



Central Southland
Seed Collection
Calendar

Greetings!

From AB Limes Environment Team!

You might be wondering at this stage what business AB Lime has growing native plants? Historically, this has not been our bread and butter, so, let me start by giving a wee bit of background on how this all came about...

The year was 2019... AB lime purchases and plants thousands of native trees each year to enhance the environment onsite, retiring areas of dairy farm back into natives and also complimenting "Motu Ngahere" a remnant 70ha native forest block located on the AB lime property.

There were several factors as to why AB lime started looking at growing their own trees. Ecosourcing - the main factor was that we wanted to grow trees that were local to the area and sourced from the property.

- Size of trees - trees purchased were often quite small and required much more maintenance when planted. Having the facility and space to grow trees in a nursery to over knee height has meant less maintenance and a better success rate.
- Cost - trees could range in price from \$3.00 to \$10.00 each, which was not expected to be an issue. Over the five years we have been growing, we have found that doing it ourselves is much cheaper, even with including the initial infrastructure costs.
- Sourcing plants - The amount of plants we needed were not always available when we needed them - NOW NOW NOW! We often could not purchase the amount of plants we needed and would need to order for the next year.

In the beginning, we had no idea what we were doing, but we did have the passion for native plants and some key identification skills. Visiting other nurseries around Southland and learning from our fantastic network of nurserymen and women was key in becoming successful at growing our own plants. Now we grow over 10,000 native plants a year.

Over the years, we found we could grow some trees really bloody well, and others... not so well. This wee booklet includes seed collecting and sowing information on all the trees and plants that we now know we can grow well and are local to the Central Southland area.

Happy growing team!!

January - February



Flax - Harakeke - *Phoridium tenax*

Wait until the seed pods are black and dry and can be easily pushed open between your thumb and finger. Flaky black seeds will fall from the pod when they are ready for collecting. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. When repotting do not worry about pulling out single individuals and instead pot a clump together. Re-pot ready at 4 - 5cm high.

Carex Variety's

Varieties include *secta* and *virgata*; however, other carex varieties also seed at this time. It is hard to distinguish simply from observing between the flower stage and seed collection stage. The seeds are ready to collect when they fall easily into the palm when pulled between thumb and forefinger from the seed head. The seed is a small brown nut shape and are bunched together on the plant at the end of a long blade. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. When repotting do not worry about pulling out single individuals and instead pot a clump together. Re-pot ready at 4-5cm high.



ToeToe - *Austroderia richardii*

The seeds are ready to be collected when they freely fall from the fluffy flower head and do not take much effort to pull off. It is hard to distinguish between flower and seed otherwise. Native ToeToe and invasive pampas grass look very similar. ToeToe flower and seed earlier than Pampas grass and ToeToe flower heads "curl their toes". Whereas with Pampas grass, the flower heads stick straight up. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. When repotting do not worry about pulling out single individuals and instead pot a clump together. Re-pot ready at 4-5cm high.



Tussocks

We grow red tussock and silver tussock. However, other tussock varieties also tend to flower and seed at this time. The seeds are ready to be collected when they freely fall from the fluffy flower head and do not take much effort to pull off. It is hard to distinguish between flower and seed otherwise. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. When repotting do not worry about pulling out single individuals and instead pot a clump together. Re-pot ready at 4-5cm high.



Carex

Tussocks



Flax



Toe Toe



March - April



Koromiko - *Hebe salicifolia*

In summer, purple and/or white flowers turn to dry brown seed heads from the end of February through to April. The seeds should fall into your hand from rubbing the dry seed heads in your palms.

The seed is tiny like grain of sand. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist.

Re-pot ready at 4-5cm high.

Wineberry - Makomako - *Aristotelia serrata*

Green berries turn fleshy red/purple then will turn black when ready to harvest. The fleshy fruit needs to be removed from the seeds or the seeds will begin to rot. Fill a bucket or sink with water and grab a kitchen sieve. Put the fruit in the sieve and gently press the fleshy fruit through the sieve. Wash the flesh away from the seeds through the sieve, as it will catch the seeds. Dry seeds on a paper towel. Sow straight away by sprinkling across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. If you do not wish to sow straight away, mix in some dry peat in a zip lock bag and freeze.



