



Fruit Tree Catalogue 2022



People often ask me what one thing I would recommend to restore relationship between land and people. My answer is almost always, “Plant a garden”. It’s good for the health of the earth and it’s good for the health of people. A garden is a nursery for nurturing connection, the soil for cultivation or practical reverence. And its power goes far beyond the garden gate- once you develop a relationship with a little patch of earth, it becomes a seed itself.”

Robin Wall Kimmerer, Braiding Sweetgrass



Our Mission

The vision of the Koanga Institute was born out of 30 years of collecting heritage fruit trees, vegetables and flowers by Kay Baxter and others, in association with the Koanga Institute. This nationally important collection is in turn built on the foundation of hundreds of generations of gardeners and farmers who have nurtured the biodiversity and cultural heritage upon which civilisation has developed (we have co-evolved with our food plants).

Much of Koanga Institute’s work was in response to the fact that in the last 100 years much of the genetic biodiversity in food plants, all over the world, has disappeared as a result of the industrialisation of our food production.

In the process of “saving the seeds”, all those involved have come to the wider realisation that not just the ecology of our “food evolution” has been compromised by industrialisation, but many other aspects of our “human ecology” have likewise been compromised, and we can’t address the one issue (e.g. seed saving) in isolation. Seed saving is one aspect of the broader need to address our “human ecology”. Thus, while an immediate priority for the Institute is seed protection and conservation, it is also committed to contributing practical holistic solutions in the wider field of sustainable living:

- Protection, conservation and development of NZ’s genetic and cultural heritage food plants.
- Understanding the connections between soil health, plant and animal health and human health.
- Research into the practical strategies and techniques required for communities and individuals to be self reliant, with a focus on regenerative land use, nutrient dense food production and processing, appropriate technology and community development.



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Join us and help save New Zealand's Heritage Food Plants!

Over the past 30 years Koanga Institute has been instrumental in collecting and saving over 700 heritage vegetable seed lines and over 300 Northern heritage fruit tree lines and we could not have done it without our members!

Our nationally important collections are built on the foundation of hundreds of generations of growers who have nurtured biodiversity and cultural heritage. We not only collected the plant material and the seeds, but also the stories and whakapapa of our food plants and the old people who carried them to today. Growing out these food plants makes them available to both our members and the general public. The beautiful diversity that we see in our heritage collection – in the flavours, shapes and colours, is a glimpse of the past varieties of all the vegetables.

HEIRLOOM COLLECTIONS

Keeping the whole collection of these incredibly important New Zealand heirlooms alive and available for the people of New Zealand is a complicated and expensive process and we receive no government funding. We are a Charitable Trust and one of the only organisations in New Zealand who grow out our seeds locally (mostly in the sunny Hawke's Bay), so they are adapted to NZ soils and climates. These seeds are then selected for the qualities home gardeners are looking for, like a long cropping season, great taste, nutrient density and many other qualities that commercial seeds are not selected for.

REGENERATIVE LAND USE

Along with protecting our collection of New Zealand heirloom plants we are a Centre for Regenerative Living, aiming to inspire, educate and support people to develop the skills to manage their land in a regenerative way. We have a wealth of experience, knowledge and resources to share with the world and this work is more important now than ever before as urgent action is required to deal with the Climate Emergency. Help us to safeguard the future for coming generations by supporting our work.

MEMBERS BENEFITS

Being a member of Koanga is an excellent way to support our important work but also brings a range of membership benefits

- Exclusive 'members only' newsletters, packed with top tips, practical advice and member-only offers.
- Two FREE seed packets of your choice from a specially selected range.
- Gardening questions answered with access to Koanga's special knowledge.
- Grow sought-after plants with preferential access to rare seeds and plants in short supply. There will be a minimum of 2 weeks member only access to fruit trees and to perennials in short supply. Members only access to preservation packs.
- FREE Online Workshop on Growing Great Compost for memberships purchased or renewed before 1st January 2023.
- Know what to plant and when to plant it with exclusive members access to a high-resolution, print ready copy of the Koanga Moon Calendar.

JOIN US TODAY!

If you agree with us that saving New Zealand's heritage food plants is an essential part of building a better, regenerative future and if you value the wealth of experience and knowledge that Koanga holds and makes available through its website, publications and courses then the best way that you can support us is by becoming a member, by encouraging other people to join, and, if you can afford it, by supporting someone less financially secure to join.

<https://www.koanga.org.nz/gardens/koanga-memberships/>

Welcome to our 2022 Fruit Tree Catalogue! As usual we have a range of beautiful trees from the Koanga heritage fruit tree collection to share with you.

Despite difficult circumstances out in the world we feel fortunate to be doing what we are doing and there are lots of exciting developments at Koanga.

Sharing the skills and knowledge that we hold at Koanga and our new learnings as we move forwards has always be an integral part of what we do. There are many strands to this including our publications, our website and our social media platforms, but at the core have always been on-site workshops and tours. So it was with some sadness that we took the decision to cancel all on-site events for now until the covid situation resolves.

The commitment to share our knowledge to help support home gardeners and growers remains though and, as many of you know, Kay & Vitor have been developing a series of online workshops. You can read more about these on page 13 including some exciting new additions.

There have also been exciting new developments to our intern program and intern accommodation area that Kay talks about on page 16.

There are so many elements to this journey that we are on, from getting to know these amazing old varieties and how to incorporate them into our lives, how to create healthy supportive eco-systems for these trees both above and below ground, through to learning how to preserve the bounty of the harvest. The largely unseen life beneath the ground is equally as important as what is happening above ground (although of course what happens above ground can support or destroy



this life) and at Koanga we always strive to 'do better' in the way that we grow all of our plants. We remain excited by our increasing knowledge of soil ecology and committed to the practical application of that knowledge to restore the soil to meet the needs of these trees and plants.

Building resilience is another crucial element of what we do and this has many aspects. Of course building healthy soil, growing our own food, learning how to store and preserve food, growing and saving seeds, creating diverse systems, supporting our own health and learning essential practical skills are all part of this and have been for decades. One step on this journey for anyone is to not use harmful products within their growing systems – so avoiding all pesticides, herbicides and artificial fertilisers that destroy the life of the soil. For many years Koanga has worked with Environmental Fertilisers using their amazing products which help restore degraded soils by providing minerals and life. However, we'll not be truly resilient or regenerative if we are constantly bringing in even good products from elsewhere. So the next growing challenge

for Koanga is to move away from these inputs and close that loop so we create all that we need on site. This would be challenging in a large home garden but even more so on the scale of growing at Koanga. You can read about the strategies we are using on page 8.

As usual writing this editorial had me reflecting on our current situation, on good things that are happening but also on some of what is wrong in the world. Whether we look at very immediate current issues or the larger ones that sit more in the background at present, there seems to be a common thread that at the core humanity as a species has forgotten its place within nature and that we will solve none of the problems that face us unless we start to live within our ecological limits. This means recognising our place within the ecologies that we are a part of and our kinship with the other creatures that we share this world with. It seems to me that crucial to this is the awareness, held by all indigenous people, of the earth and all of its bounty as a treasured gift to be cherished with gratitude rather than as resources to be exploited for short term financial gain. Of course we live within a system that reduces all life to a dollar value and is totally based on upon exploitation with no view to long term sustainability, so we need the imagination to create a system where things are done because they are the 'right thing' to do rather than because they produce a profit. It's interesting to note here that my understanding of the root of the word 'tikanga', which refers to Maōri traditional culture and practices, is effectively the 'right thing'.

Going forwards we need to recognise the amazing insights that science can bring us but also the value of other ways of knowing. My favourite book of the moment is "Braiding Sweetgrass" by Robin Wall Kimmerer. Robin describes herself as a mother, scientist, decorated professor, and enrolled member

of the Citizen Potawatomi Nation and the book looks at Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants.

I've thought for a very long time that the deepest level of what is missing today is love for the earth by the whole of humanity and the awareness of the love that comes back from the earth. She describes this way more eloquently than I could so I'll finish with a quote from her book from a chapter called 'Epiphany in the beans'.

"Maybe it was the smell of ripe tomatoes, or the oriole singing, or that certain slant of light on a yellow afternoon and the beans hanging thick around me. It just came to me in a wash of happiness ... I knew it with a certainty as warm and clear as the September sunshine. The land loves us back. She loves us with beans and tomatoes, with roasting ears and blackberries and birdsong. By a shower of gifts and a heavy rain of lessons. She provides for us and teaches us to provide for ourselves. That's what good mothers do."

