercial honey producer uses. Smaller artisan producers are far more transparent, and will generally tell you if you ask.



WILD BERRY HONEYS

DF GF

One cup of honey to 1 cup of berries works well, but there are no hard and fast rules to this. You could alter the ratio one way or the other and still end up with a delicious

product. This works well with plums, too. The higher the ratio of honey to fruit, in general the longer it may keep.

honey
foraged berries

Put the berries in a saucepan over a gentle heat and mash them with a fork as they begin to soften.

Continue heating until the berries become pulpy.

Push the pulp through a sieve over a large bowl to remove large seeds and stubborn bits of skin.

When the pulp has cooled slightly, add honey in a quantity that you imagine will be delicious, and stir the fruit pulp and the honey together until combined.

Transfer mixture to a sterilised jar and store in the fridge. It should last at least two weeks, and probably more, but keep an eye out for mould. Much depends on the fruit used, the fridge temperature, how often the jar is opened and what other bits get into the honey.

Good forageables to use for berry honeys

• blackberries	• fuchsia berries
• cherries	• kawakawa fruits
• coprosma berries	• plums

Things to do with infused honeys and berry honeys

- Spread on bread or scones.
- Use to glaze meat or tofu — try mixing the honey with soy sauce, ginger and garlic or onionweed for extra savoury flavour.
- Drizzle over ice cream, panna cotta or a scoop of mascarpone (see recipe, page 212).
- Add to a fruit pie or crumble filling instead of sugar.
- Spread on dainty sandwiches.
- Eat a spoonful straight from the jar.

INFUSED ALCOHOLS

The first time I made my own liqueur — a simple vodka and sugar syrup infused with black Doris plums — I was thrilled with the product. I wanted to shout to the world: ‘Make liqueurs! Now! At home! With whatever you can find!’

Making wild infused alcoholic drinks is a strangely exhilarating pastime, and not only when you test the results frequently. Using the methods below, it’s almost unbelievably easy to concoct a profusion of infusions — a vast array of delectable and distinctive beverages that you and your friends and family will appreciate. It makes you feel generous and clever, and yes, occasionally drunk.

Infused spirits are strong and delicious. Add sugar syrup, and spirits become liqueurs. You can also infuse red and white wines and fortified wines such as sherry.

Wild herbs, fruits and flowers are all great to use for infusing. Also, if you like, add kitchen spices. A particularly delicious addition to almost any mix is a single cinnamon quill along with a single vanilla bean pod, left for at least a week to infuse.



WILD SPIRITS

DF GF V

Vodka and gin are both popular spirits to use, as their flavours are quite neutral, so the other ingredients will shine. However, many people enjoy working with stronger-flavoured spirits, such as whisky, and infusing them with equally charismatic plants.

Make as big a batch as you like, as you’ll have no trouble giving away any excess.

spirit of choice
aromatic foraged treasures

Wash foraged treasures carefully and pick them over to remove any foreign material. Pack plant material into a sterilised jar.

Pour your spirit over the top, making sure the foraged plant material is completely covered to avoid mould growing.

Leave the infusion for as long as it takes to get the flavour you want — it could take anything from 24 hours to 4 weeks, depending on the ingredient. See tips, opposite.

Once you think it’s tasting as lovely as can be, strain the infused spirit though a sieve lined with muslin into a sterilised bottle. To be

sure of getting rid of all the bits, strain through a coffee filter. Leave your delicious spirit to mellow for a while or start drinking it straightaway.

Well sealed, in a cool, dark place, your spirits should keep for a year or more. Once opened, keep them in the fridge.

Tips

- Your best gauge of readiness is your own tongue. Taste a little every day to see how it's going. Decide when you think the time is right to halt the infusion.
- Flowers and fresh herbs are best left to infuse for only 24 hours.
- Try infusing dried herbs for a week or two, but longer is also fine.
- Fruits often need to be left for at least a week, but a longer period will give a stronger, richer flavour.
- Dried kitchen spices can be left to infuse for many weeks.
- If you're using several ingredients that require different infusion times, it may be best to do them one at a time.

Infused wines and fortified wines

To infuse wine and fortified wine, follow the same method as for wild spirits.



WILD LIQUEUR

DF GF V

In any liqueur you can choose your preferred ratio of spirit to sweet syrup, as well as your preferred ratio of water to sugar in the sweet syrup. Below is a good base recipe, but I must admit I love even stronger, sweeter liqueurs, using about 1 part of a very strong sugar syrup to about 2 parts of spirit. My favourite way to drink them, especially in summer, is a shot poured over a glass full of ice cubes.

sugar or honey
water
spirit of choice
aromatic foraged treasures

Make a sugar or honey syrup, using equal parts white sugar and water or equal parts honey and warm water, as in the recipe on page 157. Wash foraged treasures carefully and pick them over to remove any foreign material. Pack plant material into a sterilised jar.

Mix equal quantities of syrup and spirit of choice, then pour into the jar, ensuring the foraged treasures are well covered.

Leave the infusion for as long as it takes to get the flavour you want — it could take anything from 24 hours to 4 weeks or more, depending on the ingredient(s); see tips, page 181.

Once your liqueur is tasting delicious, strain it through a sieve lined with muslin into a sterilised bottle. Or to be sure of getting rid of all the bits, strain through a coffee filter.

Leave your liqueur to mellow for a while, or start drinking it straightaway.

Well sealed, in a cool, dark place, your liqueur should keep for a year or more. Once opened, keep in the fridge.

Good forageables to use for infused spirits, liqueurs and wines

➲ apples	➲ lavender flowers
➲ blackberries	➲ mānuka leaves
➲ chamomile flowers	➲ New Zealand mint leaves
➲ cherries	➲ pears
➲ citrus fruits, peels, leaves and/or flowers	➲ pine needles, twigs and/or tips
➲ coprosma berries	➲ plums
➲ crabapples	➲ rose petals
➲ dandelion flowers — new	➲ scented pelargonium leaves, stems and/or flowers
➲ elderberry flowers or berries	➲ spruce needles, twigs and/or tips
➲ fennel leaves, flowers and/or pollen	➲ sweet William flowers
➲ fir needles, twigs and/or tips	➲ walnuts — green or ripe and shelled
➲ fuchsia berries	➲ wild jasmine flowers
➲ kawakawa leaves, unripe fruits and ripe fruits	

The effect of time

It's fascinating to have two or three batches of the same alcoholic infusion going at once, and to stop each one and strain out the plant material at a different time so you can compare the flavours. Sometimes you may worry that you've missed an infusion's peak yumminess, or you may find it begins to take on a flavour that you don't like so much. If you have at least two batches going, you can stop one straightaway, while leaving the other for longer to see if the flavour starts to change again and become even better than the first, with a little extra time. This happens quite often.

Things to do with leftover alcohol-saturated fruits after infusion

Use the tasty chunks of fruit too!

- ➲ Serve as a dessert with custard, cream, pavlova, ice cream or firni (see recipe, page 238).
- ➲ Use as a filling for a fruit pie.
- ➲ Add to a cooked meat casserole.

Things to do with wild spirits, liqueurs and wines

- ➲ Drizzle over ice cream, panna cotta or firni. See the recipes on pages 241, 240 and 238, respectively.
- ➲ Mix into jelly, ice cream, panna cotta or firni. See page 161 for the jelly recipe, and remember that you may need a little extra gelatine to freeze an alcoholic jelly.
- ➲ Add to water to poach fruit.
- ➲ Add to eggnog instead of brandy.
- ➲ Use instead of wine in a pasta sauce. See the recipes on pages 227–30.
- ➲ Use to soak oats for cranachan. See the recipe on page 243.
- ➲ Use instead of sherry in aha tortoni. See the recipe on page 245.
- ➲ Gently melt chocolate and add infused alcohol — about 1 part alcohol to 2 parts chocolate — to make an incredible dessert sauce.

THE ART OF FREEZING

Unpredictability, serendipity and the seasonal ebbs and flows of supply are part of the course when foraging. Prolonging the supply of some of your foraged goods by freezing is easy and satisfying.

Freezing breaks down the cell structure of plants, so when freezing foraged finds, keep in mind their end use. If it doesn't matter to you that they emerge from their Antarctic sleep a bit mushier, then all's well. However, it's a good idea to chop or slice things ready for use before you freeze them because once they thaw, their mushiness will make them harder to cut through.

If you have the time and inclination, blanching some goods before freezing is a good idea, as it hinders enzyme action and ensures the frozen foods stay in good condition for as long as possible. Leafy greens are good candidates for blanching, as are vegetables such as pikopiko (fern fiddleheads), cabbage tree shoots and parsley roots. Frozen foods should usually last at least 6 months. It's a good idea to keep track of how long they've been frozen for by writing the date on the container or bag.

Oversupplies and undersupplies

The freezer is a good friend to the forager. It comes in handy if you've gathered too much of something to be able to deal with it all straightaway, but it's also good if you haven't been able to collect enough of a favourite forageable to make something worthwhile. In that case, you can throw your gatherings into a bag or container in the freezer until you've built up a big enough supply.

This works especially well with foragings that may be in short supply in any given location — for example, berries, onionweed bulbs, nasturtium seedpods and dandelion buds. I throw these little things into containers or freezer bags and into the freezer as is. There's no need to blanch them first.

Preparing vegetables for freezing

Fill a large bowl with icy cold water.

Bring a large saucepan of water to the boil.

Meanwhile, clean and prepare vegetables as if you were going to use them straightaway.

Drop the prepared vegetables into the boiling water in small batches — the water needs to come back to the boil quickly.

Boil vegetables for 2–3 minutes.

Quickly drain the boiling water, or if you're doing several batches, lift the vegetables from the water with a slotted spoon or scoop them out with a sieve, so you can continue to use the same water.

Drop the hot vegetables into the bowl of icy water — the idea is to stop them cooking as quickly as possible.

When the vegetables have cooled in the water, drain them and get rid of as much excess water as possible. The easiest way to do this is to spread the drained vegetables in a single layer on a tea towel to dry. When they're very dry, transfer them to a container or freezer bag and place them in the freezer.

Alternatively, lay out the pieces on a tray, oven tray or plate lined with baking paper, so they aren't touching, and put into the freezer. Once they're frozen you can bag them up together.

Preparing leafy greens for freezing

Prepare as for vegetables, but give the greens only 1–2 minutes in the boiling water. Then scoop them out and drop them into icy water.

Lift them from the water in handful-sized clumps and gently squeeze the excess water from them. Press into patties and arrange on an oven tray or plate lined with baking paper and place it in the freezer.

When frozen, transfer the patties into a container or freezer bag and return to the freezer until required.

Freezing herbs and berries

Small, flavourful plants can be chopped as you would for cooking and frozen as is, without blanching. These include parsley, wild celery, tutae koau, wood sorrel, rosemary, rose petals, lavender, onionweed, kawakawa leaves, horopito and New Zealand mint (stripped from the stalks first).

Small berries and berry-like fruit can be frozen as is, although it's a good idea to pick them over carefully first to remove all foreign material.

Preparing larger fruits for freezing

Wash, peel, pit, core and slice fruits, removing any bruised or damaged bits.

To inhibit browning on pale fruits like apples, pears and quinces, fill a bowl with cold water and add the juice of a lemon or lime. Dip each slice in the bowl of cold water.

If you don't have a lemon or lime available, fill a bowl with cold water and add 1 teaspoon of salt for 8–10 cups of water.

Spread the slices of fruit in a single layer on a tray, plate or oven tray lined with baking paper and place in the freezer.

Once frozen, transfer the frozen fruit into a container or freezer bag, pushing out the air, and return to the freezer until required.

For fruit that's too overripe to easily slice, consider simply cooking it to a purée then freezing it in ice-cube trays.

Preparing citrus for freezing

Citrus doesn't need to be dipped or blanched, but as with vegetables, it's a good idea to cut it up before you freeze it, ready to use for different recipes. For example, slice the fruits with the skins on if you anticipate adding them that way to punch, or zest the rind and squeeze the juice if that's the form you'll be likely to use them in once they have thawed.

THE ART OF DRYING

Lots of flavourful wild herbs, flowers and greens respond well to drying. Often people say the best-flavoured leaves for drying appear just before a plant flowers, but I must admit I gather and dry all manner of plants at different times of the year and have been happy with the results.

Dehydrators are great, but you don't need one. You can air-dry and oven-dry most things. Some people use a two-step hybrid air- and oven-drying process. You can also dry herbs in a microwave.

Store your dried foraged goods in an airtight jar or container and keep them as whole as you can so they retain their flavour and active compounds for as long as possible. If you want to use them powdered or crumbled, do this just before you use them.

Air-drying

Air-drying needs to be done in a dry environment. If the weather is humid, or your house damp, you'll have more success with a different drying method. There are three basic ways to air-dry plants. Choose whichever of these seems appropriate and manageable:

- Spread the plants out in a single layer in a dark, dry place. Turn them regularly to ensure even drying. You may want to spread them on a rack.
- In a dry room with good air circulation, suspend swathes of muslin from your ceiling like small hammocks, and place your plants in the hammocks to dry.
- Bunch plants together at the stem-ends and tie them together. Hang them in a dry place with good air circulation with the stems up and the leaves or flowers down. You may want to tie paper bags round bunches of flowers or leaves that you're hanging to dry, to protect them from light and dust and to catch any bits that fall off.

Oven-drying

Oven-drying can be harsh. The trick is to keep the temperature extremely low. You want herbs dry and crumbly, not burnt. Everyone's oven is different and the plant itself is another variable. It's always a good idea to do a test run on one or two samples before you fill the oven.

If you can get your oven to stay at 60°C, or even lower, you should be able to successfully dry most plants. If your oven gets too hot, you might want to heat it

up then turn it off before you put your plants in to dry. If the plants need a bit more drying, you may find you need to turn it on again after it has cooled.

Leaving the oven on with the door slightly open may help regulate the temperature.

Lay the plant material in a single layer on an oven tray or sheet. You may want to line it with baking paper, although this is not necessary. Place the tray or sheet in the oven. Keep an eye on the plants to make sure they don't burn, and adjust the temperature as required.

When the plants are brittle and crumbly, remove them from the oven and leave to cool.

Transfer the dried material to an airtight container, and store in a cool, dark place to use as required.

Microwave-drying for herbs

I follow the instructions recommended in the herb course offered by the New Zealand Herb Federation. See 'Resources' for more information about this course.

Spread the plants between two sheets of baking paper.

Microwave on high for 1 minute.

Check to see if the herbs have dried. If some have and some haven't, take out only the dried ones.

Move the others around a bit and give them another 20-second blast.

Continue heating and removing the dried herbs until all are done.

Sun-drying

Just as the sun fades your curtains, it mutes the colours, aromas and other active components of plant material as it dries. However, some people do like to start the drying process in the sun, letting just a bit of moisture evaporate before moving on to air-drying or oven-drying.

Good forageables for drying

✿ blackberry leaves

✿ fennel leaves, flowers and seeds

✿ citrus peels and flowers

(dry flowers in such a way that the pollen that drops off is caught)

✿ Brassicaceae leaves and flowers

✿ eucalyptus leaves

✿ fir tips

• horopito leaves	• pine tips
• jasmine flowers	• rose petals
• kawakawa leaves and unripe fruits (see recipe for kawakawa peppercorns, page 108)	• rosemary leaves and flowers
• lavender flowers	• scented pelargonium leaves
• mānuka leaves	• seaweeds
• marigold flowers	• spruce tips
• nettle leaves and tops	• tutae koau leaves, flowers and seeds
• New Zealand mint leaves and stems	• wild celery leaves, flowers and seeds
• onionweed leaves	• wood sorrel leaves, flowers and stems
• parsley leaves, flowers, seeds and roots	

Making your own herb and spice mixes

Every culture has flavours that define its cuisine. Local ingredients and methods of preparation are combined and recombined to form a kaleidoscope of dishes very different from each other, yet all recognisably of their place. Elisabeth Rozin describes these signature qualities as 'flavour principles' in her book, *Ethnic Cuisine: The Flavor-Principle Cookbook* (S. Greene Press, 1982).

Just as every culture has characteristic flavours, so every enthusiastic cook develops favourite methods, ingredients and ways of combining them that add up to an individual culinary personality.

I love the way people use foraged ingredients in their cooking to express themselves and their place in the world, finding the plants growing wild around them that they like the most, and using them in creative ways. Through adventure and experimentation you will find your own house flavours and style.

It's easy to go to the shop and buy Italian mixed herbs, a Mexican spice mix or an Indian garam masala, each containing a popular representation of a culture's time-honoured flavour combinations. But developing your own favourite dried spice and herb mixes by combining foraged finds in your locale is more challenging and very rewarding.

Dry and process foraged herbs according to the instructions on page 187. Do each type of plant separately, as they may require slightly different drying conditions and lengths of time.

Try all sorts of combinations to find out what you like, then keep prepared mixes in airtight jars ready to use. Invent, experiment and adapt!

You can use any of the dried herbs in the list above.

A few ideas for starters

- ➲ 1 part fennel seeds or pollen to 9 parts parsley, wild celery or tutae koau
- ➲ 1 part fennel seeds to 4 parts orange zest
- ➲ 1 part grapefruit zest to 4 parts New Zealand mint
- ➲ 1 part lavender to 3 parts fennel seeds or pollen
- ➲ 1 part lemon zest to 1 part fir tips and 1 part lemon pelargonium leaves
- ➲ 1 part lemon zest to 2 parts jasmine flowers
- ➲ 1 part mānuka to 1 part kawakawa
- ➲ 1 part onionweed to 2 parts wood sorrel
- ➲ 1 part parsley to 1 part kawakawa leaves and 2 parts onionweed
- ➲ 1 part parsley to 1 part onionweed and 4 parts nettle
- ➲ 1 part rose petals to 4 parts wood sorrel
- ➲ 1 part rosemary leaves to 1 part Brassicaceae seeds
- ➲ 1 part rosemary flowers to 8 parts New Zealand mint

Things to do with herb and spice mixes

- ➲ Sprinkle onto parmesan crisps before baking; see recipe, page 205.
- ➲ Use to flavour yoghurt dip; see recipe, page 209.
- ➲ Use to flavour mayonnaise; see recipe, page 203.
- ➲ Sprinkle on baked potatoes.
- ➲ Add to soups, sauces, casseroles and gratins.
- ➲ Rub onto meat before roasting.
- ➲ Add to bread dough before baking.
- ➲ Add to meat and bean patties.
- ➲ Place a whole fish or fillets on a piece of baking paper or cooking foil and add a knob of butter. Sprinkle with herb mix and fold the paper or foil to make a parcel. Bake fish at about 240°C for about 4 minutes per centimetre of thickness.

THE ART OF PICKLING

Pickles come in many forms — quick uncooked pickles for instant gratification, longer-storing cooked pickles, and fermented pickles that corral wild microbes and set them to work.

Pickles generally require quite a bit of salt. For best results use sea salt or pickling salt. It's especially important not to use iodised salt for fermented pickles, as the iodine inhibits the fermentation process. If you include seaweed or samphire in a pickle you will want to use less salt.

Pickles, served with cheese and bread or crackers, have long been a Kiwi kitchen staple. Sweeter pickles are great served on the side with curries and barbecued foods.



COOKED PICKLE

DF GF V

Practically anything goes, but you'll need a combination of bulky and flavoursome plants for a well balanced pickle.

foraged treasures, roughly or finely chopped, depending on how chunky you want your pickle

enough salt to coat the plant material

apple cider vinegar — enough to cover the plant material in the saucepan

sugar — half as much by volume as you use of cider vinegar

freshly ground black or kawakawa pepper to taste (see kawakawa

peppercorns recipe, page 108)

Wash foraged treasures carefully and pick them over to remove any foreign material.

Chop them as finely as you would like them and place them in a bowl. Sprinkle with salt, enough to cover the lot.

Stir salt through the plant material and cover. Set aside for 12–24 hours — overnight is ideal.

Rinse the plant material under cold running water. Drain well.

Put vinegar and sugar into a saucepan over medium heat and stir until the sugar is dissolved. Bring to the boil.

Add the plants and pepper then reduce the heat. Continue simmering for 10 minutes.

Take the saucepan off the heat and set aside to cool.

Transfer cooled pickles into a sterilised jar and seal.

Store in a cool, dark place for up to 12 months. Refrigerate once open.



THICKENING PICKLES

Some pickles are better thickened. A thickened pickle needs a nice warm colour, so if the pickle doesn't look as appetising as you'd like, add something colourful like turmeric or paprika. Follow these simple instructions to thicken pickles.

Use the recipe above but while the pickle mixture comes to the boil, put some cornflour in a small bowl — I usually allow 2–3 teaspoons of cornstarch per cup of cider vinegar used.

Add a little extra vinegar to the cornflour and blend to form a thin, smooth paste.

Pour the paste into the simmering pickle mixture and bring it back to the boil. Boil for a couple more minutes, until the cornflour is cooked — the pickle should look shiny and clear.

Take the saucepan off the heat and set aside to cool a little.

Transfer cooled pickles into a sterilised jar and seal.



UNCOOKED REFRIGERATOR PICKLE DF GF V

This is the easiest way to make pickle. However, it needs to be kept in the fridge as it doesn't last as long as cooked pickle. It's worth doing if you know you'll eat it up fast.

foraged treasures

4 parts vinegar

4 parts water

1 part salt

1 part sugar (optional)

Wash foraged treasures carefully and pick them over to remove any foreign material. Pack them into a sterilised jar.

Put the vinegar and water in a saucepan over medium heat then add the salt and sugar, if using. Stir until the sugar and salt have dissolved.

Let liquid cool and pour it over the foraged goods.

Cover and refrigerate.

This pickle will be softer and nicer after a day or two, so let it sit if you can. It will keep for a week or so.



LACTO-FERMENTED PICKLE DF GF V

The beauty of lacto-fermenting foraged treasures is that you're doing double the foraging as you also harvest the wild lacto-bacteria filling the air around us to preserve your food. This recipe is based on the sauerkraut method popularised by fermentation guru Sandor Katz.

Like the cooked pickle on page 191, you need a mixture of bulk and flavour. A glass or ceramic jar is best for the fermentation process, but some people do use plastic. Avoid metal.

foraged treasures
salt (roughly 1 teaspoon per 250 g of plant material)

Wash foraged treasures carefully and pick them over to remove any foreign material. Chop them as finely or chunkily as you like and arrange them in layers in a bowl, sprinkling each layer liberally with salt.

When they're all chopped and salted, stir to mix the salt in well. Pack the salted plant material into a large-mouthed sterilised jar, pressing down as you go.

The salt will begin to draw water from the plant material immediately, forming a brine. Pushing down on the mix will aid this process.

When all the plant material has been packed into the jar, sit a smaller jar or glass into the mouth of the larger jar and fill it with water. It's

now acting as a weight to hold the plant material below the surface of the brine.

Cover the whole thing with a tea towel to keep out insects and dust. Over the next 24 hours, press down on the weight from time to time to force more water from the plant material.

If the brine hasn't risen well above the level of the base of the weight within 24 hours, add a little extra salt water to make sure the plants become fully submerged. Once the brine level is permanently above the plant matter, the weight can be removed.

Leave your jar of pickle covered or lidded in a cool, dark place to ferment, somewhere it can't be knocked over.

Check on it once a day. Sometimes a bit of mould forms on the surface of the brine. As long as the plant material is submerged it's not a problem. Simply skim it off.

You may want to taste the pickle from time to time. When you're happy with the taste, remove the weight, seal the jar and store it in a cool, dark place until required. It should last 2–3 months, and possibly more. Refrigerate once opened.

Good forageables to use for the bulk of a pickle

• apple	• nasturtium leaves, buds, flowers and seedpods
• beach spinach leaves	• onionweed bulbs and leaves
• borage leaves	• pear
• Brassicaceae leaves	• pikopiko
• chamomile flowers	• plantain leaves, finely chopped
• chenopodiums	• plum
• chestnuts	• quince
• chickweed leaves and stems, finely chopped	• <i>Romulea rosea</i> — plum puddings
• clover flowers	• purslane leaves
• dead-nettle leaves	• samphire
• dandelion and other DYC buds, flowers and leaves	• seaweeds
• ice plant	• tī kōuka shoots
• mallow leaves and peas	• walnuts — green or ripe and shelled
• miner's lettuce leaves	• yarrow leaves

Good forageables to use for flavouring and colouring

✿ borage flowers	✿ onionweed
✿ Brassicaceae flowers	✿ pine tips
✿ citrus zest	✿ rosemary leaves and flowers
✿ fennel leaves, flowers, pollen and seeds	✿ spruce tips
✿ fir tips	✿ tutae koau leaves, flowers and seeds
✿ harakeke pollen	✿ wild celery leaves, flowers and seeds
✿ kawakawa leaves and fruits or dried peppercorns (see recipe, page 108)	✿ wild mustard leaves, flowers and seeds
✿ marigold petals	✿ wood sorrel leaves, flowers and stems
✿ nasturtium flowers	
✿ New Zealand mint leaves	

Good non-foraged foods to add to pickles

It's very satisfying to make a pickle almost entirely from foraged goods, but you might want to add a few bought or home-grown vegetables. It's an idea to add garlic and/or chopped onion if you don't have onionweed or another wild allium in the mix.