Mingimingi - *Coprosma propinqua*

Fleshy blue to white fruit when ready to harvest. The fleshy fruit needs to be removed from the seeds or the seeds will begin to rot. Fill a bucket or sink with water and grab a kitchen sieve. Put the fruit in the sieve and gently press the fleshy fruit through the sieve. Wash the flesh away from the seeds through the sieve, as it will catch the seeds. Dry seeds on a paper towel. Sow straight away by sprinkling across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. If you do not wish to sow straight away, mix in some dry peat in a zip lock bag and freeze..

Ribbonwood - *Plagianthus regius*

Tree with small jagged leaves. White/yellow to green flowers will dry off and seeds will be easy to pull from bunches ready for harvest. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. When looking after in a nursery do not be alarmed if young trees lose their leaves in winter.



Broadleaf - *Griselinia littoralis*



Big glossy green leaves with yellow stalks. Green fruit will ripen to a dark black when ready to collect. The fleshy fruit needs to be removed from the seeds or they will begin to rot. There is not much flesh and the seed is quite large. Fill a bucket or sink with water and grab a kitchen sieve.

Put the fruit in the sieve and press the fleshy fruit through the sieve. Wash the flesh away from the seeds through the sieve, as it will catch the seeds. Dry seeds on a paper towel. Sow straight away by sprinkling across some seed raising mix and sprinkle a light coating on top of the seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot at 4-5cm high. If you do not wish to sow straight away, mix in some dry peat in a zip lock bag and freeze.

Kaihikatea - *Dacrydium dacrydioides*

Often hard to collect the fruit and seed as trees are so tall. Collect seed from the ground or place a sheet under the tree when fruit is ripe. Ready for collection when fruit ripens from green to bright red. The seed is actually on the end of the fruit, not inside it. Pick off the part with the seed and fill a bucket or sink with water and grab a kitchen sieve. Put the fruit in the sieve and press the fleshy fruit through the sieve. Wash the flesh away from the seeds through the sieve, as it will catch the seeds. Dry seeds on a paper towel. Sow straight away by sprinkling across some seed raising mix and sprinkle light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. If you do not wish to sow straight away, mix the seed with some dry peat in a zip lock bag and freeze. Kaihikatea are slow at germinating and growing - don't be disheartened if they take a while.

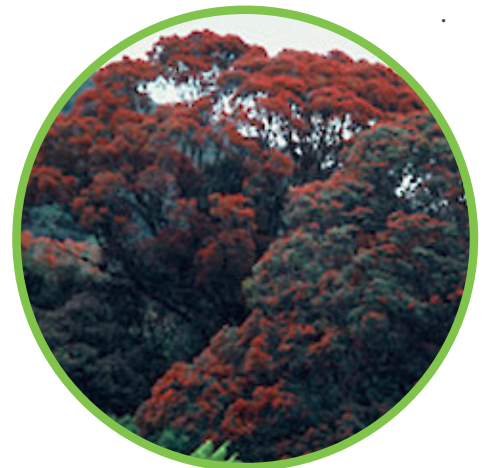


Black Matipo has round green seedpods, which dry to black and split open to reveal many small sticky black seeds. Collect the black seedpods and remove the seeds. Tarata has smaller bunched green seedpods, which dry to black but often do not split open. Sow straight away by sprinkling across some seed raising mix and sprinkle a light coating on top of seeds. This will be difficult as the seeds are very sticky. You can wash them with warm water and dishwashing liquid to remove some of the stickiness - rinse off the soap thoroughly. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. If you do not wish to sow straight away, mix in some dry peat in a zip lock bag and freeze.

Pittosporums

Southern Rata - *Metrosideros umbellata*

Brilliant red flowers will die back and seedpods will form. Hold a bag underneath seedpods and shake. The seed is hair like, dry and tiny. Rata seed does not store well so must be sown straight away. Rather slow growing in the nursery. Very tall trees so can be difficult to obtain seed. No special treatment for processing seeds - simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high.