"I spend a lot of time thinking about our relationship with the land, how we are given so much and what we might give back. I try to work through the equations of reciprocity and responsibility, the whys and wherefores of building sustainable relationships with ecosystems. All in my head. But suddenly there was no intellectualising, no rationalising, just the pure sensation of baskets full of mother love. The ultimate reciprocity, loving and being loved in return"



Learnings & Thoughts from the Forest Garden this Year — Kay

1. Everything depends upon soil microbes having enough to eat, so if your soil isn't in good shape, don't even worry about planting the fruit trees yet, plant the support species. I feel as though I learn this every year. I keep getting it again and again. It takes way more work to look after a sick tree whose nutritional needs are not being met than it takes to actually take care of the soil and get it right. Plant support species that coppice or pollard, plant more support species, and still more, and make that the most important part of the forest garden. If you get a fruit tree every now and again that is loaded with high BRIX fruit you'll have more amazing high quality fruit than you would have if you had 10 trees that are starving. It's a bit like the saying "It takes a village to raise a child." We need the forest to raise the apple tree!
2. My favorite support species for coppicing and building soil fast are...
 - * Tagasaste
 - * Tree lupins
 - * Egyptian willow, and other forage willow
 - * Acacia pravissima (I love them, in a Mediterranean situation, planted in groups close together then heavily pruned rather than coppiced, awesome with peaches)
 - * Rocket maple. A super fast growing, straight for the sky maple that has wonderful colours in Autumn, great for coppicing
 - * Genista Yellow Imp
 - * Tree Medick
 - * Alder glutinosa
 - * Poplars kawa and other cultivars
 - * Viburnum plicatum
3. I feel like I've been a really slow learner when it comes to pruning. I've had good teachers but in the end a good pruner has to connect with each tree, read the tree. This year I felt as though I was still reading trees as though I were still back in Kaiwaka on heavy, heavy clay soil. On heavy clay the roots just don't get down as far as they do in pumice soils and the trees are semi dwarfing no matter what the rootstock is. I keep wanting to make my trees the size I had them in Kaiwaka and it just doesn't work, they send out huge growth spurts and heaps of water shoots and I get little fruit. In a way structural pruning is critical for a couple of years then I pretty much need to give them some head.
4. I wouldn't call these trees the most important trees for building soil and coppicing but I think they feel good in there and add other things. Coprosma robusta (karamu) was reckoned by Bill Mollison to be the most productive chicken forage bush in the world, and Ngutukākā (Kākābeak) is a native nitrogen fixer. Both of them are stunning in this forest moist environment (temperate not Mediterranean).



Raising Our Game

Ending our reliance on bought-in fertilisers – Kay

We've been on a mission to find regenerative ways of growing our own food, and for seed production for many years (quite separately to the whole forest garden research project).

We've been using a refractometer and getting Reams soil tests done, and learned a lot about reading those soil tests and even able to see the issues now and make decisions as to what to do, but our limitation has been that we (Koanga) are still using fertiliser products from Environmental Fertilisers, to a greater or lesser degree depending on the garden. We have 11 gardens we are monitoring plus compost heaps. I love their fertiliser and it is an amazing short-medium term option, but it leaves us vulnerable and far from being a local regenerative food production system.

My home garden is my research plot and I took myself off fertilizer in that garden 3 years ago. We've always known that we could not stand up and say we were producing our seeds totally regeneratively while still putting on fertiliser, and we've been on the journey to get off it for a while.

It is a very different thing to take my home garden off commercial fertiliser than it is to take the entire seed production off it... or it always felt like it anyway. I guess we just didn't have the confidence, or a clear process for doing that on a large scale. By large scale I mean we have gardens the following sizes (sqm of actual bed):

- * Compost 600 sqm
- * Persimmon 400 sqm
- * River Garden 400 sqm
- * Thorny Croft 600 sqm

- * Nursery 600 + 600
- * Model for local regenerative food production 120 sqm
- * Perennials 200 sqm
- * Intern and Kitchen gardens 400 sqm

Almost 4,000 sqm of bed production all by hand. Recently somebody pointed me to the Ice Age Farmers podcast where he was discussing the fact that half of the Northern hemisphere food producers in the world could not buy the fertiliser or the sprays required to grow their crops last season, and so only half the food was grown... and that gave me a really big fright. We now see that is happening here in this land, we are in the middle of a food emergency!

Almost all industrial farmers are dependent on roundup, herbicides, pesticides, fungicides as well as fertilizer such as urea and superphosphate. With all of those rapidly becoming unavailable we need to switch now to local regenerative models.

We have to be able to produce our seeds and our food without the need to buy fertiliser. We must learn to identify the local sources of natural materials that can replace mining in someone's backyard, in an intelligent way. In order to do that we must first understand which minerals we need and how to balance them otherwise it is very very easy to make our situation worse. We can't take things out again.



This is how we are going to do it, and these strategies have evolved for us slowly over time as I have learned, and experienced them, mostly in my own home garden, but also in the Koanga Seed gardens.

This is still a research project and we will share what we learn, but we feel it is now urgent to step into the journey fully.

So... all of our Koanga Seed gardens and food gardens are in the process of being set up with the following:

1. Liquid fert barrels, where we can make our own fish, seaweed, cow manure, comfrey liquid fert with carbon so the fert is not water soluble. We use this product mainly as a microbe boost when transplanting or for a critical growth spurt when energy has run out or is low. To boost microbe populations. All gardens will have one or more of these for regular soil drenches.
2. Biofert barrels. This is a fermented liquid fertilizer that is used as a foliar spray. The recipe has been worked out very carefully so that if you study the minerals etc involved it serves the purpose that other commercial growth foliar do (e.g. EF:Growth Foliar). The minerals are balanced and focused on growth rather than seed flower production which is great in the first 40 days. All gardens will have one of these, for regular foliar applications. Recipe on page 37.
3. Bioreactors... making compost seed and raising mix (Johnson Su). If you go online you can easily see how to do it yourself, we are in the early stages of learning this and we will have them in all gardens. Our first one is going down tomorrow although Gail and John have already made one. All Koanga seed gardens will have these to use as seed raising mix and also compost. I feel as though in a home garden if we already make compost and are biointensive growing carbon crops and have access to ramial wood chip that we won't need to do this.
4. Compost... we have pretty much refined our composting techniques so that we know we are making amazing compost. We practice Biointensive growing so we produce enough carbonaceous material in our own gardens to make enough compost for all beds. That is not real unless the bed soil is pretty good and production levels pretty high, but we are getting there now, it takes a while. We have a Koanga Booklet and an online workshop to support you here.
5. Establishment of coppicing trees surrounding our gardens to provide us with the ramial wood chip we need as well as to bring in the insects and birds and life to also be reconnecting our phosphate cycling. If every garden was surrounded by a forest garden, we would once again, in this land of birds (as it used to be before we cut the trees down), have the insects and birds recycling phosphate

into our gardens for us. Our most important coppicing or pollarding trees at this point are listed below (see also databases and species lists in *Design Your own Forest Garden Booklet*), and keep in touch on our Koanga facebook page and website where we provide updates of new learning.

- Willow
- Poplar
- Maple
- Alder
- Tagasaste

The ramial produced from chipping the annual growth of these trees can be incorporated into the top soil each Autumn if we are planting legumes, or used as a Summer mulch, which is then forked into the bed in Autumn. That has had the biggest effect on building soil in our garden beds, the results of using ramial woodchip have been dramatic, and in my home garden, the fungi breaking it down are so thick and strong they are holding the air in the beds and all my beds are now 'no dig'.

6. Chicken compost. Ok so we just don't have enough birds or whales around doing the phosphate cycling that they used to do to maintain soil health and plant growth. Our easiest short term option now, if we are not going to be destroying somebody else's backyard, is to use your chickens to produce the phosphate and build it into compost. Chicken manure is relatively high in phosphate. We put autumn leaves piled high into our chicken house and keep them shut in until lunch time each day. 8 chickens and a rooster make several cubic metres of compost every year, fantastic for using on your heavy feeders or your berry gardens etc. Our urban garden chickens are on ramial wood chip as the base for the compost and that works very well too.



7. Worm farming. Vermiliquid (the liquid we collect from the worm farm that comes out the bottom if it is off the ground) is not a lot of use in the vege garden, but around the forest garden it's all good. It can be useful in small amounts in liquid ferts etc as a microbe source but the minerals it holds are mostly nitrate and potash which we usually have too much of already and adding more just makes it even harder to get the available calcium and phosphate that we need. The vermicast however is incredible stuff, and if you have it you can use it anywhere, seedling trays, garden amendments etc, amazing magic stuff, full of microbes and nutrients so long as you feed them calcium/lime on a regular basis, maybe a handful a week.

8. Char Phos. This is the last strategy we are implementing, for us to learn about and I'm going to focus on this strategy in the next seed catalogue. We're learning and will share what we have learnt. I believe this strategy is pretty essential for many of us with very low carbon soils, it speeds up the rehabilitation process by a huge amount.

All of this is well underway here now, and we have already been adding ramial wood chip to our seed garden beds for two seasons, so watch this space. We have years of soil building records so the results of going off Industrial fert will be very interesting indeed.



Perennials

Perennial vegetables are a great addition to a garden, bringing diversity and variety but also increasing resilience in the garden. Our perennials collection contains all kinds of treasures many of which were important elements of old food gardens that have now become rare. Some perennials such as potatoes, kumara, yams, shallots and garlic are usually grown as annuals, however naturally they remain in the ground and grow as perennials. Others such as strawberries, welsh bunching onions, multiplying leeks, sea kale, rhubarb and asparagus are left in the ground. We also sell some of our perennial vegetables in the form of seed, details here: <http://www.koanga.org.nz/gardens/product-category/perennial-seeds/>

It is our aim to make these plants available in the form of starter packs. All of these will be sent to you as live plant material, not seeds, and are sent out at only one time of year according to their needs.

Perennials section of our knowledgebase

We make a huge range of information available to gardeners through our website knowledgebase including details on many of the perennials in our collection and how to grow them. <http://www.koanga.org.nz/knowledgebase/>

How to order items from our perennial collection

Please order items from our perennial collection via our website.

Details of all perennial plant material can be found here: <http://www.koanga.org.nz/gardens/perennial-collection/>

Check out all of our varieties and make use of the 'wait list' function on our website for each product – you will then be sent an e-mail to inform you that the item has become available to order.

When we are sure of stocking levels each year the relevant items will be made available to order. Orders can be placed in advance once the item is listed as in stock but will only be sent out at the time indicated so there may be a delay.

Items will be sent out around the time indicated for that category although specific timing varies from season to season. If you have special requirements (for example will be away during part of the send out period) please let us know in advance as we are not able to contact customers to check before sending the items out.

You will receive planting tips by email when you order and an order note with tracking number when your parcel is posted.