Chopped cucumber is a pickle staple. Chopped cabbage, cauliflower and broccoli are also traditional additions. Raisins and currants are good for extra sweetness.

Parsley, bay leaves, fresh or dried chilli and cumin, cloves and cinnamon, either whole or ground, are all good extra flavourings.



CHOOSE-YOUR-OWN-ADVENTURE CUISINE

Introduction

Many recipes for foraged food crop up over and over again in books and on the internet. Pesto-style spreads, wilted green salads with bacon, and cream soups and sauces are popular for all manner of wild greens. On the dessert front, panna cotta and ice cream make perfect vehicles for the aromas of wild herbs and flowers. Other recipes might not be ubiquitous, but can be just as versatile and delicious.

In the name of optimal foraging theory (see page 199), the recipes in this part of the book are streamlined. The non-foraged ingredients are cheap and accessible and the methods are quick and simple, with unfiddly measurements. That means they're easy to memorise for added speed, and also simple to scale up or down, as foraging can be unpredictable and you don't always know how much of any given ingredient you're going to find.

The dietary requirements key on page 150 applies throughout this section.

Some of these recipes use fresh ingredients, while others use preserves from the previous section of the book as building blocks.

You can use the following blueprint recipes with whatever wild plants you harvest, adapting the ingredients and methods in many ways to suit your tastes. I like to think of them as choose-your-own-adventure recipes. The adventure is as

much in discovering what you can do with wild plants as it is in heading out and gathering them.

Creative cooks are by nature foragers, they forage for ideas as they do for great ingredients.

SALLY SCHNEIDER, *THE IMPROVISATIONAL COOK*

(WILLIAM MORROW & Co., 2006)

Flavour combinations

Many cooks prefer to star just one interestingly flavoured foraged ingredient in an otherwise simple dish so the flavours don't muddy each other. But here are some tried-and-true combinations and starting points for experimentation:

- ➲ A sparing addition of soft-scented lavender or mānuka adds nuance to a range of fruits and berries, from lemons and plums to blackberries. Lavender readily overpowers, and some lavenders take on a harsh or medicinal note. If in doubt, use much less than you think to start with and experiment to find the best balance between lavender and other ingredients.
- ➲ Infusions of rose are delicious with both plums and apples.
- ➲ In general, you can't go far wrong if you blend one flower flavour with one fruit flavour.
- ➲ A citrus flavour will go with almost any other flavour, making it sparkle. For starters, fennel and orange is a popular combination, or try grapefruit and New Zealand mint.
- ➲ Pine, fir and spruce all have citrus notes and, like citrus, they will go with all sorts of other flavours. A word of caution: some pine has an overbearing flavour, so treat it as you would lavender.
- ➲ Ingredients like nettle and jasmine have a rough earthiness to them that sometimes doesn't work as well on its own as it does combined with more smoothly or brightly flavoured ingredients.
- ➲ A hot flourish of horopito can be added to many other infusions, in the same way you might add chilli to various sweet or savoury dishes for extra bite.
- ➲ In savoury green-herb combos, onionweed or one of the other alliums will go with pretty much anything.
- ➲ Kawakawa, parsley, nasturtium, wood sorrel and tutae koau can be

combined interestingly with each other.

- Mānuka, lavender and rosemary can be added sparingly to those same herb combos, although lavender and rosemary can overpower, so go easy with these and check as you go.
- Combining simple tisanes is one way to try out new flavour combinations without investing too much time or effort or wasting too many non-foraged ingredients. You'll get an idea of whether the flavours mix, and in what proportions you like them best.
- Many of the same hints for combining apply to both cookery and perfumery. For example, both cooks and perfumers find inspiration in pondering the subtle background flavours or aromas that they like in an initial ingredient, deciding what they are reminiscent of, then finding a second ingredient that has those qualities in greater quantity to bolster them.



The mysteries of flavour and taste

Fairly regularly, a judge on a reality cooking show tells a contestant, 'You really understand flavours.' I used to wonder what that meant. The art of flavour was as opaque to me as the art of poetry. I didn't know where to begin to understand it. The writer who began to demystify it for me was Glynn Christian. He writes:

'You might not have realised that your favourite biscuits, best salad, yummiest puddings or most delicious wines all offer the bonus of long aftertaste, but they do. It's why you like them so much... Creating a recipe first delivering a mouthful of flavour, and then leaving a good lingering aftertaste is perhaps the ultimate goal of making something nice to eat, whether it be a cheese sandwich or a ten-course royal banquet'

HOW TO COOK WITHOUT RECIPES, GLYNN CHRISTIAN (ANOVA, 2008)

Christian goes on to explain that the best mouthfuls of flavour come from eating food that stimulates taste receptors across the length and breadth of your tongue. There are five different tastes — salt, sweet, sour, bitter and umami. Umami is a word adopted from the Japanese and it translates as 'pleasant savoury taste'. Good dishes use all or most of those flavours to create a complex interplay as you consume them.

The aftertaste is a slightly separate thing. A lingering finish often, but not always, comes from the oil content of a dish.



Measurements and implements

Most measurements in these recipes are in cups and teaspoons. As for butter, I've tried to keep the measurements in 50-g lots, since that's where the lines are on butter wrappers, and you can judge by eye.

Where possible I've tried to include recipes that don't use any fancy kitchen equipment, or where you can improvise a bit with the equipment.

Optimal foraging theory

Don't feel bad if, like me, you're a bit of a lazy cook. I prefer to think of it like this — I'm a proponent of optimal foraging theory.

Ecologists assert that all organisms forage in a way that maximises net energy intake per time unit spent foraging. When we forage we don't usually munch straight from the bush or tree — we carry away our finds and spend time preparing them to eat. So, from an optimal-foraging-theory point of view, it makes sense to minimise the time we spend on preparation.

Lots of us live busy lives, so to readily incorporate foraging, we have to be efficient. To look at it another way, I prefer to spend more time foraging and less time cooking.

THE ART OF THE WILD SALAD

When it comes to enjoying freshly foraged greens, it's hard to go past a salad. You can, of course, toss a few foraged treasures into a salad of cultivated greens — and the number of cultivated greens available these days is huge. But if you're up for a challenge, it's fun to make a whole salad from your wild harvest. Generally, foraged greens are good for you, too. Wild foods are often more nutrient dense than cultivated foods, which tend to have been bred for sweetness, size, appearance, shelf-life and uniformity.

Mixing and matching flavours

To make a wild salad, always choose the lushest, juiciest, healthiest bits of plant you can find and serve them while they are still fresh.

It works best if you think about the individual flavours of your pickings. Blend foraged ingredients that have a variety of tastes, choosing from two or more taste groups, then if you like, add a complementary dressing.

It's a good idea to make sure bitter greens don't make up more than about one-third of your salad. You can manage the bitters by adding something crisp, fatty or salty. This explains the traditional popularity of dandelion leaf and bacon salads! Well seasoned grilled salmon or delicious roasted nuts are just as good for balancing bitter greens.

Bitterness comes from alkaline chemicals, which can be neutralised with sour acidic ingredients such as lemon juice, lime juice and vinegar. However, if you use an acidic dressing on a salad of bitter leaves, you'll still taste the bitterness strongly when you bite into the leaves. You may prefer to pound a good harvest of bitters and sour together — for example, in a pesto.

Here's a list of possible ingredients, divided into taste groups. Note that some plants appear on more than one list.

MILD GREENS AND FLOWERS

✿ borage leaves and flowers	✿ dead-nettles
✿ chenopodium leaves	✿ mallow leaves, flowers and peas
✿ chickweed leaves and stems	✿ miner's lettuce leaves
✿ cleavers leaves	✿ plantain leaves
✿ clover flowers, broken up	

MUSTARDY GREENS AND FLOWERS

- ✿ Brassicaceae leaves, and flowers
- ✿ nasturtium leaves, flowers, buds and seedpods

BITTER GREENS AND FLOWERS

- ✿ Brassicaceae leaves and flowers
- ✿ dandelion and other DYC leaves
- ✿ fuchsia flowers, well chopped
- ✿ pūhā leaves

SOUR GREENS

- ✿ beach spinach
- ✿ New Zealand spinach
- ✿ wood sorrels

AROMATIC GREENS AND FLOWERS

- ✿ fennel leaves, finely chopped
- ✿ kawakawa leaves, well chopped and sparingly
- ✿ New Zealand mint leaves
- ✿ rose petals
- ✿ rosemary flowers
- ✿ scented pelargonium flowers
- ✿ sweet William petals
- ✿ tutae koau leaves
- ✿ wild celery leaves
- ✿ wild jasmine flowers
- ✿ wild parsley leaves

CRUNCHY, JUICY GREENS

- ✿ pikopiko
- ✿ purslane
- ✿ *Romulea rosea* — plum puddings
- ✿ samphire

SALTY GREENS

- ✿ beach spinach
- ✿ samphire
- ✿ seaweed

ONIONY GREENS AND FLOWERS

- ✿ onionweed leaves and flowers, and those of other wild alliums

TO ADD COLOUR

- ✿ borage flowers
- ✿ clover flowers, broken up
- ✿ dandelion and other DYC flowers
- ✿ fuchsia flowers, chopped finely
- ✿ mallow flowers
- ✿ marigold petals
- ✿ rosemary flowers

FRUIT TO ADD, CHOPPED OR WHOLE

✿ apple	✿ fuchsia berries — the choicest
✿ blackberries	✿ pear
✿ citrus	✿ plum

DELICIOUS EXTRAS

✿ harakeke seeds	✿ walnuts
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Slaw or green salad?

Shred everything to make a weedslaw. Alternatively, to make a light, bouncy green salad, tear the leafy greens into pieces and don't make them too small. For a green salad to be attractively light and bouncy, there should be gaps between the leaves.

Cultivated salad greens have curves, frills and wrinkles that help with airiness. You have to make more effort to achieve that effect with foraged greens. Use the youngest, tenderest leaves you can find so you can leave them whole, and even leave some stems on to add shape. Include miner's lettuce and/or chickweed, if you can. They're great salad volumisers.

Check the hairiness or stringiness of all ingredients. If they're stringy be sure to chop them finely. If they're hairy, chop them finely and don't use too much.

Dressing a salad

The right dressing can make a salad. Adding sweetness, saltiness or strong, bright flavours like citrus zest to your dressing helps cut through the taste of bitter greens in a salad as well as balance out mustardy greens. On the other hand, if your salad is full of salty plants, you may not need any added salt.



BASIC VINAIGRETTE

DF GF V

Use this vinaigrette plain, or add strong, delicious flavourings, such as crushed garlic, citrus zest, mustard seeds, a dash of soy sauce, extra balsamic vinegar, a dab of nut butter, a few pinches of sugar or some fine gratings of parmesan cheese.

1 part vinegar
3 parts oil
salt and pepper, to taste

Put your dressing ingredients in a screw-top jar or bottle and shake to combine.

Pour just enough dressing to coat the salad into the bottom of the salad bowl.

Put the salad on top.

To toss, use forks or your very clean hands. Reach down the sides of the bowl to the bottom, gently lifting and turning the greens to coat them with dressing. Tossing the dressing up from the bottom helps retain the salad's lightness and just a little dressing comes up with each manoeuvre.

Variations

- Try using a wild infused vinegar or oil.
- Try using mucilage extracted from wild ingredients instead of oil; see page 90 for information on extracting mucilage.
- Your dressing can contain foraged ingredients, too. Brassicaceae seeds instead of shop-bought mustard seeds, kawakawa pepper instead of black pepper, or your own harvested sea salt will add complexity and interest.



BASIC MAYONNAISE

DF GF

I could rarely get mayonnaise to emulsify until I discovered Matthew Evans' excellent book, Kitchen Basics (Allen & Unwin, 2000). Evans has a technique that works just about every time.

2 egg yolks
1–2 teaspoons vinegar
1 cup rice bran oil
1–2 teaspoons lemon juice
salt and pepper, to taste

Put a cloth over the top of a saucepan and place your mayonnaise-making bowl into that. This will prevent it from spinning as you whisk.

Put the yolks and vinegar into the bowl and whisk until well combined.

Add the oil, a dribble at a time, to the eggs, whisking continuously. If it gets hard to do both, rest your pouring arm and just keep whisking.

The mixture will become paler and creamier when it emulsifies.

Continue until all the oil has been added.

Once the oil is in and emulsified, you can relax a bit. Add lemon juice, salt and pepper, to taste.

Store in an airtight container in the fridge. It should certainly last for a couple of days.

Variations

You can make wild mayonnaise by adding 2–3 heaped teaspoons of finely chopped foraged herbs. See good forageables to use for dressings and dips on page 209.

Snacks and accompaniments for wild salads

A big serving of wild salad will make a good meal when served with a baked potato or an egg, or both. Potatoes can be garnished with wild herbs or finished with a knob of wild butter (see page 170). Omelettes offer opportunities for throwing in more wild ingredients and even a dollop of herbed cottage cheese (see page 210).

If you aren't sure about the best way to make an omelette, YouTube has a range of omelette tutorials. Jamie Oliver makes his at a leisurely pace, while Julia Child has a typically fast-and-furious method. Her tutorial showcases her hilariously engaging personality and I've made the best omelettes of my life following her method. Once you master it, or even if you nearly master it, you'll be able to churn out omelettes for a large group in double-quick time. It's true that you'll have best results with the size and shape of pan she specifies, but it's also possible to do so without, as long as you use a pan with sloping sides. At a pinch you can even use a wok, although French chefs would undoubtedly throw up their hands in horror.

Salad is also great alongside a helping of savoury panna cotta; see the recipe on page 222.

For a lighter meal, serve your salad with crackers or damper bread, and perhaps wild pesto or a yoghurt dip.



PARMESAN CRISPS

GF

A few of these with a wild salad are delicious — it's all you need for a light summer lunch. They're also ideal to serve with drinks. If you can, grate the cheese so it's in long, thin threads. Makes a big plateful, enough for 4 or more people.

1 cup finely grated tasty cheese or parmesan
1 teaspoon standard flour

Around 2 tablespoons very finely chopped fresh foraged greens, herbs or flowers, or 1 tablespoon dried and crumbled foraged herbs

Preheat oven to 200°C.

Use a whisk or fork to mix all ingredients together
lightly but well.

Use a teaspoon to drop little piles of the mix onto an oven tray lined
with baking paper.

With the back of the teaspoon, press them down a little.

Bake until they are golden, bubbly and crisp.

Remove from the oven and carefully slide the paper with the crisps
onto a wire rack to cool.

Store cooled crisps in an airtight container until required. They only
last a day or so before losing their crispness.

Variations

Kawakawa leaves; tutae koau; wild parsley; wild celery; onionweed; nasturtium leaves; rosemary leaves; Brassicaceae flowers, leaves and/or seeds; wood sorrel; fennel leaves, flowers or pollen; harakeke seeds or pollen; citrus zest; and nettle leaves would all be good additions to these simple tasty crisps.



RICE CRACKERS

DF GF V

These homemade rice crackers taste almost like the shop-bought ones that my family munch through at a great rate. But unlike the shop ones, these are free of worrying preservatives and additives. Makes a snack for 4.

1 cup rice flour
1½ teaspoons baking powder
1 teaspoon salt
⅔ cup water
soy sauce

Preheat oven to 180°C.

Line two oven trays with baking paper.

Whisk together rice flour, baking powder and salt.

Pour in water and mix quickly with a wooden spoon.

Use a teaspoon to place small, evenly sized dollops of mixture onto oven trays. Spread them into thin puddles with the back of the spoon. They will spread a little while cooking, so place them at a reasonable distance apart.

They cook round the edges faster. To help them cook evenly, you can make a small dip in the middle of the uncooked crackers with the back of the teaspoon before placing them in the oven.

Bake until they've begun to go brown all over. Start checking after 5 minutes.

Remove from the oven and place trays on cooling racks. Working quickly, brush each cracker lightly with soy sauce, and leave to harden.

Eat within a few hours because they don't store well.

Tip

The trickiest bit to making these is catching them at the precise moment when they have browned enough to be crisp and lose their bland raw taste, but haven't yet become so brown that they've become bitter. Start by cooking a small test batch the first time you try this recipe.

Variations

Adding 2–3 teaspoons of finely chopped foraged greens, flowers or seeds make these crackers even more more-ish.

Try kawakawa leaves; tutae koau; wild parsley; wild celery; onionweed; nasturtium leaves; rosemary flowers or leaves; Brassicaceae flowers, leaves and seeds; wood sorrel; fennel leaves, flowers or pollen; harakeke seeds or pollen; young tender pine, spruce or fir tips; citrus zest; nettle leaves or a combination, depending on what's available.



FORAGER'S DAMPER

DF V

This has been adapted from a recipe contributed by the Wellington City Mission Auxiliary to their Food for a Mission cookbook. Add anything from 1 tablespoonful to 1 handful of the finely chopped foragings, fresh or dried, according to preference and how strong the wild plant's flavours are. This makes 8 good slices.

3 cups standard flour, plus extra
4 teaspoons baking powder
1½ teaspoons salt
90 g butter or butter substitute, chopped
½ cup milk or milk substitute, plus a little extra for brushing
½ cup water
finely chopped foraged herbs or greens

Heat oven to 200°C. Grease an oven tray or line with baking paper.

Sift flour, baking powder and salt into a bowl.

Rub in the butter until the mixture looks sandy.

Add milk and water, sprinkle in foraged herbs or greens, and mix together very lightly.

Turn out onto a floured surface, knead gently into a 15-cm circle and place onto oven tray.

With a sharp knife, make four cuts across the dough in a star shape, about 1 cm deep. Brush the top of the dough with the extra milk.

Bake for 10 minutes or until golden brown, then reduce the temperature to 180°C and bake for another 15 minutes.

Variations

Great additions to damper include kawakawa leaves; wild parsley; wild celery; tutae koau; onionweed; rosemary leaves and flowers; lavender flowers; clover flowers broken up; nettles; dead-nettles; pikopiko; chenopodiums; New Zealand and beach spinach; pūhā; dandelion and other DYC greens and flower petals; young plantain leaves; young yarrow leaves; young cleavers leaves; mallow leaves; borage leaves and flowers; nasturtium leaves, flowers, flower buds and seed pods; fennel leaves, flowers and pollen; young, tender pine, spruce or fir tips; harakeke seeds or pollen; marigold petals; and scented pelargonium flowers.



WILD HERB PESTO

DF GF V

Chickweed is the most beloved of wild pesto ingredients — it's especially creamy when pounded or puréed. However, there are many other wild herbs you can also add. If you're using bitter ingredients such as dandelion leaves, consider pre-boiling them for 5–10 minutes in a large saucepan of water, but remember to drain them well. This is also a good time to use lemon or lime juice to reduce bitterness. Because the bitters are crushed, and their juices released, added lemon juice will do a good job of neutralising some bitterness. This recipe makes more than 1 cup of pesto.

1 clove garlic
2 big pinches of salt
2 cups foraged greens, torn up and loosely packed
1/4 cup olive oil
1/2 cup cashew nuts
1/3 cup dried breadcrumbs or grated parmesan cheese

Pound garlic and salt with a mortar and pestle.

Gradually add greens, continuing to pound.

Gradually add oil and nuts, until you have a smooth,
thick paste.

Stir in breadcrumbs or parmesan.

Alternatively, use a blender for all ingredients except
the parmesan or breadcrumbs. Stir them through the pesto
by hand.

Variations

Among the wild greens you can include are kawakawa leaves (sparingly); New Zealand mint leaves and flowers; tutae koau; wild parsley; wild celery; onionweed leaves and flowers or other wild alliums; chenopodiums; borage leaves and flowers; nasturtium leaves, flowers and seedpods; wood sorrel; fennel leaves and pollen; harakeke pollen; citrus zest; nettle leaves (briefly pre-cooked to remove the sting); dead-nettles; Brassicaceae leaves, especially cress; miner's lettuce; dandelion; pūhā; and other DYC leaves.

If you can gather enough borage petals to use them alone, you will be able to make an amazing blue pesto.

Tips for serving

- Dollop onto raw or cooked vegetables.
- Stir through pasta as a quick and easy sauce.
- Add to salad dressing: vinaigrette or mayonnaise; see recipes, pages 202–3.
- Mix with sour cream or yoghurt to make a creamy dip.



YOGHURT-HERB DIP

GF

Everybody loves this and, best of all, it only takes a minute or two to make with store-cupboard staples. Eat with vegetable sticks or crackers. Makes over 1 cup of dip.

2–3 heaped teaspoons of fresh foraged herbs, finely chopped
1 cup thick yoghurt
1 garlic clove, pounded in a mortar and pestle, crushed, or finely grated
juice of 1–2 lemons
salt and pepper, to taste
pinch of turmeric or paprika (optional)

Place all ingredients in a bowl and stir to combine.

Good forageables to use, fresh and grated or very finely chopped, for dressings and dips

• borage flowers	• parsley leaves, flowers, seeds and roots
• Brassicaceae leaves and flowers	• rose petals
• fennel leaves, flowers and pollen	• rosemary leaves and/or flowers
• citrus peels and flowers	• scented pelargonium flowers
• fir and pine tips	• spruce tips
• kawakawa leaves	• tutae koau leaves, flowers and seeds
• lavender flowers	• wild celery leaves, flowers and seeds
• marigold flowers	• wood sorrel leaves, flowers and stems
• New Zealand mint leaves	
• onionweed leaves, flowers or bulbs	

THE ART OF CHEESEMAKING

Artisan cheeses fascinate. At one end of the spectrum are complex delicacies that take years of experience to make well. At the other are quick, simple, delicious cheeses that just about anyone can whip up at home for minimal cost. These are the cheeses featured in this section.

You can get milk to coagulate into cheese using an acid — a particularly acidic citrus juice, such as lemon or lime will work, or you can buy citric acid from supermarkets. If you're tossing up between citric acid and citrus juice, the juices may not curdle the milk quite as strongly, but they will add a pleasant taste.

Alternatively, you can use rennet, based on a substance called rennin, to coagulate the milk. Traditionally, rennet is made from calves' stomachs so it's not suitable for vegetarians. However, vegetarian rennet is often available from specialist cheesemaking suppliers.

Acid produces a soft, crumbly curd. Rennet produces a firmer, smoother curd. When using rennet it's very helpful to use a thermometer to make sure the temperature of your cheese mixture doesn't get too high. If rennet is heated over about 30°C, it won't do its job.

Which milk to use?

The very best milk to use for cheese is unpasteurised bought direct from the farm gate. If you're unsure where to get it, a reliable source of information is your closest Weston Price Foundation chapter. If you can't get it, try full-fat milk that hasn't been homogenised. Homogenised milk is not nearly as good for making cheese.



WILD-HERB COTTAGE CHEESE

GF

There are so many uses for this cheese — as a dip, a topping for pizza, a filling for stuffed vegetables or fruits, or added to soup before serving. Makes about 2 cups.

2 litres milk
juice of 2 lemons or limes or 1/4 teaspoon citric acid
1/4–1/2 cup foraged treasures, finely chopped
salt

Place milk into a saucepan and heat over medium heat to scalding — when bubbles begin to form on the surface around the edge.

Remove saucepan from heat and add lemon juice or citric acid. Leave to cool and curdle. When cool, strain through muslin, and let drip for half an hour or more.

Place cheese in a bowl and stir in finely chopped foraged greens, and a little salt to taste.

Cover and store in the fridge until ready to use.

Making a firmer cheese

To make a firmer cheese like an Indian paneer, you can use a proper cheese press or create your own make-shift version. Wrap the cheese tightly in muslin, as if you were wrapping a present, to form a little package. Sandwich the wrapped cheese between two chopping boards and weigh down the top one with something heavy. Bit by bit add weight to it over the next 2–3 hours or more. Increasing amounts of whey will seep out, until the cheese is firm and the curds hold together strongly. This doesn't work as well as a proper cheese press, but it's quite adequate.