Rohutu - *Lophomyrtus obcordata*

Small leaved shrubby tree with pale bark which peels much like manuka. Round dark red fruits will ripen in April - May and are ready for collection when they are dark, soft and easy to squeeze the seed out. The fleshy fruit needs to be removed the seeds or the seeds may begin to rot. Fill a bucket or sink with water and grab a kitchen sieve. Put the fruit in the sieve and press the fleshy fruit through the sieve. Wash the flesh away from the seeds through the sieve, as it will catch the seeds. Dry seeds on a paper towel. Sow straight away by sprinkling across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. If you do not wish to sow straight away, mix in some dry peat in a zip lock bag and freeze.



Wineberry

Ribbonwood



Koromiko

Mingimingi

Broadleaf

Black Matipo



Kaihikatea

Rohutu

May-Anytime

Cabbage Tree - tī kōuka - *Cordyline australis*

Large clustered white berries are ready to be collected in May. Fill a bucket or sink with water and grab a kitchen sieve. Put the fruit in the sieve and press the fleshy fruit through the sieve. Wash the flesh away from the seeds through the sieve, as it will catch the seeds. Dry seeds on a paper towel. Sow straight away by sprinkling across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high. Cabbage tree seed does not keep well and sowing fresh is best.



Manuka - *Leptospermum scoparium*

Brilliant white to pink flowers will die back and seedpods will form. It takes a long time for the seedpods to dry and open as seed pods can develop many months before. Place seed pods on an open container in a warm spot to promote drying and releasing of seed. Seedpods are ready in late June to July. Hold a bag underneath seedpods and shake. The seed is hair like, dry and tiny.

Very fast grower and good strike rate. No special treatment for processing seeds simply sprinkle across some seed raising mix and sprinkle a light coating on top of seeds. Gently push down on top gently to create an even surface to stop water pooling. Keep moist. Re-pot ready at 4-5cm high .

Kowhai - *Sophora microphylla*

Seedpods tend to stay on trees year round so dried seeds can be collected and sown at any time. Kowhai is a tricky one as sowing without any seed prep can often yield poor strike rates. Everyone has different methods of processing the seed. Brad at AB Lime has tested all the ways to process seed he has heard about and the two methods with the top strike rates have been 1). Sandpaper each seed gently down to the white or 2). Nip a corner off the seed with nail clippers.



Manuka



Cabbage Tree

Kowhai

Right Plant, Right Place, Right Purpose

Backyard
Slope
Drainage
Waterway
Shelter Belt
Free Draining
Wetland
Creek
River Bank
Gully Soil Paddock
Sunlight type
Riparian
Hillside

Step 1

So... you have identified an area which could do with some native plantings. The first step is to identify and describe the area; for example is the area against a creek (riparian zone), a soggy wet corner of a paddock (potential wetland), or is this a shelterbelt area with good free draining soil and pastoral growth? It is good to look at factors such as daily sunlight hours and also soil type and drainage.

Step 2

if you are going to plant this area, ask yourself what you would like this area to achieve when fully established. For example, its purpose - i.e. to reduce nutrient loss to waterways, to increase biodiversity, to provide shelter for stock, to provide food and habitat for native birds and bees or carbon sequestration? Don't limit yourself to just one goal! Planted areas can provide many benefits and eco-services

Kapuka
Coprosma
Mingi Mingi
Flax
Cabbage Tree
Hebe
Toe Toe
Totara
Koromiko
Broadleaf
Pittosporum
Tussock
Kanuka

Birds Bird Song Shelter
Food Nutrient Uptake Bees
Flowers Sediment Control Lizards
Fish Erosion Control Shade
Wetland Biodiversity Habitat
Aesthetical
Trees

Step 3

From your survey of the area, make sure to choose the right native tree species to plant - that which already grows well in your region along with hardy species that are good for first establishment. Prep the area for your plants by removing weeds and stock proofing.