Please order via the website if you can as this reduces costs and pressure on staff time for us but if you are not able then you can e-mail your order to contact@koanga.org.nz or phone 06 838 6269. Only tracked mail options will be available for plants from our perennials collection.

Please note that some of our perennials sell out quickly and are available to members only. Being a member gives you better access to these plants and supports our work but doesn't guarantee supply. Find out more about membership on page 4.

If you have a back order query which does not relate to ordering or payment please e-mail gail@koanga.org.nz



Education

Here at Koanga we are learning to live simply and in a regenerative way. Our workshops have regenerative practices at their core and are for anyone interested in gaining the skills and knowledge to redesign their lives and to empower change in their community.

Due to the current Covid situation we took the difficult decision to cancel all on-site workshops and tours. We hope that this situation will change and that we will once again run on-site workshops but sadly it is not possible at present but our commitment to education continues.

We were already aware that not everyone could travel to Koanga so have been developing a series of on-line workshops which are based on the same regenerative practices but allow people to access our knowledge and skills wherever they are, at their own pace and regardless of the Covid situation.



ONLINE WORKSHOPS

Growing nutrient-dense food

This workshop focuses on the principles of science and laws of nature and reveals the connection between heritage seeds, the soil ecosystem, and how they produce food packed with high levels of nutrients. It breaks down how microbial activity fosters well-being all the way up to the level of our communities and the climate.

Garden planning

A revolutionary step-by-step planning process for achieving maximum production inside the smallest available area, whilst building soil and plant health. This workshop builds the foundations for creating a regenerative food culture. Alongside the video workshop, you'll have access to digital versions of our planning tools that make month-by-month planning far easier.

Growing great seedlings

Seedlings provide the clearest example of regeneration in action. Growing them regeneratively physically shows you the living bridge between seedling roots and the soil. It's inspiring and empowering, and possible for anyone to create! This workshop equips you with the skills to grow your own seedlings each season and explores seed selection, handling, and tray preparation for optimal seedling growth.

Growing great compost

This workshop unlocks how to build soil and grow nutrient-dense plants with local materials around you. It teaches the pattern language for making compost that uses our precious carbon more efficiently – producing 50% more compost, and creating up to 50% higher yields per square meter. All of this is built into a simple step-by-step process that is easy to follow.

Bed preparation and planting

This workshop starts with an introduction to the essential hand tools and equipment for gardening, along with instructions for building some of them yourself. Next, it provides simple step-by-step instructions for turning a patch of dirt or weeds into productive garden beds ready for seedlings (that anyone has the physical strength for!). From here, you'll learn a variety of techniques for planting your seedlings and other food crops.

Building a passive solar cloche

This workshop teaches you how to build an affordable, space-efficient alternative to a greenhouse called a passive solar cloche. It extends your growing season, creates a safe environment for seedling production, and enables you to grow greens throughout the winter.



Kay's garden management series

It's one thing to design a regenerative garden. It's another to manage it throughout the seasons. This video series checks in with Kay at the start of each month and explores her methods for maintaining her garden's health and productivity. It comes with additional episodes containing insights for maximizing production, building soil health and addressing challenges with a principle based approach. This is potentially one of the most valuable additions to this masterclass, and a fun part of our curriculum.

These workshops are all available as stand alone workshops or save money and buy them together in the ***Koanga Gardening Masterclass***.



NEW FOR 2022!

Designing a Nutrient Dense Diet

After learning that every indigenous group around the world has traditionally derived 30-80% of their calories from saturated fat, Kay found it impossible not to question her existing assumptions about health and the optimal human diet.

This workshop introduces you to Kay's lifelong research on the topic of food. Specifically, what to eat and how to best prepare it for maximum nutrition.

The lessons are based on both historical evidence and her own experience transitioning from a vegetarian diet and illness to regaining her health.

Herbal Health & Nutrition

Herbs have been our allies throughout history. They support us by assisting healing processes and providing nourishment.

For forty years Kay has worked with the herbs that grow most easily in our New Zealand environment – many of them of northern-European origins. Along the way, she learned how to use them for a range of valuable applications, and shares these in this workshop.

By joining this workshop you'll receive access to 12 episodes as we follow the herbs through the year, and a PDF booklet of detailed information that you can easily print at home.

You'll learn how to make remedies for common childhood illnesses, many women's health issues, and general first aid kits that help the whole family.

COMING SOON

Traditional Food Storage and Processing

A really exciting workshop showing how we harvest everything and store it ready to use all through the year.

Forest Garden Masterclass

This will consist of many videos, including monthly management throughout the year plus Design Your Own Forest Garden, Pruning and much more.

Find out more and sign up for these workshops at www.regenerationproductions.org



Internships

If you have a serious passion for learning to live simply and regeneratively, rebuilding soil and ecologies, getting into the detail of growing nutrient dense food and seed saving or designing and managing forest gardens and propagating trees, learning the design process for integrated land use design or even heritage animal breeding and management for regen ag, teaching others or starting your own business, Koanga offers several 12 month internships, designed to help you on your journey, and support our work in the process.

We are specifically looking for highly motivated Interns who want to take this learning back into their own communities.

These internships are unique, in that you will be living in an intern area with 5 other Interns. The intern area is set up with a common kitchen, cooking on biogas and rocket stove, and outdoor indoor dining area, an ablution block with a biogas toilet, a rocket stove water heater for the laundry and shower, a hand washing machine, and a passive solar cabin each with a small kitchen greenhouse on the front of each. All of our interns share in growing pretty much all of the vege they need year round, partly in work hours and partly in their own time, and this Intern area is situated in an established and highly productive forest garden... loads of fruit.

We offer 3 different Internships

1. Food Production & Seed Saving Internship

As part of this internship you will work alongside our gardeners learning skills such as:

- Bio-intensive practices
- How to work efficiently with low impact on your body
- Propagation
- Regenerative soil development techniques
- Growing nutrient dense food
- Garden planning and management
- Plant health
- Compost making
- Harvesting and seed cleaning techniques
- Designing and managing food production gardens

2. Forest Garden & Tree Nursery Internship

On this internship you will be taught by our nursery and forest garden managers the following:

- **Propagation** — A wide range of propagation skills and regenerative organic tree nursery management
- **Forest Garden Design**
- **Forest Garden Management**

3. Regenerative Integrated Land Use Design & Practice & Animal Breeding & Management

This Internship will introduce you to our Koanga Best Practice Design Process, you will be working with our design team, as well as on the ground implementation and management of integrated systems. You will be spending half of your time managing a small dairy herd, chickens and pigs following Holistic management processes.

More details available on request.

Weekly timetables are varied and diverse, but each week you will spend one day together including a session with Kay and a Design Session with Bob. Interns spend Monday evenings together with Kay learning as well. Each area of focus has it's own managers and mentors.

We are a very down to earth, highly motivated team with a vast range of expertise that love to share our knowledge and give you the best learning possible by always going that extra mile. You will find that as a group of interns you will also be a highly skilled group who can learn a lot from each other.

Our Internships begin in August and are for 12 months.

Expressions of interest and then application forms and CV's must be in by May 31st each year.

Looking forward to hearing from you.



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All Fruit Tree orders will be taken online. Please only make telephone orders if you have no internet access. www.koanga.org.nz/gardens/ or (06) 838 6269. Please help us by combining orders for fruit trees with orders for other items (seeds, books, perennials etc) as they will be packed and sent separately so incur a separate freight charge.

This is a very special collection of NZ heritage plant material, gifted to us by the gardeners of this land. We believe every tree in this catalogue to be worthy of a special place in our lives today, for one reason or another. All trees in this catalogue have been organically grown by hand in a way that regenerates the land they were grown in. We'll send the planting instructions with your trees, so you can also plant them well, ensuring strong healthy growth and maximum nutrient dense fruit production.

These trees have been grown in Open Ground situation and marked with a white dot on the North side of the trunk, so that you too can plant these trees in the same alignment. Trees grow their main roots along the earth's magnetic field and they grow far better if they are planted in that same alignment as they were in the nursery. The white dots allow you to do that.

Many of the trees offered here are from our Northern Bioregional collection. These trees have naturalised in the North where the winters are warm, and they have been through a 150 year process of natural and human selection in that climate. The significance of this is that they fruit well in warm winters. Cultivars with the same name grown south of the Bombay Hills and taken north, do not. That is the reason Kay began saving these old trees.

One of the good things about having this collection is that you can now buy trees that will fruit well in Northland, but we also now know they do very well when taken south again. Martin Crawford of Forest Garden fame in England is recommending that we should all be planting our orchards these days with fruit trees that came from 2 climate zones north of where we are, so that they will fruit in the future in warmer winters!

In the stone fruit section of our catalogue you will notice we now offer more and more cultivars as seedlings. We are doing this because we believe them to be a superior way to grow our genetically stable heritage varieties.

Modern peaches do not grow true in the same way, and so we trial all cultivars before offering them to you.

The trees are stronger and more disease resistant, but grow in size to be somewhere in between the smaller Marianna rootstock and the larger peach rootstock.

STONE FRUIT

Rootstock	Diameter	Canopy Size	Preferences	Description
Colt	4-5m	12 sqm	Good for difficult soil.	Vigorous. Some good disease resistances.
Marianna Plum Root Stock	3-6m	12 sqm	Heavier, wet soils, essential.	Smaller than on peach rootstock.
Myrobalan	5-6m	25sqm	Tolerant of variable soil conditions including wet soils.	Vigorous.
Peach Root Stock	5-8m	15 sqm	Light, dry, boney soils.	Vigorous rootstocks.
Seedlings	5-8m	15 sqm	Drier, bony soils, exposed.	Seedling grown trees, not grafted, Form strong, healthy trees.

Apricots



APRICOTS

Wairoa Seedling \$36

From large old trees in Wairoa. Ripe around Christmas. Medium to large fruit with a great flavour.