Variations

Good foraged herbs to add include kawakawa leaves, New Zealand mint leaves and flowers, tutae koau, wild parsley, wild celery, onionweed, nasturtium leaves, or flowers, rosemary flowers, Brassicaceae flowers, wood sorrel, fennel leaves or pollen, harakeke pollen, yarrow leaves, or citrus zest.

Tips for serving

- Crumble cheese onto pizza or over a pasta dish.
- Slice and serve with crackers and pickle.
- Make un-palak paneer with the firmer version; see page 225.



MASCARPONE

GF

Soft, rich mascarpone is a hugely versatile cheese that can be used in sweet and savoury dishes. Plain mascarpone with wild infused or fruit honey dribbled over is very addictive. Or try serving sweet mascarpone with a dessert sauce or syrup, on its own, or with cake, fruit pie or mousse.

Adding finely chopped foraged herbs to mascarpone makes an instantly impressive dip.
Makes about 2 cups.

1 litre cream
juice of 2 large lemons or 4 small ones

Place cream into a saucepan and heat over medium heat to scalding
— when bubbles begin to form on the surface around the edge.
Remove saucepan from heat and add lemon juice.

Leave to curdle and cool.

When cool, strain through muslin, and let drip for half an hour or more.
Place mascarpone in a bowl, cover and store in the fridge until
required. It should last 3–4 days.

Variations

After mascarpone is made:

- ➲ Stir in some wild syrup or infused honey; see recipes, pages 157 and 177.
- ➲ Stir in a little icing sugar and some finely chopped petals — try rose, lavender, rosemary, scented pelargonium or sweet William. Fennel pollen, finely chopped New Zealand mint leaves/flowers and finely grated citrus zest are also great in a sweet mascarpone.
- ➲ To make savoury mascarpone, stir in a little salt and some finely chopped foraged herbs. Try kawakawa leaves, New Zealand mint leaves and flowers, tutae koau, wild parsley, wild celery, onionweed, nasturtium leaves or flowers, rosemary flowers, Brassicaceae flowers, wood sorrel, fennel leaves or pollen, harakeke pollen or citrus zest.



CROWDIE

GF

This is a traditional Scottish cream cheese. It's a lovely, simple recipe, although as it uses rennet you'll need a thermometer. Use as you would any delicious artisan cream cheese.

Makes 2 cups or more.

2 litres milk
½ tsp rennet
100–300 ml cream
salt to taste
¼–½ cup finely chopped foraged treasures (optional)

Put milk in a saucepan over low heat and heat to 30°C.

Remove from the heat and add rennet.

Leave to curdle and cool.

When cool, strain through muslin, and let drip for half an hour
or more.

Add cream and salt, and beat or whisk until the mixture forms
a paste.

Add the foraged greens, if using, and stir through.

Cover, cool and store in the fridge for up to 3 days.

Variations

For starters, try kawakawa leaves, New Zealand mint leaves and flowers, tutae koau, wild parsley, wild celery, onionweed leaves and flowers, nasturtium leaves and flowers, rosemary flowers, rose petals, marigold petals, chamomile flowers, Brassicaceae flowers or seeds, wood sorrel, fennel leaves or pollen, harakeke pollen or citrus zest.

LIGHT MEALS

Souped-up weeds

All sorts of soups from traditions around the world can be adapted for use with your wild local foods, but here are a couple of simple favourites.



READY-TO-GO SOUP BASE

DF GF V

If you keep this base in the freezer, bagged into single or multiple servings, you'll be ready to make a yummy, healthy vegetable soup in a flash with any foraged greens or other wild vegetables as you find them.

a slug of cooking oil and/or a large knob of butter

8 onions, chopped

8 potatoes, chopped

8 carrots, chopped

8 stalks celery, finely sliced

2 cups chopped parsley, wild celery or tutae koau

Put the oil and/or butter in a saucepan over a low–medium heat, and
heat gently.

Add the onions and cook gently until softened and browned.

Remove from the heat and set aside to cool.

Meanwhile, blanch the potatoes, carrots and celery. See 'Preparing
vegetables for freezing', page 184.

Pat dry the blanched vegetables. Gently mix all ingredients together
in a bowl until they're evenly distributed.

Divide the mixture into containers or freezer bags — it should make
eight servings of soup, so if you think you'll use a single serving at a
time, divide into eight bags. If you want to feed a group of four twice,
divide into two bags, and so on.

Place bags in a single layer in the freezer until contents have frozen.
Then they can be stacked to be used later.

To use soup base

When you come in with some wild greens or other foraged treasures that would make good soup, pull a bag of soup base out of the freezer and throw the contents into a saucepan with your foraged finds.

Add a cup of water or stock per serving. Put a lid on the soup and simmer for half an hour or more, until everything is tender.

Towards the end of the cooking, add salt and pepper, to taste, and perhaps a dash of soy sauce, kecap manis or a tiny bit of miso, also to taste.

Serve on its own, with a dollop of mascarpone or wild-herb cottage cheese, or with a sprinkling of parmesan.

Variations

Good wild edibles to add can include tutae koau, wild celery, onionweed, nettle leaves and tops, chenopodiums, New Zealand and beach spinach, pūhā, dandelion and other DYC greens or flower petals, seaweed, samphire, young plantain leaves, young cleavers leaves, borage leaves, dead-nettle leaves, purslane, miner's lettuce, chickweed (chopped to lengths of 2 cm or less), ti kōuka hearts, pikopiko, mallow leaves and peas, yarrow leaves and wild Brassicaceae leaves and flowers.



MISO SOUP

DF V

Miso is customarily made with dashi (see page 216), but a fish or chicken stock will also work well. Adding soba noodles makes this hearty enough for a lunch or dinner.

Serves 2.

1 helping of soba noodles (optional)

2–4 tablespoons miso paste to taste

3 cups dashi or other stock

1 cup cubed firm tofu

2 spring onions or onionweed plants, finely chopped
finely chopped foraged greens to taste

If using soba noodles, pre-cook them according to packet instructions, then rinse under cold running water.

Stir the miso into a few teaspoons of the stock to make a thinner paste. Put the rest of the stock into a saucepan over a medium heat and bring to a gentle boil.

Add the tofu, the chopped spring onion/onionweed and the foraged greens. Bring the liquid back to the boil and remove from the heat.

Stir in the thinned miso paste and pour into serving bowls.

If using soba noodles, divide them among the serving bowls first then pour the miso soup over them.

Variations

Some good foraged greens to include are nettle leaves and tops, chenopodiums, New Zealand and beach spinach, pūhā, dandelion and other DYC greens, seaweed, samphire, young plantain leaves, young cleavers leaves, borage leaves, dead-nettle leaves, purslane, miner's lettuce, chickweed (chopped to lengths of 2 cm or less), tī kōuka hearts, pikopiko, mallow leaves and peas, and wild Brassicaceae.



Making dashi

Dashi is the stock used in Japan as a base for miso soup, giving it its distinctive taste. If you're not worried about authenticity, you can still make a delicious soup without it, or with a different stock.

Dashi is usually made with dried kelp and dried fish flakes — usually bonito but sometimes sardines, anchovies or other fish. It's also made with shiitake mushrooms. You can make your own dashi.

When gathering kelp to make dashi, collect only the small, young straps. Cut or slice them thinly and dry-roast them gently in a warm oven until crisp. They can be stored until you need them. In water they will swell again.

To make the stock, place pieces of dried seaweed — adding up to a surface area about the same size as your hand — in a saucepan with 5 or 6 cups of water over medium heat. Heat slowly. Take it off the heat just before it boils. Remove the kelp, and add 1 cup of dried fish flakes.

If using mushrooms instead of fish flakes, boil 1 cup chopped mushrooms first for around 10 minutes in the water, then let cool, add the kelp and proceed as above. You can also try using other seaweeds for a change.





LADY LINDSAY'S FERAL TEA SANDWICHES DF V

Tea sandwiches are dainty — they should take no more than two or three small bites to consume and they need to be made with thin-sliced soft white or brown bread.

I named this collection of ideas for Joan, Lady Lindsay, who is best known for her haunting novel, Picnic at Hanging Rock (F. W. Cheshire, 1967), an evocative and primal exploration of Antipodean settler unease and awe for the land.

With her highly privileged background, creative eccentricity and fascination for the land's dangers and mysteries, I think Joan Lindsay would have liked these sandwiches.

*I fancy they are like her, with their refined exteriors
and wild insides.*

Serve a varied selection of these at any one time.

A selection of wild ingredients, including:
wild infused butters; see recipes on pages 170–1

wild infused honeys; see recipes on pages 177–9

creamy cheeses; see recipes on page 210–13

wild herbed mayonnaise; see recipe on page 203

wild mustards; see recipe on page 65

flowers and flower petals

citrus zest

shredded wild greens

very finely chopped fresh foraged treasures, such as

powdered dried wild herbs and greens; see recipes on page 189

firm foraged fruits, such as apples and pears

fresh or roasted walnuts

Open-faced tea sandwiches

Lay out the slices of bread, and spread each with a thin layer of infused butter, honey, creamy cheese, mayonnaise or mustard, making sure it goes right to the edges.

Sprinkle flower petals, small flowers, powdered herbs or greens or citrus zest over them. Alternatively, lay decorative strips of shredded greens across them in even stripes, or paper-thin fruit slices or crumbled walnuts.

Slice off the crusts, then cut each slice into small fingers, four squares or two or four triangles. Alternatively, cut out shapes with a cookie cutter, although there will be more wastage.

Closed tea sandwiches

Lay out slices of bread in two rows, and spread each with a thin layer of infused butter, honey, creamy cheese, mayonnaise or mustard, making sure it goes right to the edges.

Sprinkle flower petals, small flowers or citrus zest over one row.

Alternatively, scatter strips of shredded greens or crumbled walnuts across them, or arrange paper-thin fruit slices. Place the remaining row of slices spreadside down on top of the fillings.

Slice off the crusts, then cut each sandwich into small fingers, four squares or two or four triangles. Alternatively, cut out shapes with a cookie cutter.

Club sandwiches

Lay out slices of bread in three rows and spread a thin layer of infused butter, honey, cream cheese, mayonnaise or mustard across the lower and middle rows, making sure it goes right to the edges.

Sprinkle flower petals, small flowers, shredded greens, crumbled walnuts, thin slices of fruit or citrus zest over the lower row. Then place the middle row, spreadside down, on top of the lower row.

Spread a layer of a different but complementary infused butter, honey, cream cheese, mayonnaise or mustard on the remaining row and place the slices spreadside down on the very top of the sandwiches.

Slice off the crusts, then cut each sandwich into finger shapes, four squares or two or four triangles, or cut out shapes with a cookie cutter.

Pinwheel sandwiches

Lay out the slices of bread, and spread each with a thin layer of infused butter, honey, creamy cheese, mayonnaise or mustard, making sure it goes right to the edges.

Sprinkle flower petals, small flowers or citrus zest over them.

Alternatively, lay strips of shredded greens across them or paper-thin fruit slices in a single layer or a scattering of crumbled walnuts.

Cut off crusts and roll up the slices to form pinwheel logs.
Slice the rolls into sections about 2 cm wide.
Hold together with toothpicks, if required.

Tips

- ➲ You can add decorative edges to any tea sandwich by buttering one edge and dipping it into a bowl of very finely chopped fresh or dried wild herbs pounded to a powder.
- ➲ When making pinwheels, wrapping the logs in plastic wrap and putting them in the fridge for an hour will make them easier to slice.
- ➲ It's easier to spread soft fillings onto semi-frozen bread.
- ➲ Using semi-frozen bread also makes it easier to avoid raggedy edges when removing crusts and cutting sandwiches into small triangles or fingers.

Variations

Here are some ideas for wild flora to include:

- ➲ Small flowers such as borage, Brassicaceae, jasmine, mallow, scented pelargonium and rosemary, pulled from the sepals.
- ➲ Chopped or pulled-apart petals from flowers such as marigold, rose, clover, sweet William or chamomile.
- ➲ Mild, daintily chopped or shredded greens, such as chickweed, chenopodiums, miner's lettuce, mallow leaves and borage.
- ➲ More highly flavoured specimens such as wood sorrel leaves and flowers, finely chopped onionweed leaves and flowers, New Zealand mint leaves, wild parsley, wild celery, tutae koau and finely chopped fennel.
- ➲ Bitter greens such as pūhā, dandelions and other DYC's.
- ➲ Greens with an element of surprise, like finely chopped numbing kawakawa leaves, dried and powdered hot horopito, peppery nasturtium, cress or wild mustard seed.
- ➲ Harakeke pollen and seeds, fennel pollen and decorative pikopiko (fiddleheads) sliced lengthwise.



THE LURE O' TEMPURA

DF GF

The key to good tempura is using icy cold water and whisking up the batter just before you're going to cook it. The rice flour ensures a light-as-air batter. Test cook a bit of batter and if it's soggy, try hotter oil, colder batter, or both, before cooking the rest.

Makes a meal or snack for 2–6, depending on how many flowers you gather.

a few handfuls of onionweed flowers

1 cup water

1 egg

1 cup rice flour

salt to taste

cooking oil

Cut the flowers off their stalks 1–2 cm below where the flowers join the stalks. This holds the clusters together and gives you enough stalk to grip when you dip them in the batter.

Chill the water until it's icy cold. You can put it in the freezer for a bit, or add ice cubes to bring the temperature down more quickly.

Whisk the egg in a bowl.

Add the icy water and whisk some more.

Add the rice flour and salt, and mix gently and briefly with a spoon.

Put about 5 mm of oil in a heavy-bottomed frying pan over medium–high heat.

Once the oil is very hot, work quickly. Dip each flower into the batter and drop it into the oil. Don't do too many at once, as you don't want the temperature of the oil to drop.

When a battered flower is lightly browned on one side, turn it over — it won't take very long.

Remove each battered flower from the oil as soon as it's lightly brown on both sides, and place on a paper towel to drain.

Variations

Try making tempura from new dandelion flowers, clusters of pūhā flowerbuds, whole nasturtium flowers or leaves, whole kawakawa leaves, whole borage leaves, pikopiko, purslane or pre-cooked seaweed strands.

Tips for serving

- Eat as is or serve or with a dipping sauce. Try sweet horopito sauce or yoghurt-herb dip; see recipes, pages 145 and 209.
- You could serve tempura with tomato sauce or a light Japanese soy sauce.
- Alternatively, you could make tempura with cultivated veges such as onion rings, green beans, courgette or kūmara slices to serve with wild mayonnaise or yoghurt-herb dip; see recipes, pages 203 and 209.



WEED PAKORAS

DF GF V

I used to think this reliably made a meal for two until I had a teenage boy. Now I would say it makes a meal for one hungry teenager, or a snack for two. Chickpeas are known in South-East Asia as chana and in the Americas as garbanzo beans. They're full of protein, so they make a substantial dish. Serve pakoras with yoghurt and/or relish.

1 cup chickpea flour
1½ teaspoons curry powder or cumin
½ teaspoon baking powder
½ teaspoon salt
a big pinch of chilli powder (optional)
2 cups finely chopped foraged greens, loosely packed down
2 tablespoons grated onion
water, if required
oil

Whisk dry ingredients together.

Add greens and grated onion.

Mix to a very thick, dry batter. If necessary, add just enough water, a few drops, to moisten the mixture and get it to hold together.

Heat 1 cm of oil in a heavy-bottomed frying pan over medium–high heat.

Dollop in small spoonfuls of batter, or use wet hands to mould into small patties and drop them into the hot oil.

When golden brown on the underside, turn each patty and fry on the other side.

When patties are browned on both sides, remove from the oil and place on paper towel to drain.

Variations

These foraged greens will work well on their own or in combination with each other: parsley, tutae koau, wild celery, onionweed, nettle leaves, chenopodiums, New Zealand and beach spinach, pūhā, dandelion and other DYC greens, sea lettuce, young plantain leaves, young cleavers leaves, borage leaves, dead-nettle leaves, purslane, miner's lettuce, chickweed and wild Brassicaceae.

Tips

☞ If using very bitter greens, like older dandelion leaves or wild mustard greens, you may want to boil them first for 2–5 minutes in a large volume of water, then leave them to drain well before chopping them and adding them to the batter. You may need to squeeze some of the water out, so you don't risk ending up with a batter that's too wet and runny.



RICOTTÀ PANNA COTTÀ



This is a savoury panna cotta, a delicious and satisfying thing. If you're using feta instead of ricotta, you may not want to add any salt. Serves 2–4 as a light meal.

4 leaves gelatine
foraged greens or herbs, finely chopped
3/4 cup milk
3/4 cup cream
salt to taste
1 cup crumbled ricotta or feta

Put gelatine leaves to soak in cold water.

Put your foraged greens, milk, cream, salt and ricotta or feta into a saucepan over gentle heat and stir until the cheese melts.

Take off the heat and leave to cool for 5 minutes.

Squeeze water from the gelatine leaves and stir them into the warm mix until they're well dissolved and mixed in.

Pour the panna cotta mix into a bowl or glasses or small ramekins for individual servings.

Cover and set aside to cool.

When cool, place in the fridge to set fully.

When set, serve as is or unmould by gently running warm water on the back of the container, then upend onto a serving plate or individual plates.

Variations

For your greens or herbs, try kawakawa leaves, dried New Zealand mint leaves, tutae koau, wild parsley, wild celery, onionweed, nasturtium leaves, flowers and seedpods, rosemary flowers, wood sorrel, cleavers leaves, fennel leaves or pollen, citrus zest, nettle leaves, chenopodiums, dead-nettles, dandelion greens, pūhā or other DYCs, pine, spruce or fir tips, yarrow leaves or wild Brassicaceae, especially cress.



POTATO-BASE PIZZA

DF GF V

If there's one thing pizza lovers take seriously, it's the thickness of their pizza bases. Experiment until you find the exact thickness that works for you and your loved ones. You can use freshly mashed potatoes, but this is also a good way to use up leftovers.

Makes a meal for 2 or a snack for 4.

1 cup mashed potatoes, made just how you like them

1 cup high-grade flour, but standard will do

 salt

 tomato paste

 1 clove garlic, crushed

 a dash of balsamic vinegar or kecap manis (optional)

 1 or more foraged treasures for topping

 mozzarella or another grated cheese of your choice

Preheat oven to 180°C.

Mix mashed potatoes and flour together.

 Add salt to taste.

Dollop the mixture into a greased oven tray and spread it in an even layer to cover the base. It should be around 5–8 mm thick.

Place the base in the oven and bake for around 10 minutes or until it begins to brown on top and feels as if it's forming a nice hard crust when you tap it with a fork.

Mix the tomato paste, garlic and balsamic vinegar or kecap manis, if using. Spread the tomato paste mixture evenly over the pizza base and scatter the foraged topping over the top.

Finish with a scattering of grated cheese and bake until cheese is just as melty or crisp as you like it.

Variations

- Add yoghurt or whey to your mashed potatoes.
- For a gluten-free base, use chickpea flour instead of wheat flour. You will need 1½ cups mashed potato and ½ cup chickpea flour.
- For a vegan version, omit the cheese. You may want to use a sprinkling of brewers' yeast instead.
- For a wholemeal base, use wholemeal flour and leave the flour and potato base mixture to rest for several hours — this will help the fibre in the wholemeal flour break down and become more digestible. Using whey or yoghurt in the potato mix will aid the process further.
- As well as adding toppings, you might like to add some finely chopped, strongly flavoured foraged goods to the base. Onionweed, kawakawa, nasturtium, wood sorrel, tutae koau, wild celery and wild parsley would all work well.

The wild pizzeria menu

Suggested topping combinations:

- Blackberries with nuts and feta or another artisan cheese — perhaps your own wild-herb cottage cheese (see recipe, page 210).
- Pikopiko, lemon zest and sparingly scattered crumbs of lavender flower.
- Fennel, onionweed and pickled nasturtium pods.
- Watercress with extra parmesan.
- Kawakawa — a pizza topping par excellence, all on its own.
- Of course, as with all good pizzeria menus, the best pizzas are the ones with combinations of ingredients that you dream up yourself.

Tip

- ☞ If you have trouble with some of the more delicate greens drying and burning, especially if you don't use cheese or only use it sparingly, toss the greens in a bowl with a little vegetable oil before putting them on the pizza.



UN-PALAK PANEER

DF GF V

Palak means spinach so I've called this 'un-palak paneer' to acknowledge that it uses wild greens instead of cultivated spinach. There are many recipes for palak paneer, but this is adapted from my favourite Indian cookbook, Mallika Basu's spiritedly urban

Miss Masala: Real Indian Cooking for Busy Living (Collins, 2010). Serves 4.

2 cups cubed paneer or tofu
salt
1/2 teaspoon chilli powder or flakes
oil
1 onion, peeled and diced
1 finger of ginger, peeled and finely grated
4 cloves garlic, finely sliced
1 teaspoon cumin
2 teaspoons garam masala
2-4 cups chopped foraged greens packed firm
1/2-1 cup water or 1/2-1 cup peeled tomatoes

Put paneer or tofu in a bowl and sprinkle with salt and chilli.

Set aside.

Pour oil into a heavy-bottomed frying pan over medium heat.

Fry paneer or tofu until golden brown all over, turning as required.

Return browned cubes to bowl.

Add onion to the pan and cook until it begins to become translucent and slightly browned.

Add ginger and cook 1 more minute, stirring.

Add garlic and cook 1 more minute, stirring.

Add cumin and half of the garam masala, and stir.

Add foraged greens and stir until they have wilted.

Stir in the water or tomatoes and simmer for 5 minutes.
Place the contents of the pan in a food processor and blend, or use a hand-held blender and process until smooth.
Return mixture to the pan and add paneer or tofu and the remaining garam masala.
Simmer for 5–10 minutes.
Add salt to taste and serve with rice.

Variations

- ☞ Chenopodium, mallow leaves, miner's lettuce, borage leaves, nettle, dead-nettles, cleavers, plantain, a few nasturtium leaves or flowers and chickweed will all work with this recipe.
- ☞ You can also use bitter greens like Brassicaceae, dandelion, pūhā and other DYCs, but you may want to preboil them first to remove some of the bitterness.
- ☞ If you don't have a blender, chop the greens very finely before adding.

WILD PASTA DISHES

You can put foraged greens, flowers and herbs in pasta dough or pasta sauce, or both.

Printed pasta

Take your favourite hand-made pasta recipe and adorn the pasta with foraged leaves and flowers.

Roll thin sheets of pasta through a pasta machine until they're as thin as possible, then sandwich leaves and flowers between two sheets, and put them through the roller once again. Use a clear butter- or oil-based sauce to show off the pasta.

Food writer Alessandra Zecchini makes miraculous creations in this way using borage flowers, nasturtiums, rose petals and more. She simply cuts the pasta into shapes with a pastry cutter, cooks it in boiling water very briefly, then serves it with melted butter and a little parmesan. Printed pasta also works well for ravioli.

Other good plants to use include onionweed flowers, cress, small parsley or wild celery leaves, calendula petals, nettle leaves, chamomile flowers, wood sorrel leaves or flowers, rosemary flowers, scented pelargonium flowers, gorse flowers, sweet William flowers, chenopodium leaves and dead-nettle leaves.



HEALTHY WHOLEMEAL PASTA

This is an unusual recipe for pasta, based on an idea that has been gaining support lately — that the healthiest and most digestible grains are wholemeal grains that have been fermented.

Wholemeal flour with a particularly fine, even texture will give the best result. You may need to shop around to find it. Makes about 4 big servings.

2 cups finely ground wholemeal flour, plus extra if the dough is too sticky

1/4–1 cup foraged treasures (herbs, leafy greens, flowers or pollen)

1 cup runny, plain active yoghurt

Sift flour into a bowl.

Add finely chopped foraged treasures, and fork or whisk them through the flour.

Make a well in the middle of the flour and pour in the yoghurt.

Use a fork to stir the yoghurt, gradually incorporating the flour from around the edges.

Switch to a wooden spoon, or just use your hands when it gets too hard to use the fork.

Flour your bench and plonk the dough onto it.

Begin to knead the dough, folding it over, pressing it down and turning it. Continue folding, pressing and turning, adding extra flour if it's really sticky. Add as little as possible because the softer the dough is, the easier it is to knead.

Keep kneading until the dough feels smooth and a little silky. You may need to add an extra sprinkling of flour right at the end.

Let the dough sit back in its bowl and cover it with a damp tea towel or plastic wrap to stop it developing a crust.

Leave for about 24 hours.

Give it another quick knead and use a pasta machine, according to instructions, to roll out the pasta.

Use as you would use any other fresh pasta.