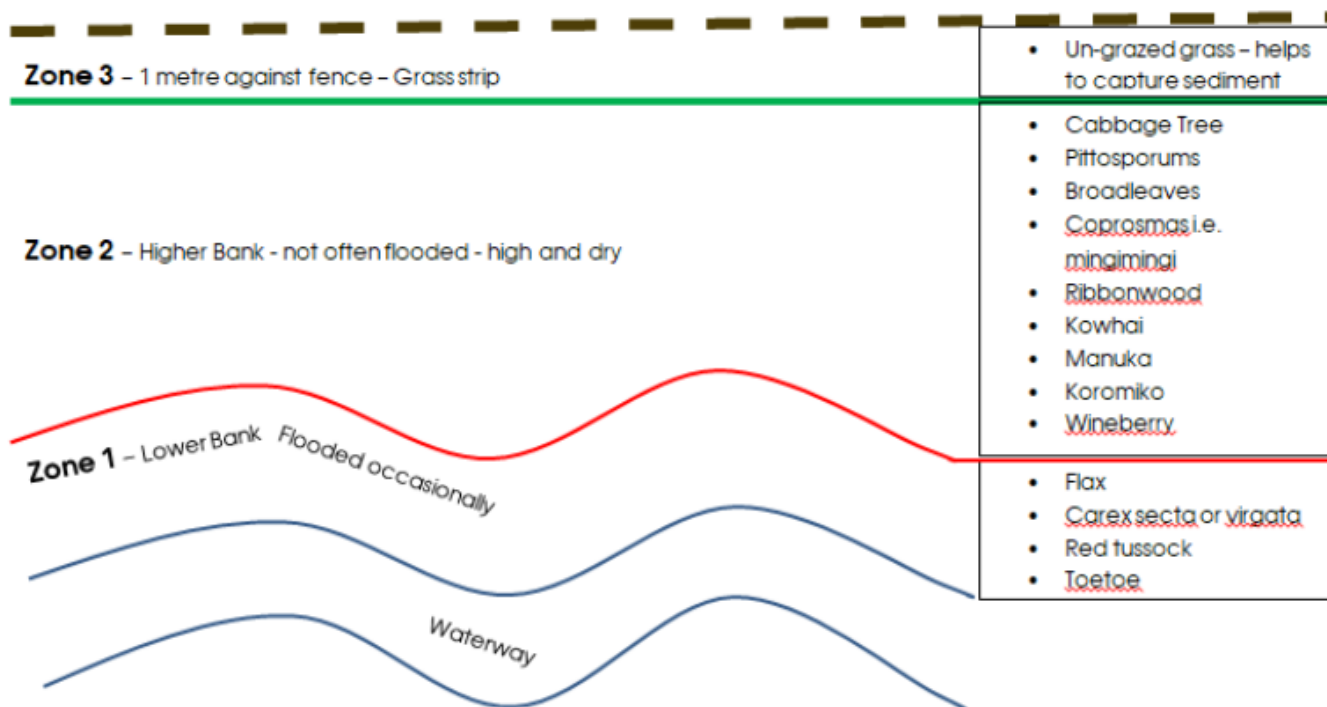
Establishment Plants

Common Forest establishment species - flax, toetoe, ribbonwood, manuka, pittosporums, kowhai, koromiko, broadleaf coprosma, broadleaf grisilinea, wineberry, mingimingi, tussocks, cabbage tree.

Common Wetland establishment species - Carex varieties particularly secta and virgata, flax, mingimingi, cabbage tree, toetoe, red tussock, Kowhai, koromiko.

Riparian Planting

Riparian plantings consist of different zones. The different zones are determined by their proximity waterways and fence lines and how often the plants may be underwater for. Water tolerant plants are effective on the lower bank zones. *Carex secta* and toetoe are good choices as they can survive being underwater for a few days during flooding. Plant taller trees and shrubs on the higher bank. Leaving a 1m rank grass buffer against the fence helps to slow down sediment-laden runoff.



Maintenance

Regular maintenance of plantings is key to their survival. The amount of maintenance depends on the size of the plant and the weeds and other plants it is trying to compete against, for example-rank grass. Generally a weed whack and spot spray around the tree in Spring, Summer and late Autumn will see a tree right for the year and benefit its growth and success. Maintenance should continue until the plant has grown well above its competing plants such as tall rank grass.