Cherries



CHERRIES

Compact Stella on Colt \$45

Dark red, heart shaped fruit with firm light red flesh. Self-fertile. Produces heavy, reliable crops around Christmas time. Forms a compact tree of around 3m, taller on good soil. Crop needs netting from the birds.

Nectarines



NECTARINES

Goldmine Seedling \$36

Medium size, mid season, white fleshed nectarine with red over green skin, dessert quality with a sweet flavour. Ripe in February. An outstanding old variety from the Kaipara.



NECTARINES

Nuhaka Seedling \$36

Goldmine type but larger, and more intense flavour. Super sweet fruit with excellent flavour, strong red blush and russetting on skin with a freestone, and is ripe February.



NECTARINES
Kōkōwai Seedling \$36

Red leaf, red skin, golden buttery very tasty flesh, free stone, medium size fruit, excellent desert nectarine. Was selected from seedlings from a heritage peach that produced multiple nectarine variations. This one was selected because of the amazing dark leaf colour which makes it very ornamental. Ripe early February.



NECTARINES
Pouto Gold Seedling \$36

Sweet, juicy, old fashioned, small, gold fleshed fruit with red on yellow skin when ripe. Allow 5-8m. From McLeod family homestead, Pouto, gifted by Logan Forrest, 2000. Ripe February.



PEACHES
Four Winds Seedling \$36

Green skin, red blush, and very firm sweet white flesh and great flavour. Produces huge crops. Ex Kaitaia, from collection trip with David Austen. Ripe February.



PEACHES
Green's Special Seedling \$36

Large, freestone, yellow fleshed peach with a red tinge when ripe. Given by Maureen Green. Her brother in law, David Green, said "My father, Fred Green, bought two Golden Beauty and two Campbell Seedlings from the nursery of Woodyear Smith at Matakana in 1940. Both freestone and ripe in early february. A seedling grew from one of these which was freestone and ripe late march. We called it Green's Seedling"



PEACHES
Hokianga Golden Queen Seedling \$36

Clingstone small, very sweet, with a good flavour. Heavy cropper and extremely disease resistant. Grow wild in Northland. Possibly the original orange fleshed peaches. Ripe late February.

Peaches



PEACHES
Arapohue Red Leaf Seedling \$36

Red skin, golden flesh and freestone with red streaks around the stone. Outstanding flavour, excellent texture and is very juicy. Red leaves on the tree. Allow 5-8m. Given to Koanga by a woman near Ruawai, originally from elderly Dalmatian gardener. Ripe late February.



PEACHES
Blood Peach Seedling \$36

Renamed from Blackboy. Small-medium, dark red grey skin, bright port red/white streaky skin, freestone, juicy, strong flavour. Allow 5-8m. Ex Kaiwaka, NZ Heirloom. Ripe late February.



PEACHES
Christina Seedling \$36

White flesh, red around stone, green skin, red blush when ripe, similar to River Peach but firmer, sweeter. Our Christina peach is really a local Northland variation of the River peach that is slightly sweeter and later fruiting. It came into our collection from an avid fruit tree collector by the name of Mr Phil Hodges, a well known Paparua character with a very special orchard himself. Ripe early to mid February.



PEACHES
Mamie Ross on Marianna \$45

We are excited to be able to make this peach available again which came from Mavis Smith's Totara House collection in Matakoho. Mamie Ross peaches were listed in the early nursery catalogues in NZ in the 1800s. Large juicy peach with white flesh. Pale white / green skin with red blush when ripe. Excellent dessert peach with lovely sweet flavour. Outstanding peaches unlike anything available commercially today. Ripe January.



PEACHES
Mary's Christmas on Marianna \$45

A large, juicy, outstanding red skinned, white fleshed peach. A hardy, healthy tree. Ex. Kaipara. The best Xmas peach!



PEACHES
Mediterranean Seedling \$36

Medium size, white flesh, medium firm but very sweet flesh with outstanding flavor, skin honey coloured when ripe with red blush. Ripe Mid February

PEACHES
Pouto River Seedling \$36

River Peaches are the ones that set Kay off on this whole journey, they are Ex Kaipara Harbour and are NZ Heirloom. They are disease resistant, easy to grow and grow true to seed. They are prolific croppers of sweet medium sized, green skin with a red blush, white fleshed, free stone fruit. Ripen late January. Allow 5-8m.



Peacherines



PEACHERINE
Matakohe Seedling \$36

An outstanding new addition to our collection. This tree came from an old orchard still being well maintained in the Matakohe area. It's a sweet melting buttery yellow fleshed fruit, with yellow skin, ripe February.



PEACHERINE
Robertson's Seedling \$36 & on Marianna \$45

Reliable cropper, medium size yellow peacherine with a furry skin, buttery texture and lots of flavour, very sweet, clingstone, ripe late Feb to early March, great bottling.

Plums



PLUMS
Black Prince on Myro B \$45

Japanese. Large dark red, meaty flesh, purple/green skin, freestone, excellent taste. Pick over long period, keeps well. Ripe February-March. From an old French orchard in the Hokianga. Heavy precocious cropper. Partially self-fertile, hedgerow pollinator plums will help.



PLUMS
Burbank on Marianna \$45

Large, red/yellow skin, yellow meaty flesh, excellent flavour, compact tree, clingstone. Burbank plums came into the Kaipara harbour, according to Logan Forrest with the Dalmatian gumdiggers. They were in all of the very old orchards, everybody had one! Ripe February.



PLUMS
Dan's Early on Peach \$45

Beautiful early plum. Medium sized with pale pinky red flesh, red skin, and fantastic flavour. Forms a large tree. Ripe December.



PLUMS
Little John on Marianna & Peach \$45

Large plums with dark red skin and flesh. They are juicy with a sweet full flavour and tend to fruit bi-annually with a heavy crop one year and a lighter crop the next. Ripe January/February.

This plum is named after the Little John family around the Kaiwaka Otamatea branch of the Kaipara who passed it to us.



PLUMS
Mangamuka Golden Drop on Myro B & Peach \$45

Delicious, yellow green, soft fleshed plum with transparent skin for dessert, Self fertile, ripens January. It came from the school grounds at Mangamuka with a big name from many past pupils. We were gifted this tree in the 1980's by somebody who had been a student at the Mangamuka school many years before, and knew how good it was. It is famous in that area.



PLUMS
Prune 2 Seedling \$12 & on Myro B \$45

This prune is the earliest to ripen here and is a desert prune. It is super sweet and relatively moist for a prune. The skin is red rather than purple like many of the prunes. Freestone.



PLUMS
Prune 4 Seedling \$12 or \$22

We haven't come up with a creative name for this prune yet so for now we are calling it Prune 4! This prune came with us from Kaiwaka where it had never fruited and was probably from the food research centre at Havelock North. It's a beautiful, completely free stone plum with firm, sweet flesh although isn't as sweet as some prunes. Delicious dried. Ripe early February.



PLUMS
Prune C Seedling \$12 or \$22

A prune that has probably been selected as a drying prune. The flesh is very firm, (high dry matter content), and it is not as sweet as a desert plum as others. When dried it is amazing.



PLUMS
Prune Italian Seedling \$12 or \$22

Dark purple/black skin, egg shape, yellow flesh, freestone, fruits well in North. From DSIR collection, Havelock North, years ago. Well known cultivar. Fruits March.



PLUMS
Prune Koanga Seedling \$12 or \$22 & on Myro B \$45

Elongated egg shape, excellent high flavour, sweet freestone, yellow flesh, reddish/yellowish /purplish skin, last fruit drying on tree mid march. Heavy croppers, excellent fruit for drying. We lost the whakapapa of this prune but it is a really good one and have called it Koanga for now.



PLUMS
Scarletina on Marianna \$45

Red skin and flesh, outstanding flavour and colour. Great for dessert, jam and bottling. An ex commercial Australian plum it came to us from Matakohe. Self fertile. Ripens mid January.



PLUMS

Tamaki Special on Peach \$45

Outstanding plum, one of the best from the collection of Dan Hansen of Wilderland fame. Large, dark red meaty plum which is full of flavour and very sweet, great for dessert and bottling. Vigorous growing tree. Ripens in late December / early January. Pollinator- Duff's Early Jewel, and others. This plum was gifted to our collection by the late Dan Hansen of Wilderland. Dan was an avid fruit tree collector and he found this seedling growing on an Auckland roadside.

PIP FRUIT

Rootstock	Diameter	Canopy Size	Preferences	Description
M9/M26 Dwarf	2m	3 sqm	Irrigation, mulch, staking, free draining soils.	Produces a dwarf tree. Can be espaliered, cordoned or grown as a staked tree.
MM106	4m	13 sqm	Free draining soils.	Developed for free draining lighter soils. A semi dwarfing tree, if well pruned can be kept to 2.5m high and 3m wide. An excellent choice for home gardens if you have the right soil
793	4-8m	30 sqm	Free draining soils.	Large tree. Has been bred from Northern Spy and does well on heavy soils.
Northern Spy	4-6m	30 sqm	This is the old rootstock that does best on heavy clays. It can handle heavy wet soils as well.	Tree Size: It is possible to keep trees on this rootstock to 3m if you are a very skilled pruner. They can grow to 6m, but not too difficult to keep them to 4-5.

Apples are available in 3 grades this year: Grade 1 \$36, Grade 2 \$22, Grade 3 \$12

Apples – Dessert



APPLES

Bert's on MM106, N Spy

Medium size, round apple with yellowish russet skin with a red blush. Dessert apple with excellent flavour and old fashioned firm flesh. From Bert Davies collection planted in 1917 in his old pear orchard, one of 2 apples in the pear orchard (the other was Northern Spy). Ripe March/April.