Variations

- Form the rolled out dough into little cupped shell shapes in your hands.
- Roll it between your fingers into tiny long-grain-rice shapes.
- Roll it out very thin with a rolling pin, until you can see through it slightly. Then cut it into sheets to use as lasagna sheets.
- Roll it into sheets, then cut it with a knife into tagliatelle or pappardelle.
- Cut it into small rectangles and pinch them together in the middle to make pasta bows.
- There are all sorts of wild ingredients you can mix into this pasta: kawakawa leaves, tutae koau, wild parsley, wild celery, onionweed leaves and flowers, nasturtium leaves and flowers, rosemary flowers, wood sorrel leaves and flowers, chickweed leaves or flowers, fennel leaves or pollen, borage flowers, citrus zest, nettle leaves, dead-nettles, chenopodiums, dandelion, pūhā or other DYC leaves and petals, scented pelargonium flowers, chamomile

flowers, clover flowers, finely chopped rose petals, jasmine flowers, sweet William flowers, very finely chopped fuchsia flowers, yarrow leaves, Brassicaceae leaves and flowers, especially cress, and young soft pine, fir or spruce tips will all be good with this pasta.

Tip

- If using flowers, very delicate ones can be left whole, while larger flowers can be pulled apart, or you may want to use the petals only.
- All leaves should be chopped as finely as possible.



WILD CREAMY SAUCE

GF

Serve this with fresh pasta as soon as it's ready. Top it with some shaved parmesan and a sprinkling of finely chopped, freshly foraged herbs. This sauce also makes a more-ish hot dip served with crackers, fingers of dense, toasted wholegrain bread or vegetable sticks — a good way to have it if you need to eat gluten free. Serves 2–4.

splash of oil and/or knob of butter
2 big onions, peeled and grated or finely chopped, and/or 3 cloves garlic, crushed
½ cup wine or spirits (optional)
a handful or 2 of foraged greens
1 cup cream
salt and pepper, to taste

Heat oil and/or butter in a frying pan over low–medium heat.
Add onions and/or garlic and sauté until clear and beginning to brown. If using both, add the garlic just before the onions are ready.
Add wine or spirits, if using, and simmer until it has evaporated.
Add greens and and simmer for a minute or two.
Add cream and simmer for another minute or two.
Add salt and pepper, to taste.

Variations

- Turn it into a tomato cream sauce by adding tomato purée or diced tomatoes after the greens, and allowing to simmer before adding the cream.
- Use one of your own infused wines or spirits in the recipe.



TASTY BREADCRUMB PASTA DF V

Late winter and spring is the best time for this recipe, as that's when onionweed is in full, lush bloom. If you dry onionweed, you can have it all year round, although it's nicest fresh. If you're not blessed with a local patch of onionweed, you could use cultivated spring onion. Serves 2–4.

pasta
½ cup olive oil
¾–1 cup finely chopped onionweed
finely chopped foraged herbs and/or greens
¼ cup dried breadcrumbs
salt and pepper, to taste

Cook the pasta according to packet instructions.

While the pasta is cooking, pour 2–3 tablespoons of the olive oil into a heavy-bottomed frying pan over medium heat.

Add onionweed and breadcrumbs and sauté until the breadcrumbs are very crisp. Transfer breadcrumb-onionweed mix to a bowl.

Meanwhile, pour the remaining oil into the chopped herbs and toss together. Toss the well drained hot pasta into the oil and herb mix, and stir through.

Put the tossed pasta into a warm bowl or individual serving bowls and scatter the breadcrumb-onionweed mix on top.

Serve immediately.

Variations

Wild herbs and greens for this pasta include kawakawa leaves, tutae koau, wild parsley, wild celery, onionweed or other wild allium leaves and flowers, nasturtium leaves and flowers, rosemary flowers, wood sorrel, fennel leaves or pollen, nettle

leaves, dead-nettle, New Zealand spinach and beach spinach, samphire, dandelion, pūhā or other DYC greens, plantain leaves, cleavers leaves, chickweed, plantains, sea lettuce, miner's lettuce, borage leaves and flowers, chenopodiums and Brassicaceae greens or flowers, especially cress.

WINTER WARMERS



SCROUNGERS' SKIRLIE

DF V

Most of us are not used to thinking of oats as the basis for a savoury meal, but this traditional Scottish dish is a great way to use onionweed and other foraged greens. Serve it on its own, or make it more substantial by adding a poached egg, tofu or a vegetable mash. You can also serve it as a side dish with dinner instead of potatoes.

Serves 2–4.

2 tablespoons olive oil
¾–1 cup finely chopped onionweed
1 teaspoon freshly chopped thyme or 2–3 chopped kawakawa leaves
1 cup rolled oats
hot water
2 large handfuls of foraged greens, washed and torn up
salt, to taste
black pepper or kawakawa pepper, to taste

Put the olive oil in a heavy-bottomed frying pan over a low–medium heat.

Add onionweed and cook for 5 minutes until soft, stirring as it cooks.

Add thyme or kawakawa.

Reduce the heat and add oats. Stir to combine.

Cook on a low heat for 5 minutes, until the oats have puffed up a bit and crisped.

Add a teaspoonful or two of hot water to help them puff up more, and cook for another minute.

Stir in the foraged greens and cook until just wilted.

Add salt and a good grind of pepper and serve warm.

Variations

Along with kawakawa and onionweed, these foraged greens are great for skirlie: tutae koau, wild parsley, wild celery, nasturtium leaves and flowers, rosemary

flowers, wood sorrel, nettle leaves, dead-nettles, New Zealand spinach and beach spinach, dandelion, pūhā or other DYC greens, Brassicaceae greens or flowers, plantain leaves, cleavers leaves, chickweed, sea lettuce, miner's lettuce, borage leaves and flowers, chenopodiums and yarrow leaves.



AUNT SALLY'S SURPRISE LOAF

DF V

In The Trolls (Square Fish, 2008), a delightful children's book by Polly Horvath, eccentric Aunt Sally encourages her nieces and nephew to eat their vegetables by making a surprise meatloaf with a different interesting vegetable hiding in each section. It's a fun thing to do with foraged surprises, too. Serves 4-6.

2 teaspoons vegetable oil
1 medium onion, grated or finely chopped
2 cloves garlic, minced
wine or sherry (optional)
1 kg minced meat
1 cup ricotta cheese
1 teaspoon salt
1 cup breadcrumbs
2 eggs
½ cup chopped parsley or tutae koau
foraged herbs (optional)
foraged edibles, for the surprises
thinly sliced bacon

Preheat oven to 160°C.

Heat the oil in a heavy-bottomed frying pan on low–medium heat. Add onion and sauté until it's soft, translucent and gently browning.

Add the garlic and continue to cook for another minute.

Add wine or sherry and simmer until evaporated, if using.

Combine the onions, garlic, meat, ricotta, salt, breadcrumbs, eggs, parsley or tutae koau and herbs, if using, in a big bowl and mix well with a fork or wooden spoon, or get your hands in if you want!

Scoop the meat mixture into a loaf pan.

Push the surprises into the loaf at regular intervals all the way along it.

Lay the strips of bacon on top.

Bake for 1½–1½ hours.

Let cool and slice.

Variations

- ➲ This simple concept works with any loaf you like — meat-based or vegetarian.
- ➲ Instead of 1 cup ricotta, use 1 cup crumbled feta or 1 cup mashed root vegetables or a mixture of cheese and mashed vegetables.
- ➲ For the surprises, try dandelion buds and flowers; pre-boiled slices of ice plant; a small, plump piece of purslane; small, juicy New Zealand or beach spinach leaves; a pikopiko fiddlehead; a slice of tī kōuka heart; a nasturtium seed pod; a clover flower; a chamomile flower or bud; a slice of sea lettuce; a strand of samphire; a mallow pea; a walnut; a piece of cooked sweet chestnut; a *Romula rosea* (plum pudding); a blackberry; or a slice of foraged fruit.

SWEET TREATS

Many of the butter, syrup and alcohol recipes earlier in this book can be used in these desserts. There are also recipes here using infused milk or cream that is prepared fresh.

Foraged fruits make marvellous desserts, but so do some foraged herbs. Wood sorrel's sour twang is nice in sweet dishes, and nettle can be an interesting and unexpected dessert green, too, if you balance it with vanilla.

For other dessert ideas see the recipes for infused syrups on pages 157–9 and infused honey on pages 177–9.



ANY-WAY-YOU-SLICE-IT SHORTBREAD DF GF V

Texture is everything when it comes to shortbread. It's important to mix it as lightly as possible. Anything resembling kneading encourages the gluten in the flour to develop and that works against the light texture you're after.

Choose one of these foraged aromatics to finely chop and add: kawakawa; fennel leaves or pollen; fir, pine or spruce tips; rose petals; rosemary flowers; scented pelargonium flowers; or finely chopped nettle plus a teaspoon of vanilla. You could also add citrus zest on top of any of those items. If using lavender, fennel pollen or a strong pine, only add 1–2 teaspoonfuls. You can add 1–2 tablespoonfuls of the others. Once you've made the recipe, you'll know if you'd like it any stronger. Makes 8 very generous slices.

1 cup standard flour
1/4 cup rice flour
1/3 cup caster sugar
a pinch of salt
finely chopped aromatic foraged treasures
100 g unsalted butter or butter substitute
a little extra caster sugar for sprinkling on top (optional)

Preheat oven to 160°C.

Sift plain flour, rice flour and salt into a bowl. Add caster sugar and foraged aromatics.

Cut butter into cubes and add to dry ingredients.

Rub the butter into the flour between your thumbs and forefingers.

When the mix looks mostly sandy with some bigger lumps, start scooping up handfuls and pushing them together into clumps.

Clump, don't squish.

Press mixture into a pie or flan dish or baking tin, around 25 cm in diameter.

Gently get the mix to a roughly even depth all over.

Bake for 15–20 minutes or until the shortbread is just faintly browning.

It should still feel soft. Stand it on a wire rack in its dish and let it rest for 10–15 minutes.

Using a sharp knife, cut the shortbread into slices in the tray or tin. If you have a round dish, cut through the centre of the circle and divide into 16 pieces in a bicycle-spoke pattern.

Leave it to cool completely in the tray or tin. It will be brittle by then, but the slices should lift out easily.

Serve sprinkled with extra caster sugar, if using. Alternatively, serve it warm with a wild-flavoured ice cream.

Variations

- For a gluten-free shortbread, use equal quantities of rice flour and cornflour.
- For a dairy-free shortbread, use virgin coconut oil instead of butter.
- Use a wild infused butter instead of the plain butter.
- Add chopped, peeled chestnuts or crushed or chopped foraged walnuts.



FLOWER OR FRUIT FRITTERS

DF

Elderflower and dandelion fritters are classic foragers' fare — dandelion flowers make particularly cute, round, juicy fritters. However, you can use many other flowers or fruits. Makes a light meal for 4 or a snack for more.

1 cup standard flour
2 teaspoons caster sugar
1 cup water
foraged edible flowers or fruits

1 egg white
rice bran oil
icing sugar
butter (optional)

Whisk together flour and caster sugar in a bowl.

Stir in water, adding it to the flour mixture gradually.

Press out some of the lumps of flour, but there's no need to be too scrupulous.

Place batter mix in fridge to chill.

Prepare flowers or fruit, ready for dipping in batter.

Beat the egg white to soft-peak stage and fold gently into the batter.

If you're using small flowers, add them to the batter with the egg white and fold gently together — large flowers are dipped in the batter later.

Pour oil into a heavy-bottomed frying pan —
about 5 mm deep.

Add a knob of butter, if using, and place over medium heat. Test the temperature with a small blob of batter. It's hot enough if the batter instantly begins to brown.

Dip larger flowers into batter and fry individually. A mix made with small flowers can be spooned into the oil, much like making pancakes. Don't cook too many at once, as the oil needs to hold its temperature.

When each fritter is golden brown on the underside, turn it over. When it's browned on both sides, remove it from the oil and place on a paper towel to drain.

Transfer each batch of fritters to a new plate and use a sieve to sprinkle over icing sugar before serving.

Variations with flowers

- ✿✿ Elderflowers, new dandelion, other DYCs, chamomile, wild jasmine, sweet William, rose petals, whole clover or clover pulled apart will make delicious fritters.
- ✿✿ Although they'll add more colour than flavour, you can also use borage flowers and calendula petals.

Variations with fruits

- Peeled apple slices, peeled pear slices and firm, unripe plum slices will work. Batter them fresh or marinate them first in an infused liqueur or honey, or in butterscotch sauce (see recipe, page 119).
- Kawakawa fruits, blackberries and the choicest fuchsia berries will also work.

Tips

- It's usual to remove stems from flowers and, if possible, sepals before dipping them in batter. But if you like, you certainly can leave stems on dandelion flowers, other DYC's and chamomile flowers as a handle to eat them with.
- Some people like to make elderflower fritters by dunking a cluster of flowers in batter, stems still on, then frying the clusters, stem end up. To eat, you nibble the battered flowers off the stems. Other people prefer to snip the stems off while the fritters cook. However you do it, try to avoid or get rid of as much stem as possible. The green bits of elder are indigestible and mildly toxic, although most people seem to be able to tolerate a small amount.



FORAGER'S FIRNI

DF GF V

Firni is an Indian rice pudding, often made with rice flour, and customarily flavoured with cardamom and nuts. This is a shiny white dessert full of possibilities — a blank slate for the gatherer of aromatic flora. Serves 2–4, depending on how high you want to send your blood-sugar levels.

1¼ cups whole milk or milk substitute, and a little extra for mixing
aromatic foraged treasures
1/3 cup rice flour
1/4 cup granulated sugar
½ teaspoon vanilla essence (optional)

Put the milk and foraged aromatics in a small saucepan over medium heat. Heat gently until foamy bubbles appear around the edges. Remove from the heat and set aside with a lid on, to infuse for around 10 minutes.

While that's infusing, mix the rice flour to a runny paste with a little extra milk and set aside.

Strain out the foraged ingredients from the infused milk, return the infused milk to the saucepan, and reheat over medium heat until bubbles appear.

Stir in the sugar, then the rice flour paste.

Place on a low-medium heat, stirring the mixture vigorously with a wooden spoon. Watch out for lumps. If they start to form, take the mix off the stove for a minute and press the lumps out with the back of the spoon.

Keep stirring until the mixture is thick and creamy. If it gets so thick it's virtually unstirrable, and you fear it isn't cooking properly, loosen it by gradually stirring in a little extra milk.

Taste it. If it still tastes of raw rice flour, keep stirring it over the heat.

Taste it every minute or so until you no longer detect much or any rawness.

Once you're satisfied, stir in the vanilla, if using.

Spoon it into bowls or onto saucers and chill.

Getting rid of lumps

If, despite your valiant efforts, your firni is still lumpy, then once it's cooked, but before it cools and sets, push it through a sieve.

Variations

- ✿ Before the mixture cools, add a few squares of chocolate to the saucepan, and swirl them through as they melt to create a ripple effect.
- ✿ Rose petals; lavender flowers; elderflowers; wild jasmine flowers; sweet William flowers; fennel leaves, flowers or pollen; kawakawa leaves or unripe berries; scented pelargonium leaves and flowers; pine, spruce or fir tips; mānuka leaves; citrus flowers or zest; or a combination of nettle and vanilla — perhaps with added ginger — are delicious in this recipe.



BASIC SWEET PÀNNA COTTÀ DF GF V

Panna cotta is usually flavoured with vanilla. However, with herbs like kawakawa you may not need it. The best panna cotta I've ever eaten — a light, refreshing fennel-flavoured offering gleaming in syrup — was cooked by local foraging chef Anthony North. Makes 2 large servings or 4 small ones.

4 gelatine leaves
fragrant foraged herbs or flowers
1 cup milk
1 cup cream
1/4 cup sugar or honey
a few drops of vanilla essence (optional)

Soak 4 gelatine leaves in cold water (see page 163).
Place foraged ingredients, milk and cream into a saucepan over a low–medium heat until not quite simmering.
Remove from the heat and set aside, with lid on, for half an hour while the foraged ingredients continue to infuse.
Strain through muslin or a fine sieve and return liquid to the saucepan.
Reheat to hot but not simmering.
Squeeze the water from the gelatine leaves and stir them into the warm infused liquid until they're well dissolved and mixed in.
Pour the panna cotta mixture into a bowl or individual serving bowls or glasses.
Cover, cool and place in the fridge to set fully.
When set, serve as is or unmould by gently running warm water on the back of the bowl or individual serving containers.

Variations

- For a dairy-free panna cotta, use coconut milk instead of milk and cream.
- Make a yoghurt panna cotta by using no cream and just 1 cup of milk. After the mix has cooled to lukewarm but not yet started to set, stir in 1 cup of yoghurt. Don't add yoghurt to warm milk or the mixture may separate. You may also need to add a little extra sugar or honey.

• Rose petals; lavender flowers; elderflowers; wild jasmine flowers; sweet William flowers; fennel leaves, flowers or pollen; kawakawa leaves or unripe berries; scented pelargonium leaves and flowers; pine, spruce or fir tips; mānuka leaves; New Zealand mint; citrus flowers or zest; or a combination of nettle and vanilla all make delicious panna cotta.

Tips for serving

• Serve a plain vanilla or infused panna cotta with wild infused syrup, a fruit or berry syrup, a runny infused honey or a berry honey.



SUDDEN COMFORT ICE CREAM DF GF V

Although I love making ice cream out of homemade custard, this sweet, yummy alternative is the quickest, easiest ice-cream recipe I know, and excellent if you don't have a proper ice-cream maker. Condensed milk is the secret — it stops the ice cream from freezing hard, instead turning it into ice-free perma-cream. Make as little or as much of this recipe as you would like.

aromatic foraged treasures

1 part milk

1 part cream

2 parts condensed milk

½–1 tsp vanilla essence per part (optional)

Place foraged ingredients, milk and cream into a saucepan over a low–medium heat until not quite simmering.

Remove from the heat and set aside, with lid on, for half an hour while the foraged ingredients continue to infuse.

Strain through muslin or a fine sieve.

Stir in the condensed milk until well combined and pour mixture into a freezerproof container.

Freeze, stirring every hour or so to break up and aerate the mix as it freezes.

It should keep in the freezer, covered, for at least a week.

Variations

- ✿ Rose petals; lavender flowers; elderflowers; wild jasmine flowers; sweet William flowers; fennel leaves, flowers or pollen; kawakawa; scented pelargonium leaves and flowers; pine, spruce or fir tips; mānuka leaves; New Zealand mint; citrus flowers; citrus zest; or a combination of nettle and vanilla — and perhaps also ginger — all make delicious ice cream.
- ✿ Make the recipe without the cream and, after the mix has cooled, stir in 1 part yoghurt. Don't add yoghurt to warm milk or the mixture may separate. You may also need to add a little extra sugar or honey with this.
- ✿ For a dairy-free and vegan soy ice cream, use 1 part soy condensed milk and 1 part soy milk.
- ✿ For a dairy-free and vegan coconut ice cream, simply use coconut condensed milk (see the recipe below). I've found that in order to make a creamy coconut milk ice cream that doesn't go icy, you can't add any regular coconut milk. Using all condensed coconut milk makes it very sweet and rich, so moderation is called for!

Tips for serving

- ✿ Serve with wild infused syrup, a fruit or berry syrup, an infused honey, or a berry honey; see recipes, pages 177–9.
- ✿ Serve with butterscotch sauce (see recipe, page 119), and a sprinkle of chopped foraged nuts.



MAKE YOUR OWN CONDENSED MILK

If you're a from-scratch junkie, or you want to use your own raw or organic milk, or you simply prefer not to support the companies that make condensed milk, making your own is simple.

2 cups whole milk
1/4 cup sugar

Put milk and sugar in a saucepan over medium heat and bring to a gentle boil, stirring to dissolve the sugar.

Reduce to a simmer, and continue to simmer, stirring every now and

then until the liquid is reduced by half and has turned pale yellow.

Remove from the heat.

It won't be quite as thick as store-bought condensed milk at first, but it will thicken as it cools.

Variations

- ☞ To make condensed soy milk, replace the whole milk with soy milk. It will go a milky brown, almost the colour of a latte rather than pale yellow.
- ☞ To make condensed coconut milk, replace the whole milk with coconut milk. It will turn grey, but don't let the colour put you off — it's delicious!



CREATE-YOUR-OWN CRANACHAN

DF

The great beauty of this Scottish dessert, traditionally made with whisky and raspberries, is that it almost provides the ultimate choose-your-own adventure recipe for both you and your guests — there are as many methods to make cranachan as there are cooks.

Before you begin, decide when you want to add the alcohol. Some people add it to the cream as they whip it, some add it to the honey, some cook the fruit in alcohol, and some soak the oats in it the night before. It's up to you, so add it in as you go wherever you think it would be nice. Make as little or as much of this recipe as you would like.

2–3 tablespoons rolled oats per serve
fresh or lightly cooked or marinated foraged fruits or berries
a delicious alcoholic drink (optional)
cream
a dash of vanilla essence (optional)
brown or white sugar (optional)
2 tablespoons runny honey per serve

Put the rolled oats in a heavy-bottomed frying pan over a low heat and gently toast them until they're crunchy and browned but not burned. You may like to add a little sugar as you do this.

Remove from the heat and transfer the oats to a bowl and set aside to cool. If you want to gently cook or marinate the fruits or berries, do so now.

Strain cooked fruits to remove seeds and skins, if necessary.

Place prepared fruits in a serving bowl.

Whip your cream and a dash of vanilla, if using, to the stiffness you like, and transfer to a serving bowl.

Place your runny honey in a bowl or jug to serve.

How to serve

Give each of your guests their own glass bowl or tall glass and long spoon. Bring all serving bowls to the table, with serving spoons, and let your guests layer up the ingredients however they like.

Variations

- For dairy-free cranachan, make a cream substitute by whizzing soft tofu and a little bit of icing sugar to taste in a food processor until smooth and creamy.
- Slightly tart fruits are best, so if you're cooking sweet fruits, you could add a bit of lemon juice or chopped wood sorrel.
- Use one of your own wild infused alcohols, or wild infused runny honeys.
- If you don't have runny honey, stir in a tiny bit of an infused spirit or a tisane to make the honey runnier.



SCRUMPER'S CRUMBLE

DF V

This is a great way to quickly and easily use freshly gathered fruits or berries, or use up the not so fresh ones that have been lingering in the fridge. Serves 4–6.

1 cup flour
125 g butter or butter or substitute, diced
1/4 cup brown sugar
3 cups foraged berries and/or chopped fruit
a little extra brown or white sugar (optional)
juice of 1 citrus fruit (optional)
a handful of oats

Preheat oven to 180°C.
Sift plain flour into a bowl.

Add butter then rub the butter into the flour between your thumbs and forefingers.

When the crumble mix looks mostly sandy with some bigger lumps, lightly stir in the sugar. Put in the fridge until required.

Sprinkle fruit with a little extra sugar and citrus juice, if using, and spread evenly in a baking dish.

Sprinkle crumble mixture on top of the fruit and scatter oats on the very top.

Bake for around half an hour or until the crumble is crispy and golden brown and juices are bubbling up round the edges.

Variations

- ✿ For a dairy-free crumble, use a butter substitute. Consider using virgin coconut oil.
- ✿ Try adding citrus zest or very finely chopped pine, fir or spruce tips to the crumble mix.
- ✿ Try adding to the filling very finely chopped wood sorrel, pelargonium flowers, rose petals, sweet William, gorse flowers, rosemary flowers, elderflowers shaken off their stems, or jasmine flowers.
- ✿ Let the fruit marinate in a little wild infused syrup or alcohol before adding to crumble.



AHA TORTONI

GF

This is a coming-out party for a heavenly dessert recipe that my small family has tried to keep secret for over 45 years. As a teenager, my mother Mary Knox visited her Auntie Jean in Canada who gave her the recipe. Mary brought it back to New Zealand and began to serve it at dinner parties. People begged her for the recipe many times, but she would only give it to good friends who were leaving the country. It was also our special-treat dessert for birthdays and Christmas.

Auntie Jean called it 'sherry tortoni', as did we, and there are quite a few recipes around with this name. Yet our family version is quite different from every other I've seen, so to publish it I've altered the name to reflect the excitement this dish generated during my and my sister Andrea's childhood: Andrea recalls that as a small child she came to believe the dish was called 'Aha!', because whenever Mum was making it and we asked

what was for dessert, that was all she would reply. I'd like to thank Mum and Andrea for allowing me to include this recipe, breaking the code of silence we've shared for as long as I can remember!