APPLES

Captain Kidd on MM106

Bright red, streaky, white flesh, large, fine excellent flavour, sweet, juicy, medium vigour, reliable cropper, healthy, disease resistant. Bred in NZ, from Tom & Robyn Morrison Kenilworth Orchards, 1989, Warkworth. Ripe March/April.



APPLES

Dawn O'Leary on M9

Large, round apple. Dark red skin. Crisp firm texture. Good flavour. Sweet but with slight sharpness. From Dawn O'Leary near Silverdale. Chance seedling. Her father had an apple nursery and orchard when she was a child and she realised this was a good one and not like others she knew. Great dessert apple, fantastic cooker and stores quite well. Ripe late March/April.



APPLES

Hayward Wright on M9

Bright red/golden russet skin, red coloured flesh, excellent texture and flavour, juicy, sweet, heavy reliable dessert apple. Ripe mid January-February. From George McKinney, Auckland, 1997; one of Hayward Wright's (of kiwi fruit fame) favourite early selections.



APPLES

Freyberg on MM106, 793

Large, pale green skin which turns pale honey yellow when ripe, crisp, juicy and very sweet flesh, excellent texture and flavour, heavy cropper. Ripe late February to late March. Bred by JH Kidd, Greytown, Golden Delicious/Cox's Orange cross, in collection since 1986.



APPLES

Jonathan on MM106, 793

Old fashioned dessert apple, crisp with very juicy flesh, mostly red skin with green patches when ripe, white flesh. Keeps very well, ripe March April. Originally from the settlement and huge orchards planted at Port Albert (on the Kaipara Harbour) by the Albertlanders from Germany.



APPLES

Giant Geniton on M9

Green skin, similar to Granny Smith, but reddish striping when ripe, sweet/tart crunchy dessert apple from April on and great cooking, reliable heavy cropper. This is an outstanding apple that came to this land with the Dalmatian Gumdiggers. From Phil Evans in Kohukohu, Hokianga, 1987; also from Cloon Eavin, Pah; one of the very best apples in the North.



APPLES

Matakana Golden Russet on MM106, 793, N Spy

Golden russet skin with red blush on sunny side, round, flattish, yellow flesh, very rich aromatic flavour, sweet, soft, excellent with cheese. Ripe February, March but store well and taste better with keeping. Golden Russets were very common in all of the old orchards. They are precocious bearers, reliable heavy croppers and are very special apples. From the Matakana area and very probably from the original Mathew Bros nursery in the area.

APPLES

Maxwell Quirk on MM106, N Spy

Golden Delicious parent, large, yellow skin, with pink blush on sunny side, excellent sweet Golden Delicious type flavour, crisp. From seedling tree in Northland, 1998. Dessert apple, mid Feb. to late March.



APPLES
Northern Spy on MM106, N Spy
Green skin turning pale yellow in the shade and red/purple in the sun when ripe, good on dwarfing stock, otherwise slow to bear, delicious, juicy, rich sub-acid aromatic white flesh, fine grained, tender. From old Bert Davies orchard, Wellsford, 1987. Ripe March/April.



APPLES
Ohinemuri on M9, MM106
Round, yellow skin, classic old fashioned cooking apple. Great dessert apple when fully ripe. Precocious prolific bearer, very health, full flavour.
Ripe late February through March. From Jim Cox, Tangiteroria, 1989, ex Te Puke, originally from Ohinemuri area, Hauraki.



APPLES
Red Delicious on M9
Original cultivar, almost black skin when ripe, wonderful sweet flesh, excellent aromatic, rich flavour. Ex Kaitaia, 2000. Ripe March.



APPLES
Tinopai on N Spy
Beautiful round red streaky dessert apple with excellent flavour. Came to us from Tinopai on the Kaipara.
Ripe March/April.



APPLES
Vaile Early on MM106, 793 \$36
Small-medium, conical, yellow greasy skin with red streaks; juicy sweet, sub-acid, reliable cropper, medium vigour, takes some years to ripen early. From Lionel Quaife (well known orchardist in Paparua), 1987. Ripe late December to early February.



APPLES
Winesap on 793
Red skin, old fashion apple, very sweet tart dense flesh, with winey flavour. Ex Kaipara Harbour. Ripe May.

Apples – Cooking



APPLES
Bramley on M9, MM106
Well known in England as the best cooking apples. Large, irregular, ugly even in shape, light green skin, outstanding flavour and texture for cooking apple, not a dessert apple.
Ripe April/May.



APPLES
Worcester Pearmain on 793
Large, round green skinned fruit, maroon blush on sunny side when fully ripe. Heavy reliable cropper with outstanding health. Fluffy when cooked, with a great flavour. In the Koanga Collection since 1987, origin unknown. Ripens mid/late season.



APPLES
Lord Nelson on MM106
Golden russet skin with red blush. A well known, old fashioned, early cooking apple. Excellent disease resistance, heavy cropper in the North, it has the classic cooking apple flavour and bite, ripe in January well before other cooking apples of any quality. Gifted to the Koanga Collection by Dave Webster of Wharehine.

Apples – Cider



APPLES
Brown's Eater on MM106
Early 20th century traditional well known English cider apple. Good disease resistance and produces a sharp flavour. Flat shaped fruit, bright green with light red stripes. Ripe March/April.



APPLES
Kingston Black on 793
A cider apple from Somerset in England. Small, round, often dark fruit that can be used to make a single variety cider or blended with other cider varieties. Ripe late season.



APPLES
Yarlington Mill N Spy
A traditional cider apple originating from the village of Yarlington in Somerset, England. A small to medium conical shaped red apple. High yielding but tends to fruit biennially.

Rootstock	Diameter	Canopy Size	Preferences
Quince BA29 Semi Dwarf	2-4m	7 sqm	Heavier, wet soils essential.
Quince C Dwarf	2m	3.14 sqm	Heavier, wet soils essential.

Pears are available in 3 grades this year: Grade 1 \$36, Grade 2 \$22, Grade 3 \$12

Pears



PEARS

Bert's Early on Quince C

Small, excellent quality pear. From Bert Davies' orchard near Wellsford. Ripe January. Great dessert pear and can be bottled.



PEARS

Bon Chretien on Quince BA29

An outstanding selection of William Bon Chretien. Superior flavour, good size, ripe early Feb. Good dessert and bottling. Bert had many Bon Chretiens, this one grew and tasted different. From Bert Davies, Wellsford.



PEARS

Kirschensaller on Quince C, Quince BA29

These pears are small and stunningly beautiful with bright Autumn colours and the most exquisite flavours. They are astringent however so are outstanding pears for making pear cider or perry.



PEARS

Princess on Quince C

Green skin with pink blush, good flavour, juicy. Sweetest pear apart from Seckles, heavy cropper. Ripe late February.



PEARS

Seckles on Quince C, Quince BA29

Pollinator of all other pears that need pollinators. Excellent small sweet fruit - the old 'honey' pear of Bohemia. Ripe end of Feb through March. Self-fertile, small tree, if you only have room for one pear, this is it! The bees love it too. From Bert Davies, Wellsford.



PEARS

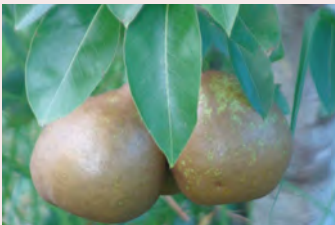
Triumph de Vienna on Quince BA29

Excellent dessert pear. Outstanding flavour, large and juicy. Ripe March, after Bon Chretien. One of the very best pears for flavour and texture, large brown russet. From Bert Davies, Wellsford. This was Bert's favourite pear (he made pear sandwiches with this one).

PEARS

Winter Cole on Quince C, Quince BA29

Small pear with russet skin and excellent flavour. Keeps well. Ripe late April/May.



OTHER FRUIT

Loquat



LOQUAT

Koanga \$11.50

Loquats are attractive evergreen trees with large leaves. It is one of the few subtropical fruit species within the Rosaceae family. Our loquat is a large thick walled sweet loquat, fully ripe early December. Loquat fruits can be eaten fresh off the tree or can be cooked.

Please note that from September 2022, planting loquat will not be allowed in the Auckland region.

Nuts



NUTS

Hazelnut \$12

Mixed from Butler (a classic cultivar known as being reliable and easy to husk) and Alexandra (a very strong cultivar with mixed nut quality, great for a fruiting hedge). Excellent for hedgerows shelter and nut groves. Require moisture to grow well.

Persimmon



PERSIMMON

Koanga \$12.50

Seedlings from an old, astringent persimmon at Koanga.

FOREST GARDEN SUPPORT TREE SEEDLINGS



SUPPORT TREES

Acacia Pravissima \$6.50

Acacia pravissima or Oven's Wattle is a woody shrub/ tree that grows up to 4m in height, it does well on heavy clay soils and is great for a subtropical forest garden situation. It is light and airy and can easily grow anywhere around heavy feeders, fix nitrogen, be chopped and dropped and also have flowers that feed the native and other beneficial insects, in particular some of the psyllids that we need! They handle a light frost but do not like heavy frosts so not an option in cold climates.



SUPPORT TREES

Alder Black (Alnus glutinosa) \$8.50

Broadly conical, deciduous. Vigorous growth and good form. Habitat beside rivers and will grow in very wet places. Tolerates salt winds better than the other alders. Good firewood crop to utilise wet ground. Timber durable under water. Height 20-25m.



SUPPORT TREES

Chinese Red Bud \$36

2 year old, over 1m.

Nitrogen fixer. Dwarf large shrub or small upright growing tree. Large light green heart shaped leaves turn bright yellow in autumn. A profusion of deep cerise pink pea shaped flowers stud the bare branches for an extended period in early spring. Ideal for small spaces, and urban gardens. Very beautiful trees.