Now we're curious. This recipe must have come from someone before Auntie Jean. Perhaps someone reading this might have clues to its origins? Serves 4–6.

1 packet vanilla wine biscuits
3 eggs, separated
1 cup caster sugar
½ cup unsalted butter or butter substitute, softened
¼ cup sherry

Have all ingredients at room temperature.

Crumb the biscuits in a food processor or put them in a plastic bag and use a rolling pin to pound or grind them to crumbs.
Beat the egg whites until fairly stiff, beating in a little of the caster sugar so that they hold their shape while you prepare the other ingredients.

Without washing the beaters, cream the butter thoroughly.

Add the remaining sugar and cream well again.
Add egg yolks and beat until fluffy and pale.
Add sherry and beat until combined.
Gently fold in the beaten egg whites.

Arrange this mixture and the crumbs in alternate thin layers in a glass dish or individual serving dishes, starting and ending with crumbs.
Cover and chill overnight.

Variations

- For a dairy-free tortoni, use an unsalted butter substitute.
- For a gluten-free tortoni, use gluten-free biscuits instead of wine biscuits.
- Use a wild infused unsalted butter.
- Use a wild infused sherry or other spirit.

Tip

Eggs are easier to separate when they are cold — straight from the fridge — so do that ahead of time then leave the separated eggs covered on the bench to reach room temperature before using.

COOKING FOR INVALIDS

The famous nurse Florence Nightingale detailed the importance of good food for sick people in her book *Notes on Nursing: What It Is and What It Is Not* (D. Appleton and Company, 1860). She recommended foods that are delicate, enticing, easily digested and also strengthening. A year later, *Beeton's Book of Household Management* (S. O. Beeton Publishing, 1861) featured a section on cooking for invalids, as did many other books that followed.

A core principle in nineteenth-century invalid cookery was small meals given often. Another was beautiful presentation. Broths and soft puddings were considered essential. There wasn't much place for veganism — many recipes featured eggs, dairy, gelatine or beef broth. It was as if the invalid needed to absorb the life of another creature in order to renew their own.

However, some recipes were based around the thickener arrowroot or the mucilaginous seaweed extracts agar and carrageenan. Others focused on the tonic and nutritive effects of vegetables, and wild greens such as dandelion.

The art of cooking for invalids hasn't been explored much in recent times, with the exception of journalist Pat Willard's *A Soothing Broth* (Broadway, 1998). Willard gathered recipes from numerous sources, and interspersed them with moving essays about looking after sick family members. The book is not just a fascinating examination of one aspect of culinary and medical history, but also a look at the healing power of human care.

What is wonderful about invalid cooking is that you can't give a series of small, dainty, well presented dishes to a sick person without obvious time and effort. So care, while it isn't listed in any of the old recipes I've seen, may perhaps be the most healing ingredient of all.



JUNKET

GF

Soft, creamy, delicious junket is a favourite invalid recipe that you can delicately infuse with many wild aromas and medicinal herbs. It's helpful to have an accurate thermometer when you make it. Serves 2-3.

2 cups milk (preferably raw, whole milk)
2 teaspoons honey or sugar
a few drops of vanilla essence, to taste
2–3 drops vegetable rennet mixed with 1 teaspoon water

Put milk and honey in a saucepan over medium heat, stirring to mix
in the honey.

Remove from the heat at 31°C.

If it gets hotter, let it cool to 31°C before continuing.

Add vanilla and stir quickly.

Add the rennet mixed with water and stir for 15 seconds or so.

Pour it into a bowl or individual serving dishes and leave to set.

Don't move the junket at all while it's setting — the curd
could break.

Once it's set, transfer it to the fridge until required.

Variations

- ✿ Before you begin, place foraged ingredients in the saucepan with the milk. Heat until small foamy bubbles appear around the edges. Take the mix off the heat, and let cool to 31°C. Strain before adding the rennet, then continue as in the recipe above.
- ✿ A small sprig of lavender; sweet William flowers; rose petals; elderflowers; a scented-pelargonium leaf; one or two kawakawa leaves; pine, spruce or fir tips; mānuka leaves; or a spinkling of citrus zest can all be used sparingly to provide a delicate flavour.

Tips for serving

- ✿ Serve junket plain, or sprinkle on a little nutmeg or cinnamon. Cinnamon is full of antimicrobial compounds and is considered a very healing spice.
- ✿ Just before serving, sprinkle caster sugar over the surface of the junket. Eat it straightaway before all the sugar turns to syrup. The granulated texture of the sugar is a particularly delicious addition to a floral junket.

SOLAR COOKING

If you're making wild plants into foods, medicines, cosmetics and dyes, and consuming foods cultured with wild microbes, you might as well harvest wild energy, too.

Your first solar-cooked meal is always thrilling. To put something into a container in the sun and come back a few hours later to find it cooked feels little short of miraculous, and it's always a fun thing to do on a camping holiday.

There's no right way to solar cook, and there are many types and designs of solar cooker. You can whip some up in half an hour out of corrugated cardboard and cooking foil. Others involve wood and mirrors and a lot of precise sawing and hammering. You can guess which way I lean.

However, most solar cookers have certain features in common and solar-cooking enthusiasts are always experimenting with variations.

A solar cooker usually needs:

- a black or very dark sealed vessel to hold the food and absorb heat
- something transparent that covers or surrounds the container, often an oven bag or lidded glass bowl, to let heat in but not out — like a mini-greenhouse
- reflective surfaces that collect the sun's rays and focus them on the dark container.

As an example of recent experimentation and innovation, Malaysian engineer Teong Tan has found that in very good weather conditions, instead of using a black sealed container inside an oven bag, you can simply use a black pot with a clear lid, and no oven bag.

One of the commonest and easiest solar cookers that you can make at home is a panel cooker developed by Tan. See 'International web resources' on page 314 for links to more information, free patterns and instructions.

The black vessel

As mentioned, your cooking vessel should be black or dark. It should also have a tight-fitting lid, otherwise vapour escapes and steams up the greenhouse part of your cooker.

It's often said that you'll get best results using a thin, metal vessel that heats up fast and conducts heat rapidly, but I know people who have solar-cooked some great meals in sturdy, cast-iron cookware.

It can be tricky to find thin, metal, lidded cookware. You can improvise by using two identical black oven pans or non-stick pans, secured together with bulldog clips.

You can also use a piece of cooking foil painted black as a lid, or paint a light-coloured, lidded container.

When to solar cook

According to US writers Lorraine Anderson and Rick Palkovic, in their excellent book *Cooking with Sunshine: The Complete Guide to Solar Cooking with 150 Easy Sun-cooked Recipes* (De Capo Press, 2006), the best solar-cooking days are when your region is at a 45° angle to the sun for four hours or more.

Here in New Zealand, that means your prime solar-cooking days begin some time in October, and run through until some time in March, depending on how far north or south you are. However, with a very powerful solar cooker it's possible to get good results outside of that prime period.

For best results, you need little or only intermittent cloud cover during the hours you're cooking. Wind can be another challenge. If it's gusty, you may have to use some ingenious methods to weigh down your cooker. (A strategically placed brick or two can work.)

Tips for solar cooking

- ➲ Cook during the hours that the sun is highest in the sky.
- ➲ If you are able to, move the cooker from time to time to follow the sun.
- ➲ Think of it as a slow cooker—put the meal out mid morning or very early afternoon, and open it up at dinner time.
- ➲ The fuller your cooking vessel, the longer the food will take to cook.
- ➲ Avoid the urge to peek and let heat out.
- ➲ Set the container of food on a rack of some sort to lift it off the base of the cooker, so the sunlight can reflect up into the bottom of the container as well as onto the top and sides. This is important. Otherwise, it's very easy to end up with something that's cooked on top and not on the bottom.

What to cook in your solar cooker

- ➲ For guaranteed first-time success, start with something simple like boiled eggs, corn on the cob or, simply, a tisane.
- ➲ With many homemade solar cookers, you won't achieve a rolling boil inside your container, so use recipes that lend themselves well to being slow-cooked at a low temperature, and chop ingredients into small pieces.

- ➲ Use much less fluid than you would in an oven- or stove-cooked recipe.
- ➲ Lentil, tofu and root vegetable casseroles all work well.
- ➲ Rice grains and most pastas present a challenge to the solar cook, and you need a very grunty solar cooker to do a good job of them. Try bean threads (cellophane noodles) or rice noodles instead. They're easier to cook at low temperatures, and not as inclined to go squidgey as wheat pasta does when slow-cooked. All the same, you may need to do a bit of experimenting.
- ➲ When it comes to desserts, try poached fruits or fruit compotes.
- ➲ Baking is also quite possible in a solar cooker, but with most recipes you won't achieve browning on the outside.
- ➲ A solar-cooked pavlova is a gooey delight — it's not crisp like an oven-baked pavlova but has a charm all its own.



WILD WAYS

Introduction

Just as local, organic and artisan food movements have gained momentum, a revival in artisan natural perfumery, bodycare products, medicine and fibrecrafts using natural and, if possible, foraged ingredients is afoot.

WILD PERFUMERY

Natural perfumes blended from whole extracts of woods, resins, leaves, flowers, seeds and roots are worlds away from most of today's mainstream commercial perfumes. The cocktails of synthetic, lab-developed fragrance compounds do not compare.

With their quirks and quiet complexity, natural fragrances are beguiling, and making them yourself is a heady, addictive thing to do. Mind you, it can be expensive. Purchasing essential oils and other botanical extracts from around the world — frankincense from Oman, vetiver from Haiti, pink lotus from India — is costly. The prices for such precious ingredients are volatile as the market rocks on the changeable ocean of the global economy.

But getting into natural perfumery doesn't *have* to drain your wallet. Increasingly, artisan perfumers are foraging for and growing plants from which to extract scent. There are simple, infinitely adaptable ways a creative forager can make perfumes.

Homemade fragrances can be in the form of liquids stored in vials or bottles — with lids, atomisers or roll-on tops — they can be water-, alcohol- or oil-based. Then there are solid perfumes made from oils, butters and waxes and usually presented in a jar or compact. Some perfumers use antique powder compacts.

Many natural perfumers branch out into making items that can be less intensely fragrant, including body oils and butters, and aftershave.

A brief history of natural perfumery

For millennia, humans have sought to become more intimate with nature's scents, using them in rituals, as adornment or simply to lift spirits. The world's oldest known perfumes were found on Cyprus in 2003, and date back 4000 years.

It wasn't until the late nineteenth century that synthetic fragrance ingredients began to be developed and, from then on, the art of perfumery moved away from its natural roots.

At first perfumes contained just a few synthetic substances. But as decades passed, the ratio of synthetic to natural ingredients grew. Today, perfumery is big business and most commercially produced perfumes are almost wholly synthetic.

Parallels to industrialised food are unavoidable. Humans crave sugar, salt and umami flavours. Industrially created food gives us what we want in larger quantities than we'd ever be able to find in nature.

Likewise, modern fragrance technology gives us unnaturally strong, sweet, consistent and long-lasting perfumes.

It's also about economics. Fast food means using the cheapest factory-processed ingredients to create maximum profit for company owners. The late British artisan perfumer Alec Lawless asserted that, in the same way, most of the dollars you spend on a mainstream perfume these days go towards marketing and packaging.

The modern Western return to natural perfumery has several pioneers, but the most well known is Mandy Aftel, who has written three books on the subject.

Store-cupboard staples for bodycare and perfumery

BASICS

- ❖ vodka
- ❖ good-quality extra virgin olive oil
- ❖ vanilla beans
- ❖ mango butter (available from soapmaking suppliers)

- extra virgin coconut oil (solid when cool)
- glycerine (available from soapmaking suppliers)
- baking soda
- a selection of bottles and jars, varying sizes
- swathes of muslin

NICE-TO-HAVES

- pure perfumer's alcohol (available from soapmaking suppliers)
- benzoin resin
- other skin-nourishing oils such as apricot kernel oil
- oils with an extra long shelf life — the best are jojoba oil and fractionated coconut oil

The good oil

Extra virgin olive oil is my favourite. It's very gentle on the skin, and if your skin is sensitive you'll be able to feel the difference between a really good oil and one of lower quality. Some of the cheap supermarket brands feel horrible on the skin. Many small New Zealand olive oil presses make excellent oils, perfect for home skin-care products.

Bought botanicals — a primer

If you have the cash to spare and want to incorporate bought botanicals into your natural perfumery work, here's a quick primer. There are four main types of fragrant extract available.

Essential oils

These are the volatile 'oils' of a plant extracted through distillation. Only some plants are suitable for this process — the plant's fragrance and physical structure need to withstand heat and water or steam. For example, it's extremely rare for essential oils to be processed from jasmine and certain other flowers. Instead, you'll generally find their fragrance captured in absolutes or carbon dioxide extracts.

Absolutes

To create an absolute, the volatile oils of a plant are extracted with solvents, then separated out from the solvents. Absolutes are very concentrated and some also have a thick, sticky consistency that's challenging to work with. Warming them gently makes them runnier and easier to deal with.

You can often buy absolutes ready-diluted in jojoba oil or fractionated coconut oil. However, many perfumers prefer to buy them neat and do their own dilution using carrier oils or pure alcohol. Absolutes you buy should state on the bottle if they are diluted, what with, and at what percentage.

Carbon dioxide extracts

This process has only recently been used for extracting botanical aromas. Carbon dioxide, so highly pressurised that it acts like a liquid, is pumped through plant material, pulling out resins and volatile oils. It releases them when it returns to acting like a vapour. This process seems to produce a very true-to-nature aroma, and is generally more environmentally friendly than absolute production.

Hydrosols

These are by-products of essential oil distillation. They're the fragrant distilled waters left after the essential oil has been skimmed off. They're acidic so they keep well, and have been called 'the new aromatherapy'. They have many uses in natural cosmetics and perfumery.

Where can you buy good-quality botanical extracts?

If you only want one or two commonly available extracts, you're best to buy from a reputable New Zealand company. Absolute Essentials and Hebe Botanicals are both considered good brands; see 'Stockists of specialised products' on page 315.

If you want a larger amount, or want to try samples of diverse and rare botanicals, consider ordering from an overseas supplier with a scaled range of wholesale discounts. Even taking into account freight cost and currency conversion rates, it may be more economical.

However, it is a case of buyer beware! Corruption is rife in the world of natural botanicals. Many, many botanicals that are sold as natural — both in New Zealand and overseas — are, in fact, adulterated with synthetics, or are mélanges of cheaper naturals made to imitate the fragrance of the extract they're being sold as.

Eden Botanicals, White Lotus Aromatics, Appalachian Valley Natural Products and Prima Fleur Botanicals are all US-based online sellers with excellent reputations among natural perfumers. From Britain, Aqua Oleum is highly recommended. See 'Stockists of specialised products' on page 315.

If you buy from a reputable and experienced supplier like those, you have the best chance of getting a good, pure, honest product. Even so, some dodgy specimens can slip through as the supply chain is sometimes long, and there are several points along the way where an excellent product might be adulterated before it reaches the purchaser.

Some sellers are just dodgy and should be avoided. Con-artists can be convincing. There are a number of known disreputable suppliers. If you're uncertain, go to experienced natural perfumers for advice.

What signs should you look for that a product may not be what it claims to be? One is price. If it seems too good to be true . . . it probably is. On the other hand, that's not to say that an expensive price guarantees authenticity.

Colour is another indicator. A few plant extracts are completely clear, but many are not. For example, if you come across a rose absolute or a vanilla essential oil that's thin and clear, it must be synthetic.

Sometimes the best indicator is your own sense of smell. With experience you'll be able to sniff out some fakes, although you'll likely make mistakes along the way as you train your nose.

If you come across a seller offering essential oil of jasmine or, say, frangipani be suspicious. As mentioned before, true distilled essential oils from these flowers are so rare they're scarcely available anywhere. There are ancient, time- and labour-intensive methods of making them that have developed over centuries in countries such as India but they are rarely economically viable these days. If you do perchance find such an oil, it will be *very* expensive.

All in all, if you want to know for sure what's in your botanical extract, just as with food, you'll need to obtain it from someone you know and trust and whose process is transparent . . . or you can make it yourself.



Your brilliant nose

We all know about the great noses of perfume houses. Those revered masters aside, there are enormous differences in skill among ordinary mortals when it comes to interpreting and working with scent and, by extension, flavour.

Just as people with ability in the visual arts see things the rest of us don't and interpret what they see in exciting ways, so those with exceptional olfactory skills perceive and appreciate the world's taste- and smell-scapes with a sharpness, depth and sense of wonder that eludes others.

You might be one of those olfactory talents. Or maybe, like most people, you weren't born with a particularly extraordinary nose. Don't worry. As in many areas of human endeavour, hard work and practice count for a lot, too.

Developing your skills

Never underestimate the importance of smell. Take away the ability to smell and most people are grief-stricken. Some who lose their sense of smell can fall into depression. Anosmia — having no sense of smell — is occasionally brought on by a sinus infection but can also be a side-effect of some drugs; for example, certain oral antifungal medicines. It may also result from serious head injury. Fortunately, anosmia is usually temporary.

It's actually possible to improve your ability so that you smell with increasing sensitivity. Perfumers talk about a scent memory and say that it's a key skill to develop. It's not about getting better at smelling, but at recalling and *thinking about* what you smell.

There are scent-memory exercises you can do — like olfactory isometrics. See below. They can easily be incorporated into your daily life, and over time, they'll improve the way your brain comprehends fragrance.

Scent-memory exercises

Do these as often as you like, with as many repeats as you like, and in any order or combination. If you do them regularly you'll notice your olfactory skills improving.

EXERCISE 1

Wherever you are, become deliberately aware of the shifting smell-scape around you. Tune your nose into your surroundings. How many different smells can you discern? What do you think they are?

EXERCISE 2

Imagine a food, plant, place, person, item of clothing, or any other item, and try to recall its smell in 'your mind's nose'. Think hard to remember it as vividly as you can.

EXERCISE 3

See how many different smells you know that you can clearly imagine. Start a mental list. Notice how you can conjure some smells quite clearly, while others you can only bring up a vague impression of.

EXERCISE 4

Notice how when you try to imagine a smell, you breathe in, as if sniffing something. Try imagining the same smell without breathing. Notice how much harder it is. A related challenge is to try imagining certain smells in your mind, when there are other strong smells around that you can't help breathing in.

EXERCISE 5

Sniff something, then move it right away from your nose and try to remember the smell as clearly as possible. Repeat as many times as you like. Later in the day, after you haven't smelled that thing for a while, try to remember it again.

EXERCISE 6

Try to imagine how two scents that you know well might smell if combined. If you can do that, try imagining three scents combined with each other. This is really hard for lots of people! The tendency is to run through them in your mind very quickly one after the other, rather than imagine them all at once.



Your sniff rhythm

Did you know you have your own unique sniff rhythm? Researchers have noticed that when people sniff at something, they tend to do it the same way every time. Each person has their own pattern of long and short, deep and shallow sniffs that they consistently use when deliberately trying to smell something.

Trying to discern your own sniff rhythm is not always easy because as soon as you start thinking about it you do it differently. It's easier to test it out on friends, especially if you don't reveal to them exactly what you're testing.

Interior and exterior smelling

There are two ways we smell — we sniff from the outside up through our nostrils, and we smell from the inside of our mouths, as the aromas of what we're eating or drinking rise up through the back of our nose and are exhaled. In other words, we sniff external smells by inhaling, and internal smells by exhaling.

Have you noticed how, when you have a cold and can't smell or taste much, you can sometimes intensify the aromas of food just enough to detect them by exhaling through your nose very hard? Next time you have a cold, give it a go.

As most people know from school science experiments, what we usually refer to as taste or flavour is a mix of the sweet, salt, sour, bitter and umami sensations our tastebuds detect, along with the rich variety of aromas that rise up through our olfactory cavity.

Studies have shown that our brains perceive the same scent molecules slightly differently depending on whether they reach it by interior or exterior sniffing. Nonetheless, the art of cooking and the art of perfumery are closely linked and people who are skilled at combining flavours are often just as good at perfumery and vice versa.



A note about notes

The word 'note' is used in two different ways to describe perfume. A note is a single scent that your nose detects. Most plant extracts contain many notes. For example, a scented pelargonium may contain a complex of rose, lemon and musk notes.

The word is also used to group particular scents together, according to their role in a complex perfume, when each will be described as a top note, middle note or base note. A perfume often has several top, middle and base notes. Here's how they work:

- ➲ Top notes are the flyaway parts of a perfume. Their molecules are the most volatile. They hit your nose first and give lift and sparkle to a perfume, contributing strongly to first impressions. They vanish fast, leaving the middle and base notes to shine. Citrus peel extracts are among the most common top notes in artisan natural perfumery.
- ➲ Middle notes are made up of less volatile molecules that take longer to evaporate after the perfume is applied. Many floral extracts provide middle notes.

- Base notes are the least volatile parts of a perfume. They create the lingering scent that you can still smell hours later. They can also act as fixatives, clutching onto parts of top and middle notes so that they, too, last longer.



GETTING STARTED

Here are four age-old ways to extract plant fragrances that can be achieved at home — you won't need elaborate equipment. There's also advice on how to mix extracts together to make creative, fragrant blends.



ALCOHOL TINCTURES

You can use either a pure perfumer's alcohol, or a low-odour drinking alcohol like vodka. You will also need some sterilised jars and a fine sieve, clean muslin or coffee filter papers to make a tincture.

fragrant foraged treasures
alcohol

Carefully pick over the foraged plants to remove foreign material.
Cram your wild botanical ingredients into a sterilised jar and pour in
enough alcohol to cover them.
Seal the jar and leave it covered in a dark place to infuse for 24 hours
or more.

Check the scent often to gauge how the extraction is changing —
different scent compounds take different lengths of time to extract.
You may find you prefer the scent compounds that are extracted in
the first few hours or days.

When your first infusion is complete, strain the alcohol into a new jar
through several layers of muslin, or through a coffee filter to ensure
all bits of plant material are removed.

Sometimes one infusion gives a strong-enough tincture, but with
most ingredients you need to do several rounds of infusion.

If your tincture is not strong enough yet, recharge the alcohol with
fresh plant material and leave for another 24 hours or more and
strain. Repeat this process until your tincture is as strong as you want
it. Don't be alarmed if you have to do 10 or more recharges to get a
good, strong fragrance.

Decant the tincture into sterilised bottles, seal and store in a cool,
dark place.

Variations

Dried kawakawa peppers or hard, green, unripe kawakawa fruit; fragrant broom flowers; pine, spruce and fir bark, resin, needles and cones; rose petals; lavender; rosemary; scented pelargonium leaves, stems and flowers; wild jasmine; parsley; New Zealand celery; fennel leaves, flowers and seeds; mānuka leaves; and all kinds of citrus flowers and leaves are worth trying.

Tips

- ☞ Don't despair if you can't gather enough of a plant to recharge the tincture enough times for a strong fragrance. A weak tincture can be frozen and stored for up to a year, until you have a new supply of the plant material. Alternatively, a weak tincture can be made into an aftershave; see recipe, page 279.
- ☞ You could also continue the infusion with a different, complementary ingredient. Until you've developed an understanding of what goes with what, it's best to experiment with just a small amount of the tincture to make sure the scents you're working with combine well. You don't want them to clash with each other or turn the tincture 'muddy'.
- ☞ If using flowers, make sure you've removed as much greenery as possible, including sepals, stems, etc. You want only the scent of the petals, unless it's a flower like fennel with aromatic greenery, too.
- ☞ Flowers and leaves are generally tinctured for 24 hours or less, because as the plant material quickly degrades the tincture may begin to absorb some off notes. Drier things, like conifer cones and dried kawakawa fruit, can be tinctured for a week or more and the tincture will get stronger and stronger. Before tincturing, some perfumers leave their aromatic plants in a dry place for a few hours to wilt and reduce their water content.
- ☞ Try pouring off some of the tincture at intervals and keeping it, to compare and contrast the tincture's scent over hours or days. You may find that although you liked a particular extraction after one day, it was even better after four days. Equally, it may be worse after seven days, and only by experimenting will you know how to time different extractions to get them as you like them.

Blending with tinctures

- ☞ Tinctures made with drinking alcohol, like vodka which is generally 50 percent or more water, can only be mixed with other tinctures

made from either drinking alcohol or pure perfumers alcohol, glycerine extractions or hydrosols — fragrant waters.