SUPPORT TREES

Japanese Raisin Tree (Hovenia dulcis) \$11.50

Large, up to 10m, fast growing, attractive, hardy, deciduous tree. Can be used as emergent in forest garden situation. Excellent bee forage in December to January. Produces edible swollen stalks that are sweet like raisins. Can be eaten fresh or dried but are fiddly to use in any quantity. Good chicken forage.



SUPPORT TREES

Kākābeak or Ngutukākā (Clianthus maximus) \$8.50

A native plant which is endangered in the wild. Has usually red distinctive shaped flowers. Nitrogen fixer. Great in a forest garden once established. Is susceptible to slug damage, grazing and browsing. This is a beautiful pink flowered version from Wairoa.



SUPPORT TREES

Maple Boxelder, AKA Rocket Tree (Acer Negundo) \$6.50

A super fast growing maple that has wonderful colours in Autumn and is great for coppicing.



SUPPORT TREES

Chokeberry Black (Aronia melanocarpa) \$15

Multi-stemmed shrubs that grow to 3m and prefer moist to wet swampy forest ground, slow growing and hardy, the fruits are edible but best processed, they contain the highest known levels of anthocyanins. Ripe Jan, Feb.



SUPPORT TREES

Crab Apple Jack Humm \$18

2 year old, over 1m.

Red, heavy reliable crops, commercial pollinator variety. Very large red apples for a crab apple and can even be eaten fresh. Also used for jelly, cider, bird food and autumn colour. Ripe May.



SUPPORT TREES

Goumi (Elaeagnus multiflora) \$15

Elaeagnus multiflora Nitrogen fixer. Deciduous shrub growing to about 3m. Bees love the flowers. Some plants produce berries which can be eaten. Great as a forest garden support tree or in a hedgerow. Can be pruned for chipping or chop and drop. Copes with a wide range of soils.



SUPPORT TREES

Tree Lupin (Lupinus arborea) \$6.50

Nitrogen fixer, low shrub, 1.5m, covering the ground well, fast growing perennial mostly although it sometimes dies after flowering, self seeds and self protects young seedling coming up underneath it, yellow flowers all summer, seeds edible by poultry, stunning yellow in forest garden Spring to Autumn Great for biomass/carbon production in forest garden.

FARM FORAGE



FARM FORAGE

Oak (quercus faginea) \$12

A smaller, upright, conical, deciduous oak with leathery dark green leaves. Produces bountiful sweet edible acorn crops that can be used to feed pigs. Tolerates exposure, heat & dry conditions. Trims as a hedge. Height to 20m.

Berries



BERRIES
Boysenberry Hammer Springs \$22
Boysenberries are a cross between a blackberry and a raspberry and produce delicious berries that are high in antioxidants. They behave like blackberries and produce arching stems that can be tied to a frame. They do well in climates with mild winters and warm summers. Fruit mid summer.



BERRIES
Currant, Black \$22
Classic black currants high in flavour and nutrition, fruiting in Hawkes Bay Allow 1m. From the Henry Harrington Southland collection, which Henry collated from plants growing wild along railway lines along the tracks near Ohai, an old coal mining area and a trail the old goldminers used. Ripe December.



BERRIES
Currant, Koanga Big Red \$22
From the Henry Harrington Southland collection. Henry collected most of his berries along the railway lines travelled by the early settlers and gold miners. This is the largest of our red currants ripening in mid December.



BERRIES
Goji Berry \$13.50
Edible berries, superfood, thin branching habit, hedge forming bush precocious bearers. 3-4m, ripe January.



BERRIES
Raspberry, Black \$22
Non suckering well known ancient cultivar sent to Koanga by a member in the South Island, 10 years ago. The fruit is darker than Lake, and is ripe a little later and longer. The vines grow tall but can be tipped to keep down to 1m if tied to wires in loops. Must have old wood taken out each winter and all new vines tipped. Black raspberries are reputed to be the most nutritious.



BERRIES
Raspberry, Lake (Red) \$22
Classic red raspberries that sucker strongly like the yellow one. Best in a largish Food Forest situation where they can form a raspberry patch. From Louise Shaw 2006, originally from the central north Island lakes area. 1.5m, ripe December and again February.

BERRIES
Raspberry, Yellow \$22
Outstanding raspberry, was well known all over New Zealand 100 years ago. Average size, pale yellow fruit, one of the best eating raspberries, with a strong Autumn crop following a Summer crop. 1.5m, ripe December. Ex Canterbury/Lower Hutt, NZ Heirloom.



BERRIES
Worcesterberry, Henry's \$22
This Worcesterberry came from Henry Harrington's grandparents (de Malmanche family), who were early French settlers near Akaroa. It is a cross between a gooseberry and a black currant, and grows like a vine, so needs espaliering against a wall, a south wall is great. If you espalier them like an apple you can then hang bird netting over the vine when the black sweet berries are ripe, the berries sit for weeks once ripe if covered. Excellent flavour. Ripe February will hang on bush if shady until late March.

Figs



FIGS
Black \$22
Small dark skinned, pink-fleshed fig, creamy texture, very sweet skin. An early fig, best for marginal areas that may experience cooler summer, ripens March. Allow 4-8m (depends on pruning). Ex Auckland, NZ Heirloom.



FIGS
Hyndemans \$22
Small figs with a purply skin and silky pink centre, two crops if you don't prune it the first around Xmas, the next in March/April. Very good for drying. Allow 4-8m (Depends on pruning). Ex Kaipara, Hyndmans original farm, Kaiwaka.

Grapes



GRAPES

Albany Surprise \$18

Heavy cropper in mid season. Produces medium sized bunches of large, sweet, juicy, aromatic and spicy bluish-black berries with a jelly texture. Hardy and disease resistant. Suitable as a table grape or for wine production. Came to us from Mavis Smith of Totara House, Matakoho.



GRAPES

Bishop Pompallier \$18

Large black grape, sweet with full flavour, excellent as dessert grape. Disease resistant, ripe in March. From Bishop Pompallier's original early orchard plantings, Kerikeri, Northland.



GRAPES

Isabella \$18

Small black grape. Dry (not really juicy) and sweet with a good flavour. A very old Northland Grape that came in with the early settlers on the boats via America. This is one of the oldest grapes in New Zealand.



GRAPES

Niagra \$18

Excellent choice for the organic home gardener. Very early white dessert grape, sweet with a lovely mild flavour. Ripens early March. Easy to grow with reliable heavy crops. NZ Heirloom, in our collection since 1985.



GRAPES

White Dalmatian \$18

Came to us from an old Dalmatian orchard in Kohukohu. Very sweet, excellent flavour, slightly later than Niagra. Ex Kohukohu, came from the same old Dalmatian orchard as Black Dalmatian.

Pomegranate



POMEGRANATE

\$25

2 year old, 400 x 400. Small deciduous tree to 3m maximum. Requires a hot full sun position. Mulch to prevent weed competition in early years. Produces highly renowned fruit. The quality depends on heat when ripening.

Quince



QUINCE

Chinese Quince (*Pseudocydonia oblonga*) Seedling \$18

Attractive small tree up to around 3 metres tall. Produces large, very fragrant quinces that, like other quinces, are not eaten raw but are cooked and used to make paste, jam or jelly. Trees are ornamental with good autumn colour.

KOANGA FRUIT TREE PROPAGATION MATERIAL

We have had a lot of requests for propagation materials and are pleased that this year we are able to offer them to enable you to grow your own fruit trees. They will be supplied in the winter and will be available to pre-order from 31st May.

We will have available:

- * Apple rootstocks
- * Quince rootstocks (for grafting pear onto)
- * Peach stones to grow your own rootstocks for the following year or to grow as seedlings
- * Marianna and myrobalan cuttings to grow as stone fruit rootstocks for the following year
- * Apple, pear, plum and peach scionwood for grafting onto rootstocks (although you will need to have peach or plum rootstocks as we don't supply those for immediate use, only cuttings to grow into rootstocks for the following year).
- * Grapes, figs and elder will be supplied as cuttings as will support species such as poplar and willow.

These items will be available to order from 31st May. Details will be found here on our website <https://koanga.org.nz/gardens/product-category/propagation-materials/> and we will announce that they are available to order through social media and our newsletter. Please do not contact us in advance of them becoming available. There will be no pre-ordering available until they are listed.

Please do not combine orders for propagation materials with orders for other items (fruit trees, seeds, books etc) as they will be packed and sent separately so incur a separate freight charge.



CUTTINGS

We can supply the following as cuttings for you to root and grow your own tree.

Will be available to pre-order from May 31st along with other propagation materials.



CUTTINGS

Elderberry Adam \$9 for 3 cuttings | Fast growing, large bunches of black berries, even in warmer areas of New Zealand. Highly medicinal fruit and flowers. Loves wet soils.



CUTTINGS

Basket Willow Collection \$20 for 6 cuttings each of 4 varieties. These are professional basket willows, and will grow to have different color, length, flexibility, and so on. willows like wet soils and the more water available will result in more growth, plant in 30-50cm spacing to create long upright growth, and harvest during winter.

- Common Osier x 6 (salix viminalis) — Gold
- Giganta x 6 — Yellow
- Purple Willow x 6 (salix purpurea) — Red/Purple
- Unknown x 6 — Yellow



CUTTINGS

Egyptian Willow \$9 for 3 cuttings

We have found that this willow is the most resistant to the large black aphid that is attacking our willows today, and it is the willow best suited to use as firewood, because it has very little branching, only good strong length of thick wood easily cut up, and as well as that an excellent bee forage because the catkins are among the first Spring pollen available for our bees.