- Tinctures made with perfumer's alcohol are more versatile. Mix them sparingly, little by little, into a fragrant oil or pomade. Add essential oils, absolutes or carbon dioxide extracts to them sparingly, drop by drop — they can easily overpower a tincture.
- Alternatively, dilute essential oils, absolutes and carbon dioxide extracts in alcohol at a rate of 5–10 percent before adding to a tincture so it's easier to control the effect. Even once they're diluted, only add them drop by drop and mix and check between each addition.
- Once you have mixed a pure alcohol tincture with any essential oils, absolutes or carbon dioxide extracts, you cannot mix it with a glycerine extraction or a drinking alcohol tincture.



GLYCERINE EXTRACTIONS

Glycerine works by sucking the fragrant juices from plant material. It's important to use only the freshest plant material for glycerine extraction.

fragrant foraged treasures
glycerine

Carefully pick over the foraged plant material to remove
foreign material.

Cram your wild botanical ingredients into a sterilised jar and pour
in a small amount of glycerine — you don't need to cover the
plant material.

Use something like a chopstick to stir things up, making sure all the plant material is thoroughly coated with glycerine. Add a little more glycerine if there doesn't seem to be quite enough — the plant material needs to be well coated, not swimming. Over the next 24 hours or so the glycerine will suck the aromatic water from the plants. You don't have to be quite as scrupulous about frequent changing of plant material as you do with alcohol tinctures — glycerine is such a good preservative.

The glycerine will grow more watery. The plants will relax a bit and the liquid level will rise.

After 24 hours or more strain the glycerine through a sieve into a clean jar and add fresh plant material, making sure it's thoroughly coated with glycerine. Leave for another 24 hours or more, then strain again.

Repeat this process until your extract is as watery but strong-smelling. Strain it really well through several layers of muslin or a coffee filter to remove stray plant material.

Decant the extraction into sterilised bottles, seal and store in a cool, dark place.

Variations

Unripe fresh kawakawa fruit or leaves; pine, spruce or fir needles; rose petals; lavender flowers; rosemary leaves and flowers; fresh New Zealand mint; scented pelargonium leaves and flowers; jasmine; fennel leaves, flowers and seeds; mānuka leaves; and all kinds of citrus flowers and leaves give a pleasing fragrance.

Blending with glycerine extractions

- ➲ Glycerine extractions will mix with pure alcohol tinctures, vodka tinctures, hydrosols and other glycerine extractions.
- ➲ Glycerine extractions won't mix with oils, fats, butters, essential oils, absolutes or carbon dioxide extracts. However, if you dilute any of these in pure perfumer's alcohol, first at 5–10 percent and add them carefully and sparingly, drop by drop, you can sometimes coax a little to mix with the glycerine, although they may give your blend a cloudy look. Don't experiment with this unless you're happy to risk failure. Mix and check the fragrance after each addition.



POMADES

A pomade is produced using the classic French perfumery technique of enfleurage. It is essentially a fragrance-saturated fat — fats love to absorb smell. You will need an enfleurage 'frame' of some kind. It can be quite makeshift. See page 266.

an odourless or pleasant-smelling solid oil, fat
or body butter
heavily scented flowers or leaves

Smear a thin layer of solid oil, fat or body butter — roughly 5 mm thick — across the surfaces of your frame (or makeshift frame) that will face each other.

Arrange your heavily aromatic material in a layer over the fat on the bottom half of the frame.

Don't worry too much if you have some greenery still on the flowers — it can be good to retain the green bits that hold the flowers together so you don't have such a fiddly time removing them all from the fat when the enfleurage is complete.

Close the frame and secure the top and bottom together. If they don't fit together, firmly wrap elastic or a sheet of plastic food wrap around.

Leave in a cool place for 24 hours.

Open the frame and remove the flowers. Try not to leave any little bits, as they will rot and go mouldy.

Repeat the process again and again, changing the flowers every 24 hours, until you have fat that smells as strong as you want. To test it, take a little out with each recharge and try it on your skin to check for odour strength and longevity.

Once you're happy with your pomade, scoop it out into a small jar or other airtight container, and keep in a cool place.

If it's very strong, you can use it for perfume on its own or blended. See tips for 'Blending with pomades', page 266. If it's subtler, it makes a great massage or body butter.

Your enfleurage frame

Traditionally, enfleurage uses wooden-framed glass sheets stacked on top of each other. Real enfleurage frames are just about impossible to come by, but if you can make one or persuade someone else to make one for you that would be ideal. Otherwise, a matching pair of shallow, transparent oven dishes will make a good substitute. They need to fit together in an airtight-ish way with enough room between them for the fat and plant material. Even two plates, saucers or shallow bowls that can be held together will do for small quantities. If they're small enough containers you may even be able to use a sturdy rubber band to secure them together. They need to be made of a non-reactive material.

Variations

- ➲ Traditionally, odourless lard is used, but that's no good if you're vegetarian or want to give your pomade to vegetarian friends. I've also found that it's hard to find lard in New Zealand that's odourless enough.
- ➲ Mango butter and virgin coconut oil are my favorites for making pomades.
- ➲ Some people like shea butter and cocoa butter, but they're very hard and it's best to melt them and mix a little of another butter or oil in to soften them a bit before beginning the enfleurage.
- ➲ Fragrant broom flowers, tī kōuka flowers, very strong-smelling roses, lavender flowers and leaves, rosemary flowers and branches, jasmine, fennel flowers, scented pelargonium flowers and leaves, and all kinds of citrus flowers are good for enfleurage.

Tips

- ➲ As with a tincture, you may need to do 10 or more recharges to get a strong-enough fragrance. Perfumes handcrafted from scratch take time and care.
- ➲ If you don't have enough flowers to do a change at any time, you can store your pomade in the fridge, without flowers sitting in it, while you wait for a new supply.

Blending with pomades

- ➲ Pomades will mix with other pomades and infused oils. They also blend with essential oils, absolutes and carbon dioxide extracts. Those fragrances can overpower. However, if you first dilute an essential oil in a vegetable oil at 5-10 percent and add it carefully and sparingly, drop by drop, you should

be able to control the balance of scents. Mix and check the fragrance after each addition.

- Pure alcohol tinctures can also be mixed carefully and gradually into some pomades.



INFUSED OILS

To make an infused oil for use in perfumery or cosmetics, use the same method as for making a culinary infused oil, but use very fragrant aromatics. Any odourless vegetable oil will work. If you don't care so much about a neutral odour but want something that is beautiful on the skin, good quality extra-virgin olive oil is perfect.

heavily scented foraged treasures
oil

Wash foraged treasures and pick them over to
remove foreign material.

Leave them flat in a dry place for a few hours to wilt and reduce their
water content.

Crush them slightly, or cut or tear them into pieces.

Cram them into a jar or bottle, and pour oil over them.

Be scrupulous about filling the bottle as near to the top as you can, to
reduce the amount of oxygen that will be sealed inside the container
when the lid is on.

Make sure no plant material is sticking above the surface.

Poke it down if it is.

Place the infusing oil, tightly covered, in a cool, dark place. Keep an
occasional eye on it to make sure no plant matter has bobbed above
the surface.

Infuse for 1–3 days, then strain through muslin, very gently pressing
the plant material to get as much of the oil out of it as possible
without causing it to disintegrate.

If you'd like a stronger infusion, recharge with a new batch
of plant material for another 1–3 days. Repeat this as many times as
you like, until the infusion is as strongly aromatic
as you like.

When you're happy with your infused oil, strain it well, remembering bits left in the oil may encourage mould.

Decant it into a sterilised bottle and store in the fridge.

To help it keep longer, let it stand for a few days, then decant it again, leaving behind any sediment that has settled.

Variations

- Jojoba oil and fractionated coconut oil are commonly used in artisan perfumery and cosmetics because they are close to odourless and have an extremely long shelf life compared to many other oils. Jojoba oil is particularly kind to the skin.
- Good olive oils smell divine in their own right, and some have almost floral notes. Perhaps it's my imagination but I'm sure I can detect the olive family relationship to jasmine in the bouquet of some local olive oils, so they blend well with jasmine and rose.
- Unripe kawakawa fruit, either fresh or dried; fragrant broom flowers; pine, spruce and fir bark, resin, needles, tips and cones; rose petals; lavender; rosemary; dried New Zealand mint; scented pelargonium leaves and flowers; wild jasmine; fennel leaves, flowers and seeds; and mānuka leaves are all sufficiently aromatic to infuse oils with.

Blending with infused oils

- Infused oils can be mixed with other infused oils and pomades.
- They also blend with essential oils, absolutes and carbon dioxide extracts, although those fragrances can overpower. However, if you first dilute these in a vegetable oil at 5–10 percent and add them carefully and sparingly, drop by drop, you should be able to control the balance of scents. Mix and check the fragrance after each addition.
- Pure alcohol will also mix with fractionated coconut oil.



The language of perfumery

Perfumery has a language of its own

Sillage is a perfume or fragrant ingredient's sphere of influence — it's a measure of the fragrance cloud around it. For example, a scent that wafts around and fills a room

has strong sillage and one that hugs your skin and can't be smelt by anyone unless they are very close to you has low sillage.

A scent with vanilla-ish notes is said to be balsamic.

Perfumes using or reminiscent of food fragrances are called gourmand perfumes.

Wild perfume formulas

A rich, satisfying perfume generally contains top, middle and base notes. Much of the perfumer's art is in the blending, although a perfumer does have to know each individual ingredient intimately in order to make effective blends.

You can wear or gift a single fragrant extract that you love, or blend extracts to create something more complex. Start by blending just two or three ingredients. Just like when you mix lots of paint colours, it's easy for fragrance blends to become muddied.

You'll be able to experiment more easily with scent combinations if you make extracts of single plants and try blending them in different combinations in very small quantities. However, you can also make blending part of the extraction process. This can be fun and simple. Try the recipes below, using store-cupboard staples plus some wild foraged plants. Use them as inspiration for your own formulas.

Just as wine changes and mellows over time, so do perfume blends. You might want to start using some of your blend straightaway, but you can also seal some up and store it for a few weeks or months, even years, to see how it changes over time.



SIMPLE BALSAMIC TINCTURED PERFUME

This two-stage tincture creates a perfume with a base note (vanilla), a middle note (rose or jasmine) and a top note (peppercorns).

1 vanilla bean pod sliced into several pieces
about 20 black or pink peppercorns or a mix of coloured peppercorns
1/2 cup vodka
rose petals and/or jasmine flowers

Put the vanilla bean pod and peppercorns into a jar.
Add vodka, making sure the vanilla bean pod and peppercorns
are covered.
Leave to infuse for a week.
Strain out the vanilla bean pod and peppercorns.
Put the petals or flowers into a jar and pour the
vanilla-peppercorn infusion over them.
Strain and recharge the tincture with new flowers every
24 hours, until you're happy with it.
Decant into a nice bottle, give it a better name, and label it!



SIMPLE KAWAKAWA PERFUME

½ vanilla bean pod, sliced into several pieces
3 whole cloves
a handful of dried kawakawa peppercorns (see page 108)
½ cup vodka
fresh ginger

Put vanilla bean pod, cloves and kawakawa peppercorns into a jar.
Pour vodka over to cover well.
After three days, strain out vanilla, cloves and kawakawa.
Put a few thin slices of fresh ginger into another jar and pour tincture
over the ginger.
Let infuse for another 24 hours or so.
Decant into a nice bottle and add a label.

Variations

- ✿ Kawakawa perfume works well with the scent of roses. Put some heavily scented rose petals into a clean jar and pour the kawakawa perfume in, making sure the rose petals are covered. Leave for 24 hours and repeat with fresh rose petals several times until you are happy with the perfume.
- ✿ Instead of rose petals, you can add rosewater to the kawakawa perfume just before decanting. (See mock rosewater recipe, page 123.)



SIMPLE BALSAMIC POMADE

Don't wear this pomade on any part of your skin that is likely to be exposed to the sun.

See the warning on page 272.

1/4 cup mango butter or extra virgin coconut oil

2 vanilla bean pods

heavily scented flowers

1 lemon or other citrus fruit

Scrape out the seeds from vanilla bean pods and stir them thoroughly through the mango butter or coconut oil.

Use the enfleurage technique — see 'Pomades' on page 265 — to infuse the mango butter or extra virgin coconut oil with the fragrance of your chosen flowers.

When you're happy with the strength of the pomade, finely grate

1/4 teaspoon citrus zest and stir through the pomade.

Keep in a little jar and use as a fragrance or body balm.

Variations

• Jasmine, jonquils, fragrant broom, daphne, ū and citrus flowers will all work in this simple pomade.



JAFTELIER

This is my homage to Mandy Aftel of Aftelier Perfumes whose jaffa-jasmine perfume 'Chocolat' begins with an infusion of cocoa and vanilla. Several different jasmine absolutes are added, then it's topped off with blood-orange essential oil.

1 vanilla bean pod, sliced into several pieces

2 teaspoons cocoa nibs or good-quality roasted cacao beans

1/2 cup vodka

jasmine flowers

1 orange

Put vanilla bean pod and cocoa nibs or cacao beans into a jar.
Pour vodka over, making sure the cocoa nibs or cacao beans
are covered.

After three days, strain out vanilla and cocoa nibs.

Put the flowers into another jar and pour the vanilla-cocoa infusion
over them.

Let infuse for 24 hours.

Strain and recharge the tincture with new flowers every 24 hours or
so until you're happy with it.

Finally, add thin peel from the orange (use a potato peeler) and let
infuse for 24 hours.

Decant into a nice bottle and attach a label.

A warning about citrus

From lime and tangerine to grapefruit, citrus scents are a staple of natural perfumery. Citrus provides fresh, gorgeous top notes. You can use ripe or unripe fruits. Tincture the peels, infuse them in oil or grate them finely into a pomade, but do be careful.

The oils in citrus skins contain phototoxins, which can permanently discolour your skin when exposed to sunlight. Only use citrus zest in something you're sure will be applied to a part of your body that stays out of the sun.

Alternatively, use a distilled citrus oil, as the distillation process gets rid of the phototoxins. Just make sure that if you are concerned about phototoxicity you really are buying a distilled citrus oil, not a cold-pressed oil.

If you have a still, citrus peel is one of the most rewarding items to distill, as it has a high yield compared to many other plants.

Using fixatives to make your perfumes last longer

A fixative is just that — it fixes a perfume *in situ*, so its fragrance lasts longer on your skin or hair. Glycerine makes a great fixative for water-based or alcohol-based perfumes, giving them a slightly silkier texture as well, and you only need a few drops.

Many base-note fragrant extracts are also fixatives for middle and top notes. Here are a few of the most common.

VANILLA

This is a time-honoured base note, and the recipes above show two ways it can be used in your own perfumes. You can also add bought or homemade pure vanilla essence to any water- or alcohol-based perfume. See vanilla essence recipe, page 26.

BENZOIN RESIN

Buy powdered benzoin resin from cosmetics or incense suppliers, then dissolve it in pure perfumer's alcohol. It's a divine balsamic base note, and in my opinion is even better when mixed with a little vanilla. You could add it to any of the recipes in this chapter. Use your alcohol-dissolved benzoin in alcohol-based perfumes, or carefully mix a little into a pomade or oil.

KAURI GUM

Dissolved in alcohol, kauri gum has a complex resinous fragrance. Treat it like benzoin resin. Small pieces of kauri gum can be bought online or in souvenir shops, and this is a uniquely New Zealand fixative.

LABDANUM RESIN

This sticky resin looks like Marmite. Its fragrance is hard to describe but it's enough to say it's intoxicating. Work with it as you'd work with benzoin resin, although the consistency is different.

Essential oils

There are many readily available essential oils that make good strong fixatives. Natural perfumers often work with vetiver, frankincense, myrrh, patchouli and sandalwood.

The sandalwood species traditionally used in perfumery, *Santalum album*, is now endangered. However, there are ethical sources of other *Santalum* species

and each of those species has its own charms. The recent development of the Australian sandalwood industry based around *S. spicatum* is particularly exciting.

Essential oil base notes can be overpowering, so be very sparing with them. Dilute them to 5–10 percent in alcohol or vegetable oil before attempting to add them. Then use a dropper and add one drop at a time to your hand-made wild perfume blends, mixing and testing the fragrance on your skin or a strip of blotting paper after every drop.

Animal magic

Many perfumes have a primal touch of dirt. Animal secretions, like musk from the musk deer, civet from a small cat-like mammal, and castoreum from beavers, have been highly prized as perfumery ingredients for centuries.

Although these intense animal ingredients can smell repulsive undiluted, when watered right down and blended with other fragrances they add a mysterious, sexy allure. Many are also unparalleled as fixatives. Musk can retain its scent for centuries!

While there is often cruelty involved in harvesting these ingredients, there are a few substances from animals, or containing animalic notes, that are perfect for the ethical wild perfumer.

AMBERGRIS

An excretion from whales, ambergris must surely be the ultimate foragers' find — a fist-sized lump is worth thousands of dollars. It is found on New Zealand beaches, although even here it's extremely rare.

If you want to experience some without going on a wild goose chase, there are reputable dealers in New Zealand. It is expensive, but a little goes a long way. You can buy ambergris tinctures, or grind a tiny amount and tincture and age it in alcohol yourself. It is often diluted in alcohol at around 3 percent.

Younger ambergris is grey and has oceanic notes. Aged ambergris, which has floated on the waves and been bleached in the sun for decades or even centuries, is almost white and smells sweet.

In small quantities, ambergris is a superb fixative, amplifying the other scents it's added to. In larger quantities it has an entrancing smell in its own right that is exotic, yet strangely and compellingly familiar and comforting. I can almost guarantee that the first time you smell it, it won't be what you're expecting.



AMBRETTE SEEDS

You can sometimes buy ambrette seed extract from suppliers of essential oils. It's both harsh and sickly unless you dilute it very, very heavily. Only then does it make an excellent botanical musk substitute. It has fixative qualities and adds a seductive, rounded softness to blends.

BLACKCURRANT BUDS

These are leaf buds, not flowerbuds — they are little flame-shaped bundles of possibility that grow out from the branches of blackcurrant bushes. They can be made into an absolute that is a valued ingredient in perfumery, its fragrance a marriage of fruitiness and tomcat.

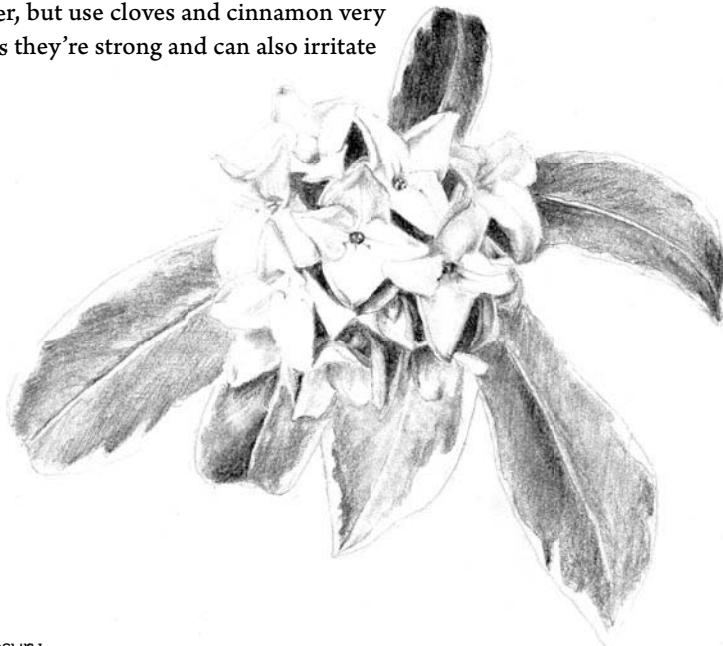
You can also gather the buds from a bush yourself, snapping them off to tincture in alcohol or infuse in oil. I'm not sure about their fixative qualities when processed this way, but that tomcat scent has a strong and stealthy sillage!

The wide world of wild ingredients

There are many plants you'll find growing in your neighbourhood or further afield that don't have main entries in this book but that make wonderful perfume ingredients. Here are just a few.

- ➲ Bay tree — the buds and dried or fresh leaves are beautiful tinctured.
- ➲ Daphne (pictured overleaf, bottom) — the delicious-smelling flowers make one of the best homegrown pomades ever; see 'Divine daphne pomade', page 276.
- ➲ Jonquils (pictured overleaf, top) — the flowers are marvellous for enfleurage. When they bloom in spring make the most of it, because they don't last long and you'll want to make sure you can do several recharges before the flowers die away. They are somewhat toxic so you may want to use the same method as for daphne.

- ➲ Lilac trees — these are in the same family as olives and jasmine, but they don't give up their scent to extraction nearly as readily as jasmine. Nonetheless, if you're persistent you can make a delicately fragrant pomade or infused oil. Use the most fragrant lilacs you can find, and plan on recharging your pomade or oil as many times as possible.
- ➲ Ornamental conifers — some cypress trees and other ornamental conifers have marvellous smelling leaves and cones, which tincture well in alcohol.
- ➲ Herbs — thyme and various other herbs are used in perfumery. Coriander is a particularly popular ingredient. You can extract the scent from herbs using any of the four methods in this section.
- ➲ Spices — many of the spices from the collection in your kitchen are widely used in perfumery, including clove, cinnamon, ginger and pink and black pepper, but use cloves and cinnamon very sparingly, as they're strong and can also irritate the skin.



A word about chamomile

Chamomile essential oil is used sometimes in perfumery, and I've smelt some beautiful samples that have a fruity, apple-like opening, then dry down to something richer and deeper. However, I've never had any luck extracting a nice smell from chamomile myself. My tinctures always have unpleasant off notes, and the one time I tried actually distilling it, the resulting hydrosol had an unforgettable vomit note. However, I wish you all the best if you want to give it a go!



Divine daphne pomade

If you have daphne in your own garden or neighbourhood, or know someone who does, make the most of it! Daphne is a late-winter treat, filling the chilly air with its strong perfume.

It has toxic sap running through it, so it's not suitable for tincturing or infusing in oil; however, it's one of the best plants around to make a pomade from.

Instead of laying the daphne flowers directly on the fat, because of their toxicity keep them slightly suspended above the fat in muslin.

I simply use a small, lidded casserole dish, and a square of muslin that's bigger than the dish. Once I've smeared the fat (generally mango butter) on the bottom and up the sides of the casserole dish, I place the muslin over the top with the edges draped over the sides of the dish. Then I place the flowers onto the muslin, and put the lid of the casserole dish on so that it holds the muslin in place.

I pull the edges of muslin tight so that the muslin becomes more taut inside and holds the flowers well above the fat. Sometimes I have fat smeared on the underside of the lid as well, if it's slightly curved and won't touch the flowers.

Change the flowers every 1-2 days. After about 10 changes the smell is strong and impressive! But keep going to make it even stronger if you have the flowers, the time and the patience.

Daphne blooms in the winter when the flowers are often damp from rain. Make sure flowers are fully dry before placing them in the pomade to avoid having trouble getting rid of the water from the surface of the fat, which may encourage mould.

WILD BODYCARE

Factory-made cosmetics have been around for just a fraction of the time humans have existed. We've been using cultivated and wild plants to try and improve the health as well as the appearance of our bodies for so much longer. Here are a few recipes using readily forageable ingredients.

‘You don’t need the cosmetic industry. The cosmetic industry needs you. Your face supports an industry worth billions.’

ELIZABETH FRANCKE, *MAKE YOUR OWN COSMETICS AND FRAGRANCES*,
REVISED NEW ZEALAND EDITION (HEINEMANN REED, 1988)

FORAGED-MALLOW HAIR CONDITIONER

To make this, you must have Malva species mallow, not Lavatera.

freshly foraged herbs
1-2 cups mallow leaves

Use boiling water to make 1-2 cups of strong tisane with the herb
or herbs.

Strain the plants from the infusion.

Set the infusion aside until cool or at least lukewarm.

Roughly chop the mallow leaves and pour the infusion over them.

Stir well. You can get your hands in to squeeze
and squish a bit if you want.

Strain out the mallow leaves, pressing to get every bit
of mucilage out. The infusion will now be thick and silky.

Use it as a conditioning rinse.

It will keep in the fridge for a couple of days
or in the freezer for several months.

Variations

- For the foraged herbs, rosemary sprigs, nettle leaves, cleavers leaves and stems, chamomile flowers, lavender flowers, rose petals and calendula flowers are good used individually or in a combination.

Tips for selecting herbs

- Nettle, rosemary and cleavers have been known as hair-conditioning and scalp-care herbs par excellence for a long time.
- Rosemary is said to add special gloss to dark hair.
- Marigold is supposed to add highlights to medium-auburn hair.
- Chamomile is said to lighten blonde hair.
- Lavender and rose are all-round good herbs that people use everywhere, including for hair-care.