CUTTINGS

Willow Fodder, Bee and Ramial Collection \$30

Contains a mix of willows suitable for use as animal fodder, as bee fodder and to cut to make ramial wood chips. Mix includes:

- Egyptian Willow x 3
- Japanese Fodder Willow x 3
- Willow Moutere x 3
- Willow 2 x 3

BIOFERT RECIPE

There are many variations of biofertiliser recipes with common ingredients and some differences. This recipe is the one that Geoff Lawton at the PRI was using when Kay was visiting, and the recipe came originally, as did many other variants, from farmers in Central America who could not afford to buy commercial fertiliser.

Bio fertiliser is made using an anaerobic process which extracts and chelates nutrients, vitamins and hormones for quick absorption by plants through their stomata when applied as a foliar spray. This stimulates photosynthesis which allows the plant to convert more sunlight into exudates that feed the microorganisms in the soil which in turn release more nutrients for the plant.

Ingredients (For a 200 litre barrel)

- Half a fresh rumen or 50 litres of very fresh manure from a pasture fed organic cow
- 6 lts of fresh non pasteurised organic full cream milk
- 2 lts of molasses
- 3 kgs wood and bone ash
- ½ kg fresh bakers yeast (we used some of our sourdough starter)
- 1-5 lt worm juice
- 10 lts dry kelp powder (used for cattle feed)
- 2 kg rock dust (all-rock)
- 1 kg rock phosphate
- Non chlorinated water

Equipment

- Food grade plastic drum with a lid as big as the diameter of the barrel and with a metal clamp to seal it air tight
- 1 meter of transparent hose
- Rubber grommet to fit the hose and seal it as it goes through the barrel lid
- 1 meter of wire or twine (to hold the bottle at the end of the hose)
- One empty 2 lts plastic bottle

To prepare the barrel you must fit the pipe through the lid. There are different ways to do this but make sure you get an airtight fit using either a rubber grommet or some kind of irrigation gasket.

1. Put the manure or rumen into the barrel first to avoid it splashing everywhere.
2. Dissolve the molasses well in water.
3. Add the molasses and all of the other ingredients to the barrel.
4. Mix well using a long stick and continue mixing while filling the barrel with water.
5. Leave around 20cm of space at the top of the barrel to prevent blocking the air lock.
6. Put the lid on and make sure lid is airtight.
7. Use a plastic bottle filled with water to put the hose end in to create the air lock. Hang the bottle from the barrel or stand it on the floor.
8. Leave the barrel in the shade for at 6 to 8 weeks to ferment peacefully.

The final product should smell strong but certainly not putrid, it should be amber or light brown but not purple or very dark brown (will smell bad anyway), there is typically a skin on top of the liquid. If you check with pH meter and it should be around 4.5 at pH 4 it is stable if above pH5 is may require more time to mature.

Dilute 1 litre of biofert into 10 litres of water to use in a sprayer or as a liquid feed. Spray early in the morning or late in the afternoon when the sun is off the plants.



Life Members

Susan Adam	Faye Fausett	Kay Langdon	Doug & Jane Russell
Guillermo Aldao-Humble	Dene Fowler	JaneLenting	Te Awhina Savage
Lorna Alden	Noeline Gannaway	Chris Livesey	Alana Savage
Peter Alexander	Kirsten Garrabrant	Ingrid Losch	Robyn Scanlen
Diana & Justin Anderson	Monika Geister	Hugh Lusk	Dick & Bertha Schoneveld
Anita's Shop	Claire Goodwin	Pat Mabbett	Rachel Scott-Wilson
Leigh Astill	Wayne Gordon	Pauline Macdonald	Roy Shackleton
Banyan	Simon & Stacy Griffiths	Anne MacLennan	Pam & Brett Shand
Barbara Baragwanath	John Griggs	Alistair McKay	Yvonne Shanks
Stephen Batsch	Jo Hainsworth	Jan McKenzie	Virginia Sharplin
Bedford Mackay	Joanne Hamlyn	Tania McLean	Sandra Sheard
Family Trust	Rob Hammington	Suzanne & Andrew McLeod	Suzanne Stelmock
Sonya Bennett	BT Hammond	Fiona McQueen	Richard Stoks
John Billings	Jaquie Hardinge	Nicola Mechen	Matt & Debbie Sutcliffe
Nick Blennerhassett	Stephen Harris	Jackie Mills	Rox Sutherland-Valentine
Helen Boyd-Alspach	Melissa Hartley	Chris Morrison	Chas Symes
Richard Burgess	Sonja Hay	Susan Morrison	Jenny Tait
Donna Campbell	Grace Heart	Kathrina Muller	Lisa Talbot
Fiona Campbell	Joanne Hedge	Jo & Bob Munro	Elaine Taylor
Brian Cartmell	Wolf Hiepe	Elisabeth Nairn	Lynelle Taylor
Patrick Corrieri	Vivienne Hill	Annette Nixon	Grace & Iohangawai Te Pahi
Gwenda Costello	Liz Hodgson	Richard Noke	Phyllis Tichinin
Grant Croft	Barry Hutchings	Pip Norvell	Denise Twentyman
Emma Darke	Rochelle Hutchinson	Alison Nuttall	Martin Ulenberg
Fiona Davidson	Ruth Illsley	Lesley O'Callahan	Melita Van Wordragen
Karyn Davis	Philippa Jamieson	Lauren Overend	Chris & Julene Wake
Maggie Dawson	Tricia Joe	Craig Palmer	Nate Walker
Bryony De Boer	Sajini Jones	Viola Palmer	Derell Walker
Mark Denekamp	Murray & Rob Joyce	Marco & Teresa Partridge	Yannick Walrelam
Robyn Diamond	Kahukuri Bloodstock Ltd	Gina Payne	Dave Webster
Cherry E Dibley	Elizabeth Keet	Jane Penberthy	Morley West
Inge Diks	Michael Kelly	Samantha Penman	Yvonne & Jim Wheeler
Greg Dillon	R Kent	Lucy Petrie	Maara White
Natalie Dromgool	Jenni Kent	Phoenix Organics	Makayla Wilde
Sabine Drueckler	Jennifer Kerr	Jenny Quilliam	Charlotte Wilderland
Robyn Dyer	Susan King	Randell, Tutton & Bell	Tania Williams
Mavson & KA Early	Lyn & Fred	Jan Rata	Julia Williams
Emily Eile	Kingdon-Sanders	Betty Rawley	Alison Wilson
Bridget Elworthy	Wendy Klink	Carla Roberts	Ritz Wood
Angela Emery	Jude Knights	Daphne Ross	Richard Worthington
Rona Ensor	Pat Knuckey	Kirsten Rudolph	Rachel Yeats
Susan Erskine	Heike Koester	Annina Rueegger	
Brett Fallen	Susan Lane		

Seed Collections

These seed collections have been developed to encourage children and gardeners of all ages to be inspired to garden. Presented in an envelope printed with artwork by Franzi Corker, these collections make wonderful gifts. They include written material to help you get the most from each collection, and offer a chance to grow some of New Zealand's most rare heritage seeds, from the Koanga Institute collection.



Beginner Gardener Seed Collection, 40 sqm salads, stir fries, soups & stews | \$195

Take your family another step toward future food security! This seed collection is specifically designed to go with our *Koanga Beginner Gardener Booklet* (not included). Full instructions for every step of the way in words, diagrams and charts, are in the booklet. At supermarket prices the value of the food grown from these could be \$2,300!

Collection Contains:

- 47 packets of seed, including Barley Hulless Milmore Carbon Crop pack. All 47 packets of seeds in this Collection are the seeds of our ancestors, saved, grown and selected to nourish people.
- The Garden Action Plan which contains a lot of useful information to support you to do a good job of this garden.
- The Crop Rotation Planner shows you when to aim for having your crops in the garden, when to expect them to be out, and what will follow so that you get a sense of the seasonal rhythms.
- The Garden Map, which will show you how to plant these vegetables in a way that means you have 10sqm of heavy feeders, 10sqm of roots/legumes and 20sqm of carbon/compost crops.



Children's Garden Collection | \$41

This collection contains the seeds a wide mix of all those plants that get children excited in the garden. We include hut building instructions using flowers and the vegetables included are exciting shapes and colours as well as easy and fun to grow - favourites for young gardeners.

Collection Contains: Sunflower Giant Russian (for making children's huts), Morning Glory (for making children's huts), Zinnia Chromosia (to attract the butterflies), Cucumber Green Apple, Kiwano, White Scotch Runner Bean, Te Anau Salad Pea, Mini Black Popping Corn, Magenta Spreen Lamb's Quarters.



Cottage Garden Faery Collection | \$38

A special collection of heritage Cottage Garden flowers that are perfect for creating a space that feels really special place to remember our grandmothers, and to tangibly feel the garden faeries there as well. From my travels around old gardens it is clear to me that the flower gardens of our ancestors who came to this land in the early days were largely about reminding them of family and place.

Collection contains: Poppy Fire Circle, Foxglove, Larkspur Early Grey, Nicotiana Woodlands, Aquelegia Grandmother's Garden, Hollyhock Muriwai, Sweetpea Heritage Mix.



Rainbow Summer Salad Collection | \$38

This collection of summer vegetables will ensure you have a load of colour, fun, flavour and nutrition in your salads this summer. We include some exciting recipes giving you some traditional ideas for using these veges in Summer Salads.

Collection Contains: Port Albert Cucumber, Magenta Spreen Lamb's Quarters, Chioggia Beetroot, Finger Lettuce, Genovese Basil, Juwarot Carrot, Rainbow Cherry Tomato Mix, Sorrel.



Kiwi Superfood Collection | \$41

Kiwi's do not need to go to the Health Shop and spend money on imported products, to be able to eat 'super food'. We can all grow 'superfood' in our own back yards. There are two critical ingredients:

1. The right seeds.
2. The right growing conditions.

The vegetables and fruit you can grow with these seeds all have outstanding nutritional qualities and the details about each are in the Collection for you. We have included both Summer and Winter crops to create a year of fun and discovery and home grown superfood!

Collection Contains: Borecole Kale, Dalmatian Cabbage (Collards), Souters Watermelon (Navajo Storage Melon), Magenta Spreen Lamb's Quarters, Wild Crafted Golden Purslane, Dalmatian Parsley, Purple Sprouting Broccoli, Cape Goosberries.

NZ Heritage Rare Seeds Collection | \$45

This is a very special collection of rare vegetables that you will not find in any other seed catalogue. They are some of the special vegetables that have come to this land with our own ancestors and were valued enough by the last few generations that they actually survived, to be available today for you through the Koanga Institute and the generosity of our members, and our seed growers who are the life blood of our organization.

This collection comes with the stories of each seed included.

Collection Contains: Dalmatian Pea, White Scotch Runner Bean, King's Gold Tomato, Avon Resister Parsnip, Dalmatian Pean, Alma Tomato, Red Seeded Broadbean, Port Albert Cucumber, Kaanga Ma Maize, Zimbabwe Squash.

Winter Vegetable Companion Collection | \$29

This collection of heritage seeds from the Koanga Institute Collection provides vegetable companions for your winter garden. You'll find that the energy of the garden really changes with these beauties growing freely amongst the vegetables. Flowers attract bees to help with pollination.

All of our vegetables have evolved alongside other plants, in complex relationships with the environment around them. Companion plants usually come from the same geographical region as the vegetables they grow alongside, they have co-evolved together and create supportive environments for each other. It is easy to imagine a plant being happier with a few of his friends around, creating a familiar, supportive environment.

Collection Contains: Calendula Mix, Allysum, Chamomile, Heartsease, Snap Dragon Yellow, Nasturtium.

Wild Fermentation Collection | \$34

This collection of vegetables is designed to inspire you to preserve your excess from the garden with the technique of lactic fermentation. Recipes included.

Collection Contains: Dekka Cucumber, Ohno Scarlet Turnip, January King Cabbage, White Icicle Radish, Watermouth Tomato, Austrian Yellow Lloberricher Carrot, Henry's Chinese Cabbage.

Winter Salad Collection | \$38

This collection is great for beginner gardeners - it will ensure that you have fresh nutritious produce for winter salads over many months, with a variety of colours, flavours and textures. Includes some tips for garden preparation.

Collection Contains: Celery Nutty, Winter Lettuce, Ohno Scarlett Turnip, Asian Greens Mix, Corn Salad Strap Leaf, White Icicle Radish, Oxheart Carrot, Rocket.

Nourishing Greens | \$41

This is a special collection of seeds from the Koanga Institute! A tasty collection of wild greens and highly nutritious garden greens to get the minerals and vitamins we all need each day, gotta love your greens!

Collection Contains: Puha, Purslane, Upland Cress, Endive Indivia Scarola, Corn Salad, Dalmation Cabbage, Borecole Kale, Magenta Spreen Lamb's Quarters, Red Orach.

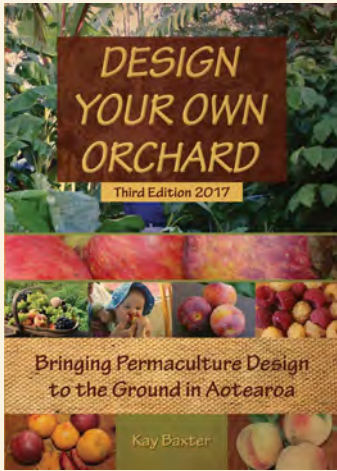
Bequests

By making a bequest to the Koanga Institute you will be supporting us to continue our important work. This gift is one that you may not be able to make during your lifetime, but will ensure that our heritage plants are available for future generations as a resource for cultivation and genetic diversity. The Institute relies on generous contributions, and our membership fees. In these changing times it feels very important that we continue to flourish and grow. We are very good at making a little money go a long way. Please do not hesitate to contact us if you would like to know more. Our vision is to be able to save all of our NZ heritage seeds so that they can become the seeds our future food is grown from.

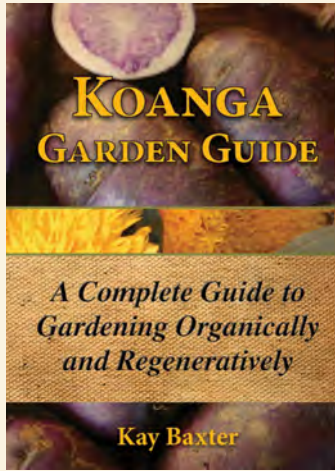
Email officemanager@koanga.org.nz



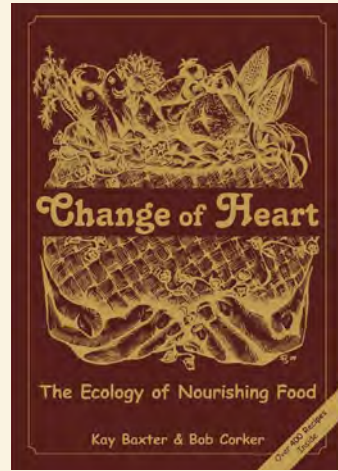
Koanga Bookshop for Regenerative Living



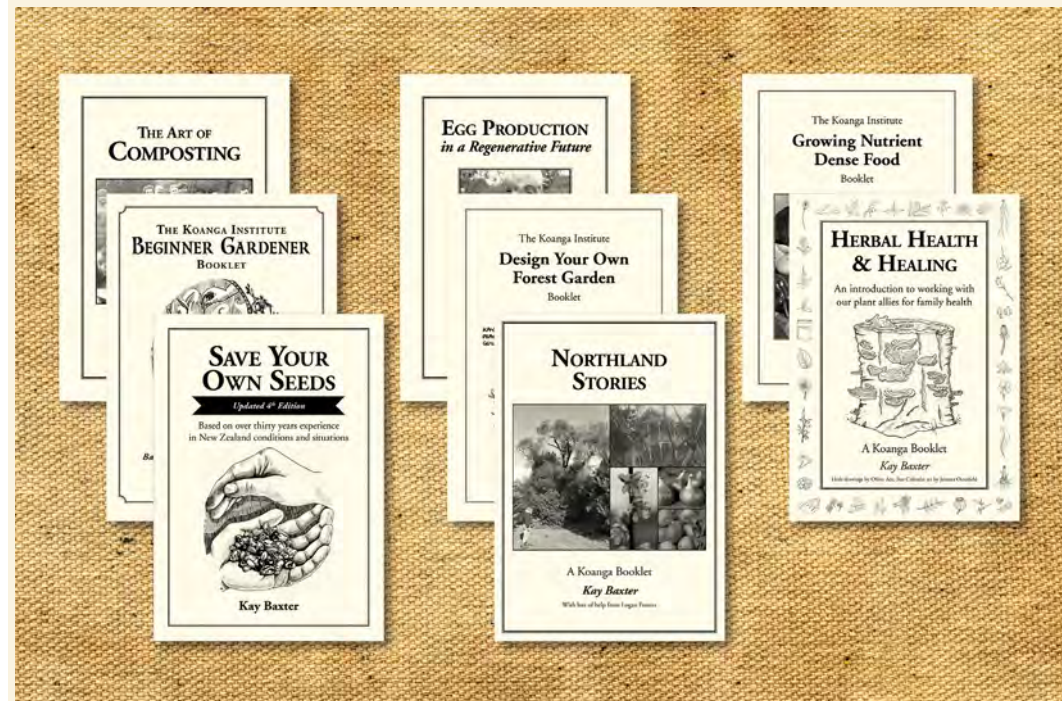
Design Your Own Orchard
Third Edition 2017
Kay Baxter



Koanga Garden Guide
Third Edition 2015
Kay Baxter



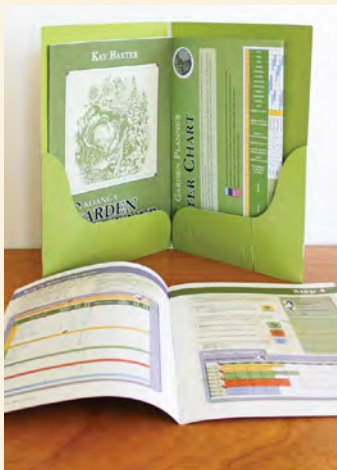
Change of Heart: The Ecology of Nourishing Food
Kay Baxter & Bob Corker
Includes over 400 recipes!



THE KOANGA BOOKLET SERIES

**Beginner Gardener • Design Your Own Forest Garden • How To Grow Nutrient Dense Food
Save Your Own Seeds • The Art of Composting • Egg Production in A Regenerative Future
Northland Stories • Herbal Health & Healing**

(All booklets also available as e-books)



Koanga Garden Planner
Kay Baxter

If you want to get serious about your home garden and take permaculture to the next level, this is for you!



Koanga Garden Planner Master Chart
Kay Baxter
The Master Chart sits at the core of our Garden Planner and is now available for the first time as a stand alone item. The Master Chart contains decades of accumulated crop knowledge in an easily accessible format.



The Koanga Seed Saving Master Chart
Kay Baxter
This is a beautiful wall chart, to support you at a glance, to develop your seed saving skills.



Heritage Vegetable Selector Charts

Beautiful and useful Heritage Vegetable Selector Charts designed to help you select which varieties of heritage vegetables to plant to meet your needs and conditions.

Available Charts: *Bean, Corn, Pumpkin & Tomato*