WILD AFTERSHAVE

You will need an alcohol tincture made with vodka and wild herbs to make this. After that, it couldn't be simpler. And it will keep for several months.

½ cup wild vodka tincture (see recipe, page 26)

½ cup distilled water

1 teaspoon glycerine

Mix ingredients together well.

Decant into a sterilised spray bottle.

Spray on after shaving.

Natural powder deodorants

Baking soda is often used as a minimally processed, odourless deodorant. You can add fragrant herbs to it as well. On very hot days or when activity is extra vigorous it may not do the job as effectively as some store-bought products, but for regular wear it works well.



LAVENDER DEODORANT

½ cup baking soda
2 sprigs of fresh lavender

Place baking soda and lavender in a sealed jar for 2–3 days, shaking every now and then.

Remove lavender — the powder should be infused with its scent.

Store in an airtight container.



FRAGRANT WILD DEODORANT

You will need well-dried fragrant herbs that are gentle on the skin, such as scented pelargonium, elderflower, lavender, rose petals, jasmine and New Zealand mint. Baking soda absorbs moisture from fresh herbs as well as their scent, and it can form clumps, so using well-dried herbs is important here.

½ cup baking soda
crisp, well-dried, fragrant herbs

Crumble or pound the herbs into a powder and mix with baking soda.

Variations

- ➲ To make a fragrant baking-soda deodorant that will last longer on your skin than a powder, mix the baking soda to a paste with a pomade; see page 265. Mix in as much baking soda as the mix will take.
- ➲ Some people find their skin reacts to baking powder and use another antimicrobial powder instead — usually fuller's earth.

Tips for using natural powder deodorants

- ➲ Apply to underarms with a cottonwool ball, or sew a stuffed powder puff.
- ➲ Carry a small container around with you and reapply when necessary.

Checking for reactions

- ☞ If you have sensitive skin, try the baking soda without adding any fragrance first. If you don't react to it, add your fragrant herbs. If your skin reacts, drop the herbs or try different ones.

Deodorising foot powder

- ☞ Use the same recipe as for fragrant wild deodorant, opposite.
- ☞ Use herbs with strong antimicrobial actions such as kawakawa and rosemary. Sprinkle the powder into shoes every day for a week, tipping out the old powder and adding new.

Infused face wash

- ☞ Many wild herbs have a history of use in skin-care products. Take your pick! Simply make a strong tisane of one or more of the herbs below and use as a face wash to cleanse, tone and make the most of its mild antimicrobial effects.
- ☞ Some of these washes may help slightly with acne.
- ☞ They will keep in the fridge for a couple of days.
- ☞ Rose petals, cleavers leaves and stems, chickweed leaves and stems, lavender flowers, calendula flowers, nettle leaves, jasmine flowers, chamomile flowers, yarrow flowers and elderflowers are all suitable.

Juiced face washes

- ☞ Make a juice from chickweed or cleavers leaves and stems by whizzing several handfuls of plant material in a food processor, then straining and squeezing the pulp through muslin. These herbs are said to be good for soothing and smoothing skin.

Glycerine moisturiser 1

- ☞ Use any rosewater or tisane and mix in equal parts with glycerine. This moisturiser keeps quite well at room temperature, but store it in the fridge if you want to be extra careful.

Glycerine moisturiser 2

- ☞ Make a glycerine extraction (see page 263) with one or two changes of fresh plant material.

☞ Rose petals, cleavers, chickweed, lavender flowers, calendula flowers, nettle leaves, jasmine flowers, chamomile flowers and yarrow flowers or a pairing from the list would all be suitable.

☞ Dilute the mixture with distilled water to around half and half.

Sugar facial scrub

☞ For a cleansing, exfoliating facial scrub, mix a sprinkling of brown sugar or caster sugar into a little glycerine moisturiser, and use straightaway as the sugar will dissolve in a short time. Rub the exfoliating scrub over your skin in a gentle circular motion, then rinse off with lukewarm water. You can then splash your face with cold water.

Chickpea-flour face and body scrub

☞ Mix 1 teaspoon of coarse chickpea flour into ½ cup of glycerine moisturiser and keep in a jar.

☞ Use on your face in the same way as the sugar scrub above. For a whole body scrub, use it in the shower.

Ground-almond face and body scrub

☞ Make in the same way as the chickpea-flour face and body scrub, but use ground almonds instead of chickpea flour.

Mallow face and body scrub

☞ Make a strong tisane as for infused face wash, see above.

☞ Chop or tear up 1 cup mallow leaves (*Malva* species) and pour the cooled infusion over the mallow. Stir until the mix is silky and mucilaginous.

☞ Strain mallow leaves out, pressing to get every last bit of mucilage into the mixture.

☞ Mix in 1 teaspoon ground almonds or chickpea flour.

☞ This will keep in the fridge for a couple of days.



OAT BATH 1

Oat baths soften and soothe skin, and are particularly good for irritable skin and rashes. Some eczema sufferers swear by them.

$\frac{1}{4}$ cup oats
a handful of fragrant foraged herbs of your choice, fresh or dried

Bundle up herbs and oats in muslin, and tie together, Christmas-pudding style.

Fix the bundle under the tap so that as the water runs through, it carries the fragrant oat milk out into the bathwater. Alternatively, swish the bundle round in a bath to release the milk.

Afterwards, you can use the bundle a bit like a wash cloth.

By the end of the bath, the bundle will be filled with fragrant porridge, so discard the contents into the compost and wash the muslin well for next time!



OAT BATH 2

$\frac{1}{2}$ cup oat flour or rolled oats ground as finely as possible in the blender
a handful of fragrant foraged herbs of your choice, fresh or dried

Mix together ingredients, sprinkle into the bath and enjoy a long soothing soak.



SEA SALT BATH

This charming recipe is quoted directly from Jeanne Rose's classic Kitchen Cosmetics (North Atlantic Books, 1978), which is still available on her website: www.jeannerose.net. With its salts and seaweed, this recipe brings the ocean to your bathtub.

equal quantities of salt, powdered dulse, baking soda and Epsom salts

Mix together, then pour a goodly quantity (at least 1 cup) in a warm bath. Soak and let the healing salts release the toxins and poisons from your skin. This bath is very relaxing and soothing.

Tips for New Zealand foragers

Dulse is a red seaweed — *Palmaria palmata*. It can be found around New Zealand shores and is sold commercially as well, but you don't have to use dulse. Almost any kind of seaweed you find will be lovely and mucilaginous and add ocean ambience to your bath. Instead of adding dried, powdered seaweed to the mix, you could go a step further and add a little fresh seaweed to the bathwater.

WILD MEDICINE

Traditional plant-based medicines are frequently researched to confirm or deny their reputed effects or ascertain what compounds are responsible for the effects. Many studies have, as a long-term goal, the extraction of those compounds and the production of new commercial medicines, but they also add to the herbalist's body of knowledge.

Herbal medicine is based on a mix of traditional knowledge and scientific research. Medical herbalists tend to use whole plants in treatments, based partly on the idea that the complex combinations of compounds found in plants may work together synergistically in beneficial ways that isolated compounds don't. In the same way, herbal-medicine traditions often have a philosophy of treating their patients holistically, aiming to get every part of the person working together well, rather than targeting and treating individual complaints.

Nonetheless, there are many simple plant-based treatments for specific complaints that are tried and true, often using freely available wild plants. Here are just a few. For more far-reaching medical issues, do see a medical professional!



FOR BLOCKED NOSES, COLDS AND BLOCKED SINUSES

A few fresh, dried or semi-dried eucalyptus leaves and some boiling water will help alleviate these conditions.

To have it at the ready, you can keep an ice-cream container or two full of dried eucalyptus leaves in your store cupboard or hang a bunch of leaves somewhere to dry.

To treat a cold, blocked nose or sinuses, put a few leaves in a heat-resistant bowl and pour boiling water over them.

Place a plate on the bowl and leave to infuse and cool slightly for no more than 5 minutes.

Sit at a table with your head lowered over the bowl and make a steam tent by draping a towel over both your head and the bowl.

Keep your face at a comfortable distance from the bowl. Inhale the steam, breathing through your nose if at all possible.

If you're treating a child who feels uncomfortable with the towel-tent over them, let them sit beside the bowl and breathe in the steam without it.

If you or your patient is sick in bed, you can simply put the bowl in a corner of the room to fill the space with vapour — in that case you can use it without first leaving it to cool.



FOR CUTS, GRAZES, BLISTERS, BURNS AND BITES

A lotion of soothing, antiseptic pia harakeke — harakeke gel — will help alleviate these conditions.

To have it at the ready, you can gather plenty and freeze it in ice-cube trays.

You will find pia harakeke, a golden gel, at the base of harakeke leaves.

To extract the gel, make cuts at the base of the leaves and use a knife or small spoon to transfer it into a container.

To apply, rub it onto the affected area, just as you would with aloe vera gel or store-bought ointments.



FOR ECZEMA, BITES AND OTHER ITCHES

A cooling compress or poultice of chickweed will help alleviate these conditions.

To have it at the ready, keep a lush patch of chickweed growing in your garden all year round or nurture one nearby in your neighbourhood. Alternatively, always keep a container of chopped chickweed in the freezer.

To make a chickweed compress, first make juice from a few handfuls of chickweed. You can do this in a juicer if you have one. Alternatively, whizz up the chickweed in a blender or food processor

with a little water, or pound it with a mortar and pestle, and strain the processed mixture through muslin. Finally, lay a piece of clean cotton on a clean towel, and pour the chickweed juice over it. Place the juice-soaked cotton on the affected area, or wrap it right around it.

To make a chickweed poultice, pound a big handful of chickweed with a mortar and pestle, spread it over the area you want to treat, and bind it on with a strip of cotton bandage or plastic food wrap, or a layer of each, beginning with the cotton bandage.



FOR ECZEMA AND OTHER DRY SKIN CONDITIONS

Chickweed-infused top-quality extra-virgin olive oil massaged into the affected area will help alleviate eczema and other dry-skin conditions.

To have it at the ready, store the infused oil in the fridge, but after seven days transfer it to the freezer.

To make an infused oil, see page 267. I pound the chickweed first with a mortar and pestle.



TO CALM NERVES AND NERVOUS INDIGESTION AND AID SLEEP

A chamomile tisane will help alleviate these conditions. However, remember that a few people find chamomile indigestible.

To have it at the ready, pick German chamomile, Roman chamomile or rayless chamomile flower heads regularly during spring and summer. The more you harvest, the more flowers the plant will produce. Dry or freeze any excess to use during autumn and winter when the main flowering period has passed.

Make a strong tisane using 1–2 teaspoons dried chamomile flowers or 2–3 teaspoons freshly picked chamomile flowers. Don't worry if

you get some green bits in, they're harmless, just not as active.

Place flowers in a cup and pour boiling water over.

Leave to steep, covered with a saucer.

Strain and drink just before bed if using as a sleep aid.



FOR TENSION HEADACHES

A hot lavender bath or shower will help alleviate tension headaches.

To have it at the ready, use lavender fresh while it's flowering and gather bunches of stems to dry.

For a lavender bath, place 2–3 handfuls of fresh or dried lavender in the centre of a piece of muslin, and tie together in a bundle.

Place in the tub as you run a hot bath.

Leave there as you sink into the bath and relax,
inhaling the calming lavender scent.

For a lavender shower, gather plenty of sprigs of lavender and tie them into two or three bunches.

Place the bunches on the shower box floor while you shower. The hot water pounding onto the lavender sends up clouds of lavender scent.



FOR TREATING WOUNDS

A poultice or compress from plantain leaves or yarrow leaves and flowers will help coagulate blood and staunch bleeding. Plantain also contains allantoin, the same substance that comfrey has been valued for, which stimulates new tissue growth.

To have them at the ready, gather yarrow early in the flowering season to dry and keep a lush supply of plantain growing in your garden or nearby, all year round.

To make a yarrow and/or plantain poultice, pound a big handful of plant material with a mortar and pestle, spread it over the wound you

want to treat, and bind it on with a strip of cotton bandage or plastic food wrap, or a layer of each, beginning with the cotton bandage.



FOR DIARRHOEA

A tisane of young blackberry leaves can help alleviate diarrhoea.

To have it at the ready, gather new blackberry leaves during spring and summer — they will be much lighter green than the older leaves and may have a reddish blush. Use them fresh, but dry some to store.

Place a few fresh, young blackberry leaves or 1–2 teaspoons dried leaves in a cup and pour boiling water over. If using them fresh, tear or cut them up a bit first.

Leave to steep for 10 minutes.

Drink slowly.

You can make a stronger treatment by decocting (boiling) the leaves in water for 5–10 minutes.

Take up to three times a day.



FOR A SORE THROAT COMING ON

A gargle or tisane of young blackberry leaves or kawakawa leaves will help alleviate a sore throat. Both leaves have antimicrobial properties. Kawakawa leaves are also anaesthetic, whereas blackberry leaves are particularly astringent, helping smooth over and soothe inflammation.

To have them at the ready, gather new blackberry leaves during spring and summer — they will be much lighter green than the older leaves and may have a reddish blush. Gather kawakawa leaves at any time of year, preferably those with the most holes in the leaves. Use them fresh or dry them to store.

Make a strong tisane with either blackberry leaves or kawakawa leaves and use as a gargle, or sip as a tisane.



FOR A FLU COMING ON

Elderberry or elderflower tisane or cordial may decrease the severity of a flu.

To have it at the ready, harvest elderflower around November. Hang-dry elderflowers in a bag to catch all the flowers that fall off. Elderflower dries quickly and easily, and can be stored for up to a year. Alternatively, freeze concentrated syrup (see recipe, page 157) in ice-cube trays, so you can get one out whenever a cup is needed.

Elderflower berries can be gathered in summer and keep well in the freezer.

To make a tisane, place 1 teaspoon dried elderflowers, 2 teaspoons fresh elderflowers or a teaspoon of elderflower berries in a cup and pour boiling water over.

Leave to infuse for 10 minutes.

Drink up to three times a day.



Quick treatments

- For toothache, chew a fresh kawakawa leaf.
- For a cold coming on, chew a fresh nasturtium leaf every so often.



Preserving rongoā

Rongoā is the Māori term for medicines that are produced from native plants in New Zealand. Use of these medicines prevented many sicknesses, and provided remedies for the sick. In traditional Māori healing, diagnosis involved a holistic approach that included mind, body and mauri — what we call spirit or life force, wairua or spirit, and tapu or natural law.

Whakapapa or genealogy was also considered. Tohunga, the medical practitioners of the Māori world, passed their knowledge down through the generations, and modern Māori healers still use many of the concepts and practices of their forebears.

...A big number of the species used for rongoā are found in the regenerating fringe of the forest. A traditional way of describing the situation is to say that the plants that heal the land are also the ones that heal the people who live on the land.

In a healthy forest the fringe is constantly renewing and extending itself, so that usually most of the species involved continue to persist in the landscape ...

But a quick look at the forest fringe in most parts of the country these days will show a very different scenario. Where once would have been found a range of indigenous species ... one is more likely to find exotic species ...

Among the indigenous species that are lost are a number of species important for rongoā.

...Even when rongoā plants do survive in the landscape they may not be safe to harvest — they are often contaminated in some way ...

The first role of the rongoā plants is to heal the whenua, the land itself. It is easy to forget this. We are so worried about our own concerns, our needs, or sicknesses and injuries that we easily fall into the way of thinking that everything in creation is for our own personal use. We are much less important than that. In fact, as healers, our first patient is the land itself ... It is only when the land itself is well can it heal the living things that belong to the land, ourselves included.

ROB MCGOWAN, STUDENT AND TEACHER OF RONGOĀ



LOCAL COLOUR

Dyeing with foraged plants

Using foraged plants to make colours is as much of an adventure as cooking with them. The concept of *terroir* applies to dyeing fibre with wild plant material just as it does to cuisine, perfumery and medicine.

With some plants, what you see is what you get, but many plants hide colourful secrets — throw them into a dye bath with a willing fabric or fibre and see what they have to give. For example, fennel flowers share their sunny gold, flax pods give all their darkness and then some, but silver-blue eucalyptus trees hide souls of red and orange.

Never be afraid to experiment. Marigold flowers, buddleia flowers, cleavers roots, fennel leaves, rosemary leaves, comfrey leaves, blackberry leaves, dyer's chamomile, goldenrod flowers, yarrow flowers, coprosma bark, dock leaves and roots are all good to use, whether you're a beginner or more experienced.

Try different plants, and every part of each plant. Try plants in different seasons and with different mordants. Try dyeing different fibres with the same dye. Try soaking dye-plants for different lengths of time, or upping the quantity of plant material used . . . the possibilities are endless.

However, some outcomes are predictable. Natural plant dyes will always colour animal fibres — for example, silk, wool, angora, mohair and alpaca. They will sometimes colour plant fibres — for example, cotton and bamboo, but very rarely will they colour synthetic fibres; most synthetic fibres actually repel plant dyes. Your safest bet with a homemade plant-based dye is to use it on an animal fibre.

Because dyeing sometimes makes things shrink, it's a good idea to dye yarns or lengths of fabric rather than garments. Shrinking a garment is far worse than shrinking the yarn or fabric that will eventually be knitted, crocheted, woven or sewn into a garment.

Wool, angora and alpaca are especially inclined to shrink, but there are ways to minimise the risk. One of the great beauties of silk is that it doesn't shrink, although you do have to be careful not to let the dye pot get too hot, or it will weaken the fibre, which may even start to disintegrate.

Extra-thrifty dyeing

If you like to haunt second-hand shops, you can buy old, dull, unlovable garments to dye, and experiment on them. You don't have to dye the whole garment, either. You can find an old knitted or crocheted garment, unravel it, and dye the wool, ready to be remade into something new. Check for seams that look as if they can be unpicked — hand-made garments are generally easier to unravel than factory made.

Using mordants

The word mordant means 'biting' and a mordant is a chemical that 'bites' into your fibre and primes it to take on a more colourful dye. Some plant dyes really need a mordant in order to take, while others produce deep, rich colourfast results without one. There are also many plant dyes that produce quite different results depending on whether or not you use a mordant, and which mordant you use.

There are various mordants but some, like chrome, while producing beautiful results, are highly toxic and require great care when using. Being the klutz I am, and having children in the house, I don't use them. However, there are two mordants that are very safe for home use and that I happily use: alum mixed with a little cream of tartar is the safest, and copper sulphate is nearly as safe. Both are readily available from chemists and farm-supply stores.

Alum is a good general mordant, while copper sulphate adds particular depth to greens and blueish colours, although it will give interesting results with anything. Here are the instructions for using mordants to prepare fibre for dyeing.

Use 4 teaspoons of alum and 1 teaspoon of cream of tartar per 100 g of fibre.

OR use 1 teaspoon of copper sulphate per 100 g of fibre.

Mix mordant into a solution with water — enough to cover your fibre well.

Soak the fibre in the solution overnight.

Either dye the fibre as soon as it is lifted from the mordant, or dry it on the line and store it in the dark until you're ready to dye it. The mordanted fibre will store for months.

Wild plants to dye with

Here's a table of just a few commonly available wild plants, and some of the results they produce on wool that I've verified. Note that depending on the type of eucalyptus leaves used, there is an enormous range of browns, oranges and reds possible.

	Alum	Copper sulphate	No mordant
Fennel flowers	Vibrant, almost fluoro golden-yellow		Greeny gold
Eucalyptus leaves	Vibrant deep red-orange	Rich brick red	Orange
Elderberry leaves	Pale olive green	Olive green	
Flax seedpods	Almost black	Very rich dark brown	Medium brown
Dandelions	Golden yellow		
Walnut shells			Light, slightly pinky brown

Preparing harakeke-pod and walnut-shell dye

Harakeke pods and walnut shells take slightly longer than green plants to give up their colour. Pound and crush harakeke pods a little and soak them in water for three days or more. Apparently, over time they can ferment and get quite stinky, but I haven't had this happen. At any rate, don't worry if they smell — they'll still give beautiful colour.

Walnut shells need to be soaked even longer, a week or more. The water will turn black and a bit smelly but as with the harakeke pods, that's okay.

Fugitive dyes

A fugitive dye is one that washes out or fades rapidly. Berry dyes are notorious for this. This has certainly been my experience when dyeing with blackberries. Elderberries are said to be similar. They are fun if you don't want a permanent result.



PREPARE TO DYE!

Collect all the equipment and ingredients you'll need before embarking on your dyeing project. Follow these simple steps to minimise the mess and inconvenience and maximise your likelihood of success.

Decide what you want to dye,
then what you want to dye it with.

Decide whether you'll use a mordant or not.

If using a mordant, mix the mordant and soak the fibre or garment you want to dye in it, according to the instructions on page 292.

Gather enough of your chosen wild plant. The general rule is that you need about a 2-litre container full (or a bit more, to be sure) of plant material per 100 grams of fibre. Too much is better than too little.

Soak your plant material in water overnight or longer — up to three days. Break it up a little to help release its colourants into the water.

Make sure you have a long wooden spoon and a good big pot to use that you'll never want to cook food in again. A stockpot from a second-hand shop is good. Always keep your dyeing pots and your cooking pots separate.



THE ART OF DYEING

One of the delights of natural dyeing is the aromatic steam that fills the kitchen as you work. Another is the scent of the fibre when it comes out. Unlike synthetic dyes which smell, well, synthetic, an item dyed with natural plant dyes is softly fragrant. The sweet

aromas of fennel, gum and flax pods can linger for some time. Follow these simple instructions to experience the joy of dyeing.

Put your wild plant material and the water it's been soaking in into your dye pot — it needs to be large enough to hold all the fibre plus enough dyeing liquid to cover the fibre so that it has plenty of room to move. Add more water if necessary — this doesn't mean you'll get less colour. It's the ratio of fibre to plant material that counts.

Drop in the fibre or garment — you may want to put it in a net bag if there are lots of plant bits in the water. (Picking them out of the fabric or garment afterwards can be a pain.)

Very slowly and carefully bring the pot to simmering point.

If you heat it too fast, the fibre can burn
on the bottom of the pot.

Watch it like a hawk to make sure it stays simmering gently or,
ideally, just slightly below simmering point —
but definitely not boiling.

Keep it simmering or just below simmering point for
20 minutes to 1 hour. You may want to check the depth of colour in
the fibre occasionally, but don't stir.

Turn the heat off and leave everything in the pot to cool.
Gently take your garment or fibre out and rinse it in cool
or warm water until the water runs clear.



HOW TO MINIMISE THE RISK OF SHRINKAGE WHILE DYEING

The things that make fibres shrink the most are movement while wet, and sudden changes of temperature from hot to cold. Follow these simple instructions to avoid those hazards.

Stir the fibre in the dye pot as little as possible — preferably not at all. Having a very large pot with plenty of water flowing around the folds of the garment means you won't

have to stir to make sure the whole garment is getting reached by the dye evenly.

Keep a close eye on the pot to make sure it doesn't boil, but stays at a gentle simmer or just below simmering point.

Don't try to speed things up by rapidly cooling the dye pot and its contents. Leave it to cool in its own time.

Alternatively, use a solar cooker as the temperature stays low and even, see 'Solar cooking' on page 249.

I am not a weights and measures dyer. I would rather gather an armful of branches and fill the pot, be it small, medium, or large, put it on to boil with a skein of wool amongst the leaves and see what colour you get. Never be disappointed in what you get. Put it in your wool bag, and one day it will be just what you want ...

There is just a touch of magic in the colour that comes from a pot on the stove with 'goodness knows what' in it

JANET WINGFIELD, AUSTRALIAN DYER,

SPEECH TO THE FIFTH WORLD CONGRESS ON COLOURED SHEEP AND THEIR PRODUCTS, GEELONG,
1999

WILDLY ENTERTAINING

Foraging doesn't just have to be for gathering wholesome and free ingredients — it can be about free fun. Especially on foraging expeditions with children, it's good to have a few game and activity ideas up your sleeve. This section is a bit like the foragers' equivalent of a list of games for long car trips. They can be fun for grown-ups, too.



POOHSTICKS

This simple game, invented by author A. A. Milne's character Winnie the Pooh and first described in The House at Pooh Corner (Methuen & Co Ltd, 1928), is a much-loved pastime. Indeed, the bridge in Ashdown Forest, East Sussex, where Milne and his son Christopher Robin first played Poohsticks, has been renamed Poohsticks Bridge and continues to attract tourists from all over the world. Meanwhile Oxfordshire hosts an annual World Poohsticks Championships at Day's Lock on the River Thames — let the games begin.

To play correctly, all you need are two sticks and a stream with a bridge over it.

Basic rules

Each competitor chooses a stick and shows it to the others. All sticks must be recognisable, so you can tell which is whose when they're floating on the water. If they're not recognisable, find a way to mark them.

Competitors stand in a row along the bridge and face upstream.

Each competitor holds their stick out over the water. Everyone's hands must be at the same height.

Someone calls, 'Ready, steady, drop!' On 'drop' everyone drops their stick. Throwing is not allowed.

Everyone hurries to look over the downstream side of the bridge to see which stick emerges first. The person whose stick emerges first is declared the winner.

Repeat!

Variations

- When Winnie the Pooh first played the game he used fir cones. Other foraged plant material that floats can be used, including leaves and flowers, as long as the bits are big enough when floating for people to be able to identify.
- Winnie the Pooh also played it alone the first time. Play solitaire Poohsticks by holding a stick or other item in each hand and dropping them at the same time, pitting one against the other.
- If there is a stream without a bridge, set a starting point and a finishing point. Drop your stick or other item in at the starting line, and see which stick reaches the finishing line first.



CONKERS

You can't easily eat horse chestnuts, but you can play conkers with them. This simple game has been popular since at least the nineteenth century, and variations are played around the world.

Each player needs to gather a selection of chestnuts, and choose the ones they think will make the best conkers. They should be smooth, firm, uncracked and symmetrical. Here are a couple of tips:

*You can test conkers by putting them in a bowl of water —
floaters are no good.*

Choose conkers that sink to the bottom, then fit them out.

Drill a hole through the middle of each horse chestnut, using a nail, a thick needle, an awl or a small screwdriver. You can also use an electric drill — a smooth, clean hole is best to help maintain the conker's strength.

Cut a 25 cm length of string and thread it through the conker, tying a knot at one end to hold the conker on. You can also use a shoelace.

Basic rules

- Players take turns using their conker to hit someone else's conker. In each round there is a defender and an attacker.

- The defender wraps the string of their conker around their hand and lets the conker hang down, perfectly still, at whatever height the attacking player chooses.
- The attacker wraps the string of their own conker around their hand and uses the other hand to draw the conker back then release and swing the conker forward on its string to hit the defending conker.
- If the attacker misses, they get two more chances. If they hit, it's the other player's turn to attack.
- Players continue playing until one conker is destroyed — usually conkers split in two and fall to the ground.

Bonus shots

- If the strings get tangled, both players yell 'Strings!' and the one who yells first gets a bonus shot.
- If the attacker's hit makes the defender's conker swing round in a full circle on its string, the attacker gets a bonus shot.

Scoring

- Traditionally conkers is an ongoing schoolyard game that lasts an entire season, with each conker accumulating points over days, weeks or months.
- Every time a conker is victorious, it adds one point to its score, but also adds its opponent's score to its own. If it beats a new conker, it only wins one point. But if it beats a conker with, say, a score of three, it wins four points, which are added to any points it has already accumulated.
- A new conker is called a none-er meaning that it has beaten none yet.
- A conker is called a one-er if it has a score of one, a two-er with a score of two, and so on.
- Mental tallies are not always reliable — you might want to keep track of scores on paper!

Cheating

The harder your conker, the more likely it is to win. You can deviously harden your conkers by baking them or soaking them in vinegar. One-year-old conkers are well hardened too. That's why it's considered cheating to use them, and each year new conkers should be found.



WILD STAMP ART

It's easy to forage for things to use as stamps — interesting leaves of all shapes and sizes, seedpods, flowers and fruits, to name a few. Then all you need is some paint or fabric paint to print your own cards, gift wrap or, even, a border for the hem of a skirt. Here are some of my favourite ideas for making stamps.

Homemade stamps

Crabapples — cut them in half lengthwise and use the half that has the stalk. Paint both the flesh and the stalk, and stamp a cute fruit shape. You can also cut them in half around the circumference to print an interesting pattern of spots.

Fennel fronds — paint them gently, then whip the paper with them, making energetic little markings that look like mini explosions.

Unripe blackberries — when they're still hard they can be coated in paint and rolled along paper or fabric to make a dotty trail.

Kawakawa leaves — their fascinating patterns of holes make great stencils.



PLANTAIN CATAPULTS

This was a favourite activity on the school field at lunchtimes when I was a kid. First we picked a *Plantago minor* seed stalk as close to the base as possible. We made the bottom of the stem into a loop with which we lassoed the seed head. Then we took aim and jerked the loop back so it flicked off the seed head and sent it flying.



GO FIND

This is a simple game where the participants take turns to set each other the task of finding something; for example, the smallest or biggest or most deformed-looking pine cone, or a kawakawa leaf with three holes in it, and so on.

You can play it endless ways, with or without time limits and competitively or non-competitively.

You can even put together a list of things to find and turn it into a scavenger hunt — a good kids' party game.

Starting young

The very charming *Mudpies and Other Recipes* — a cook book by Marjorie Winslow with illustrations by Erik Blegvad (New York Review of Books, 1961) was re-released in 2010. It's a wild-food cookbook for small children. Recipes are arranged in courses and include mud-puddle soup, mock mud-puddle soup, see-saw salad, and dandelion souffle made from fluffy dandelion clocks. It's a great gift or a source of inspiration for outdoors make-believe play with small children.

THE LANGUAGE OF WILD FLOWERS

It's a popular misconception that the decorous and repressed Victorians used the language of flowers to communicate the deep, thunderous emotions they could not speak of. In fact, there's little evidence that they ever used flower languages in any serious way. For an insight into a more likely history, *The Language of Flowers: A History* by Beverly Seaton (University of Virginia Press, 1995) is a fascinating read.

Language-of-flowers books, including dictionaries, were part of a larger genre — the sentimental flower book — and they were often given as gifts. They provided entertaining diversions, just as they do today.

Language-of-flowers dictionaries were popular in Victorian times, and still fascinate adults and children alike with their intriguing symbology and quaint phrasing. The writers of the dictionaries based their meanings on diverse sources, from ancient mythology to the plant's botanical or common name and its physical qualities.

One of my favourites of the surviving texts is the beautifully illustrated *Language of Flowers* by Kate Greenaway (George Routledge and Sons, 1884). It includes many of the flowers and other plants that you find while out foraging in New Zealand today. It's fun to bring home an assortment to bunch into a bouquet or arrange in a vase. There's no reason not to include interesting branches, mosses, fruit and even dead leaves. When you're finished, you can create your own meanings for some of the plants that don't already have a listing.

Here's a sample of entries:

Apple	temptation
Apple blossom	preference
Bay tree	glory
Bay leaf	I change but in death
Birdsfoot trefoil	revenge
Bramble (blackberry)	lowliness, envy, remorse
Borage	bluntness
Broom	humility; neatness
Chamomile	energy in adversity
Chickweed	rendezvous





Clover, red	industry
Clover, white	think of me
Cress	stability, power
Daisy	innocence
Dandelion	rustic oracle
Daphne	painting the lily
Dead leaves	sadness
Dock	patience
Elder	zealousness
Fennel	worthy of all praise, strength
Fern	fascination
Ice plant	your looks freeze me
Forget-me-not	true love, forget me not
Fumitory	spleen — melancholy or ill temper
Fuchsia, scarlet	taste
Pelargonium, lemon	unexpected meeting
Pelargonium, nutmeg	expected meeting
Pelargonium, rose-scented	preference
Pelargonium, oak-leaved	true friendship
Grass	submission, utility
Hawkweed	quick-sightedness
Honeysuckle	generous and devoted submission
Lemon	zest
Lemon blossoms	fidelity in love
Lichen	dejection, solitude
Lupin	voraciousness, imagination
Mallow	mildness
Moss	maternal love
Mouse-eared chickweed	ingenuous simplicity
Mulberry tree, black	I shall not survive you
Nasturtium	patriotism
Nettle	slander
Orange blossoms	your purity equals your loveliness

Parsley	festivities
Pine	pity
Rosemary	remembrance
Scotch thistle	retaliation
Scots pine	elevation
Wood sorrel	joy
Walnut	intellect, stratagem
Yarrow	war

PICK 'N' NICK PICNICS

To be clear, when I say 'nick', I mean quickly cutting something off — not stealing it! Gather-your-own picnics are cheap, wholesome, sociable fun.

You need lots of little containers. Lidded jars are ideal, not only because glass is a clean, healthy food-storage material, but because jars seal easily and well and you can admire your gatherings through the translucent sides.



FORAGER'S PICNIC

By the time you spread the blanket and take a well-earned rest, you should have gathered everything you need for your picnic meal. The bare essentials for a pick 'n' nick picnic are listed below.

scissors (preferably one pair for each person, but you can share)

crackers, bread or a selection

cutlery and a cup per person

a shared thermos, or one per person, filled with hot water

a small jar for each person, filled with a favourite dip

or cream cheese

a medium-sized jar for each person, with some of your favourite salad

dressing (or an empty jar for those who don't like salad dressing)

a medium-sized jar for each person, with some of your favourite

dessert topping

Before you sit down to eat, go foraging together for wild foods.

Find herbs, flowers or fruit to put in the thermos to infuse the hot water for a refreshing tisane.

Find herbs, flowers and seeds to cut up and mix in the jar with your dip or cheese.

Find greens, herbs, flowers, fruits, berries and seeds to fill the jar that contains salad dressing. Then, with the lid on, shake it gently or roll the jar to distribute the dressing over your foraged salad.

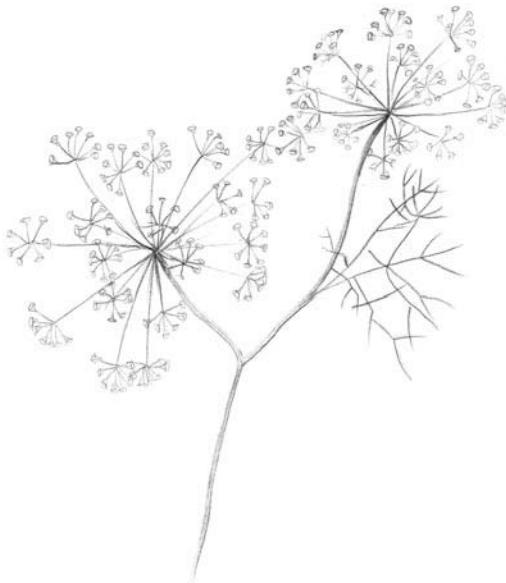
Find fruits, flowers, and berries to fill the jar that contains the dessert topping.

Variations

If you like sweetened tisanes, add honey or sugar to the thermos with the water.

Try adding non-forageables, like croutons or seeds and nuts, to the jars that contain salad dressing. Alternatively, you could take them in separate containers for people to add to their jars if they want to.

Instead of dessert topping you could use cranachan ingredients — minus the fruit. (See the cranachan recipe, page 243.)



BRINGING THE WILD TO YOUR GARDEN

Not content only to go out into the wild, you might want to invite the wild to come to you. If there's a weed you'd like to forage for, but can't find, there's no reason not to have a go at growing it yourself, from seed or baby, as long as you're sure it's not going to run rampant and take over your garden. Introduced wild-growing plants often found for sale in New Zealand include purslane, miner's lettuce, plantains, chamomiles, sweet William, heritage roses and scented pelargoniums.

US forager John Kallas likes growing weeds in his own yard — he sees fostering edible weeds in a highly ordered urban environment as a form of 'mischievousness'. He recommends two ways to have some fun:

- For a fully wild garden, start as if you're planting a domesticated garden. Turn the soil, water the patch and add fertiliser. The difference is that then you just wait for whatever wants to grow there. It makes for an interesting garden and is a good way for the non-gardener to get started with a small

patch. You can actively select those weeds you want, as well as the specimens that look lushest and healthiest, by pulling out the others.

- For a semi-wild garden, grow desirable weeds around your planted vegetables, keeping a clear space only around the bases of the vegetable plants.

Native gardens

It's not always easy to get out into the native wilds and, even if you can, many native plants need to be protected in their natural habitats and should not be gathered except in special circumstances. It's immensely rewarding growing edible, fragrant, medicinal and otherwise-useful New Zealand native plants in your own yard.

In an ideal world, native plants and ecosystems would be seen as important, with a right to exist, and preserved simply for their own sake. However, in this day and age a lot of us probably need a bit of extra encouragement to do so. Discovering first-hand all the amazing uses of native herbs, bushes and trees is just the inspiration some of us need. Then once you start growing them and showing other people what you can do with these plants, your enthusiasm is infectious.

Geoff Davidson, founder of Oratia Native Plant Nursery says:

Many of our threatened plants are very easy to grow — weeds are the problem. The rare plants are often the edible ones, for example, *Sonchus kirkii* (a rare pūhā species), *Rorippa* species (native Brassicaceae), nettles etc. Save them or lose them.

Davidson suggests, also, that if you have the time, interest and resources, you could go further and create a whole ecosystem in your backyard.

Another important piece of advice to help preserve some natives is to grow them a reasonable distance away from other related plants they might hybridise with. A specialist native plant nursery should be able to give you the growing advice you need as well as provide you with the plants. See 'New Zealand web resources' on page 313.

RESOURCES

THE FORAGER'S LIBRARY

New Zealand foraging books

Plant Dyeing, A. H. Hutchinson Hawke's Bay Art Gallery and Museum, 1941

This is a treasure if you can get hold of a secondhand copy. It is full of ideas and information about dyeing with wild plants and lichens.

Māori Food and Cookery, David Fuller, Reed, 1978

This hard-to-find book contains a wealth of information about cooking both hunted and gathered ingredients.

Wild Fare for Wilderness Foragers, Sheila Natusch, HarperCollins Publishers Ltd, 1979

Sheila Natusch, a prolific writer about New Zealand's history and natural history, produced this entertaining, anecdotal guide to the New Zealand bush and seashore's wild resources.

A Field Guide to the Native Edible Plants of New Zealand, Andrew Crowe, Collins, 1981

This classic has rarely, if ever, been out of print. It covers numerous native plants and funguses, offering historical, medicinal and culinary information, as well as identification details.

Simply Living: A Gatherer's Guide to New Zealand's Fields, Forests and Shores, Gwen Skinner, illustrations by Christine Brown, A. H. & A. W. Reed, 1981

This New Zealand foragers' classic is out of print but can be found secondhand. It contains recipes for food, drink and cosmetics.

Māori Vegetable Cooking: Traditional and Modern Methods, Murdoch Riley, Viking Seavenseas NZ Ltd, 1988

This small but dense book illustrates a rich variety of local foods available to Māori cuisine.

Māori Healing and Herbal, Murdoch Riley, Viking Seavenseas, 1988

This classic details the use of many native plants in rongoā.

Weeds Heal: A Working Herbal, Isla Burgess, Veriditas Publishing, 1998

Renowned New Zealand herbalist Isla Burgess examines the use in modern Western herbalism of thirteen common introduced weeds.

Cooking with Charles Royal, Charles Royal and Jenny Kaka Scott, Huia Publishers, 2010
In this marvellous cookbook, pioneering Māori chef Charles Royal shares accessible, contemporary recipes using some of his favourite native, wild ingredients.

Find It, Eat It: Cooking Foraged Food Gathered Around New Zealand, Michael Daly and Teresa McIntyre, New Holland Publishers Ltd, 2012

Chef Michael Daly presents an array of his own delicious recipes, each featuring one or more foraged ingredients.

Classic international foraging books

Stalking the Wild Asparagus, Euell Gibbons, Hood, Alan C. & Company, Inc., 1962

Euell Gibbons drew on a lifetime of foraging — sometimes from necessity — to write this groundbreaking book. Each chapter is a highly informative and entertaining examination of a wild plant or group of plants, focusing mostly on their uses as food. A large amount of the information is specific to the United States, but New Zealanders will nonetheless find plenty to apply locally.

Food for Free, Richard Mabey, Collins, 1972

A lot of introduced plants in New Zealand are also found in Britain, so this British book contains plenty that's of relevance to New Zealanders. It's good for culinary ideas and plant identification.

Botanical books — identifying plants

Flora of New Zealand, Volume IV: Naturalised Pteridophytes, Gymnosperms, Dicotyledons, C. J. Webb, W. R. Sykes and P. J. Garnock-Jones, Botany Division, DSIR, 1988

The Native Trees of New Zealand, J. T. Salmon, Reed Methuen Publishers Ltd, 1980

New Zealand Wild Flowers Handbook, Owen and Audrey Bishop, photographs by Nic Bishop, Hodder & Stoughton, 1994

Wildflowers of New Zealand, Geoff and Liz Brunsden, New Holland Publishers NZ Ltd, 2004

All of Andrew Crowe's work

Cookbooks full of adaptable basic principles and blueprint recipes

Ethnic Cuisine: The Flavor-principle Cookbook, Eisabeth Rozin, S. Greene Press, 1983

Simple to Spectacular: How to Take One Basic Recipe to Four Levels of Sophistication,
Jean-Georges Vongerichten and Mark Bittman, Clarkson Potter, 2000

The Improvisational Cook, Sally Schneider, William Morrow & Co, 2006

How to Cook Without Recipes, Glynn Christian, Anova, 2008

Other useful books for foragers

Materia Medica of Western Herbs for the Southern Hemisphere, Carole Fisher and Gilian Painter, Janus, 1996

This standard local herbalists' reference guide contains many herbs that grow wild in New Zealand, along with some that are cultivated but have not naturalised.

Sea Vegetable Celebration: Recipes Using Ocean Vegetables, Shep Erhart and Leslie Cerier, Book Publishing Company, 2001

This is a wonderful little book from the US containing all sorts of vegetarian recipes using seaweed.

Wild Fermentation: The Flavor, Nutrition, and Craft of Live-culture Foods, Sandor Ellix Katz, Chelsea Green Publishing Company, 2003

This is the guide to taming the wild microbes that live invisibly all around us and setting them to work fermenting food and drink.

The Scented Kitchen: Cooking with Flowers, Frances Bissell, Serif, 2007

This treasure will instruct and inspire beginners and enthusiasts alike.

Cutting the Curd: Cheesemaking at Home, Katherine Mowbray, Bateson Publishing, Limited, 2008

There are a number of good cheese-making books on the market, but I particularly appreciate Katherine Mowbray's style and approach.

Eco Colour: Botanical Dyes for Beautiful Textiles, India Flint, Interweave Press, 2010
You would have to be a pioneering natural dyer with a name like India Flint, wouldn't you? The information here is solid, academic and detailed, and the book as an object is very beautiful.

Edible Wild Plants: Wild Foods from Dirt to Plate, John Kallas, Gibbs Smith, 2010
US forager John Kallas focuses on fifteen commonly growing weeds, all of which are found in New Zealand, and details the harvesting and uses of each plant and its different parts.

NEW ZEALAND WEB RESOURCES

Wild Foragers Aotearoa New Zealand

This is a Google group and you need to be a member to participate.

Rongoā New Zealand network — Nga Teina O Ngahere
rongoanz.blogspot.co.nz

Māori uses of plants, School of Biological Sciences, Auckland University
web.auckland.ac.nz/uoa/science/about/departments/sbs/newzealandplants/Māoriuses

Landcare Research

Their plants database is a treasure trove of information for foragers, duplicating much of the information in *Flora of New Zealand* (although I must admit I prefer to have the book)
www.landcareresearch.co.nz

A Forager's Treasury

The accompanying blog to this book.

foragerstreasury.blogspot.co.nz

Herb Federation of New Zealand

www.herbs.org.nz

Online nurseries that bring the wild to your garden

Oratia Native Plant Nursery: www.oratianatives.co.nz

The Fragrant Herb Garden herb nursery: www.fragrantgarden.co.nz

NEW ZEALAND FORAGERS' COLLECTIVES ON FACEBOOK

Manawatu Urban Foraging

Otautahi Urban Foraging

Central Otago Foragers

Wild Foods and Foraging — NZ

INTERNATIONAL WEB RESOURCES

Plants for a Future

This is a database of 7000 useful plants.

www.pfaf.org

Wild Man Wild Food — Fergus the forager

www.wildmanwildfood.com

Turkey Red Journal

This journal is dedicated to natural dyes.

www.turkeyredjournal.com

Natural perfumery email list

health.groups.yahoo.com/group/NaturalPerfumery/

Simple home-made solar cookers

www.sunnycooker.webs.com/

Solar cookers world network

This provides information on all aspects of solar cooking.

www.solarcooking.wikia.com/

EDUCATION

Titoki Education and Learning

Offers workshops in rongoā — Māori medicine.

www.titokieducation.co.nz/rongoa_medicine.html

Herb Federation of New Zealand

Offers a very reasonably priced, modular correspondence course in herbs and their uses.

www.herbs.org.nz/certificate.html

Cottage Hill Herbs

Offers a range of courses about herbs and common weeds and their uses.

www.cottagehillherbs.co.nz/workshops/

Human Bushcraft & Wild Living

Offers weed walks and hands-on bushcraft and foraging courses for adults and teens.

www.human.org.nz/

STOCKISTS OF SPECIALISED PRODUCTS

Fermentation

WATER KEFIR

For water and milk kefir, Caspian sea yoghurt, kombucha and sourdough starter.

www.waterkefir.co.nz

CURDS AND WHEY

For cheesemaking supplies and books, as well as some wine- and beer-making supplies.

www.curdsandwhey.co.nz

THE BREWHOUSE

For everything you need to make wine, spirits and beer, including commercial cultures.

www.thebrewhouse.co.nz

Natural cosmetics

Go Native

For perfumer's alcohol, mango butter, jojoba oil and a range of other natural cosmetics ingredients.

www.gonative.co.nz

Cottage Hill Herbs

For a range of interesting and useful natural cosmetics ingredients.

www.cottagehillherbs.co.nz/

Natural perfumery

There are relatively few suppliers I go to for perfumery-grade essential oils. I know and trust these as much as one can. Note that for bulk uses such as soapmaking, you can get away with lower-quality essential oils.

Absolute Essential

www.absoluteessential.com

Appalachian Valley Natural Products

www.av-at.com

Eden Botanicals

www.edenbotanicals.com

White Lotus Aromatics

www.whitelotusaromatics.com

(Note that at the time of writing they had just stopped shipping outside of the US, so you will need an intermediary if you want to order from them.)

Aqua Oleum

www.aqua-oleum.co.uk

Prima Fleur Botanicals

www.primafleur.com

Hebe Botanicals

www.hebebotanicals.co.nz

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- Chef Charles Royal who, through his website and book *Cooking with Charles Royal*, published in 2010, shares both his creativity and his knowledge of native plants and their customary and contemporary uses in cuisine;
- Andrew Crowe, whose *A Field Guide to the Native Edible Plants of New Zealand*, first published in 1981, is a classic foragers' guide, rarely out of print since it was first published; and
- Gwen Skinner, whose 1981 book, *Simply Living: A Gatherer's Guide to New Zealand's Fields, Forests and Shores*, is impressive in its scope and inspired the format of this book.

Many more people have generously shared their knowledge and enthusiasm for the wild with me over the past few years: Emeritus Professor Phil Garnock-Jones, a botanist whose brain is always a-whirr with ideas; my amazing friends Lynda Eichler and Ellen Blake — and their families — who've always been far more adventurous than me; the members of the email list Wild Foragers Aotearoa New Zealand; the co-founders of Manawatu Urban Foragers, Madeline BatachEl and Helen Lehndorf, as well as the other intrepid members of the group; the vigorous Otautahi Urban Foragers group; my amazing blogging friends; and also all those who have visited my blog Wild Picnic and left helpful and fascinating comments.

Then there are my natural perfumery buddies: Francesca Brice and Kate JasonSmith from Pacific Perfumes, as well as Polly Lind, Eleanor Laban and Michelle Bailey — who have each shown me different ways to perceive and think about the world of scent. I also thank 'my South African correspondent', perfumer Sophia du Toit, who has shared her immense knowledge of native South African plants, many of which are now naturalised in New Zealand. In addition, I thank US natural cosmetics guru Jeanne Rose, who has been one of my heroes since the day, at age 11, I left a local bookshop clutching her book *Kitchen Cosmetics*.

I thank Hannah Schickedanz from the legendary World Sweet World magazine who first nudged me to go public in writing and talking about foraging in 2008. And immeasurable thanks are due to both Simon Morton and Richard Scott from Radio New Zealand's *This Way Up* show. The opportunities they gave me to

develop my knowledge of foraging and to share it on radio between 2008 and 2011 were unexpected, fun and more valuable than they know.

When Nicola McCloy at Allen & Unwin emailed to ask if I was interested in writing this book, it was about the most exciting message I had ever received. Since then she has been unfailingly enthusiastic, kind, helpful and knowledgeable, and that has made the world of difference to me as I have worked on this.

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