# Te Wairua o Kere

## KELLYS CONSERVATION FOREST (SNA 113) 2020-2025





## **Site Description**

Kellys Conservation Forest is a17 hectare site at 100, Enner Glynn, Nelson City. It includes approximately 2.7 hectares of original pre European lowland forest containing many rare and unusual flora and fauna, giving it a SNA status with a 'high rarity' score. The balance of the area in covenant is fully replanted (1986-2022) and is full of naturally regenerating native species. There is a natural wetland just north of the SNA. The area is protected in perpetuity by a Department of Conservation covenant. See map page 13.

#### Background

Our community project has been offically running for over 37 years. During that time we have increased the size of the forest area six fold, clearing a whole gully packed with head high gorse covered with blackberry, old man's beard and passion fruit vines, and turning the hillsides and pastureland on either side, above and below the mature bush into conservation land.

This area and others are now all planted out, have trails, bridges, picnic areas, lookouts and seats all through it plus a shadehouse where we propogate ecosourced seeds to grow and replant in the new areas.

The area provides a highly valuable and a unique environment for the Nelson community to be actively involved in conservation, education and recreation. Over the past 36 years it is estimated that over 100,000 volunteer hours have gone into the project and that it has had over 50,000 visits.

The forest is widely used across the community. Active education and training feature highly in its use - local schools, kindergartens, community groups (such as Scouts) and the Nelson Marlborough Insitute of Techonology (NMIT) Conservation Rangers, Maori Rangers and NMIT Horticultural students use the area as part of their course work. Part of the distinctive use of the area is its intergenerational engagement. We are seeing parents who planted as school children, who are bringing back their own children to plant.

In addition to those listed above, usage of the area varies and includes but is not limited to;recreational walkers, hospice, ecological studies, community events, family recreation and education.

Please see project pamphlet attached (Appendix 2). The project featured on Country Calendar – episode 36, November 2020. Visit Facebook @kellysconservationforest

Committee Members/ Advisors	Role and delegated area of responsibility	
Lindy Kelly	Project Lead – Award winning conservationist, strategic plans,	
	funding applications, day to day management. Landowner.	
Peter Thompson	Conservationist, weed control – clearing, planting, education guide	
	(former teacher), website management	
Mike McConochie	Former Forest Research Manager, conservationist (primarily for	
	Department of Conservation nationally), advisory role for	
	committee. Planter and weed control.	
Dylan Hedges	Enviromental scientist. Advisor on ecology and stormwater.	
Archdeacon Harvey Ruru	Kaumatua. Advisor.	
Gillian Pollock	Volunteer and advisor	
Amy Shattock	Open day coordinator and social media	
Moana Guerin	Horticulturist. Propagating, planting and forest signage	
Lee Black	Lead Trapper	
lan Eyles	Planting, building, clearing and spraying trails	
Leslie Cross	Teacher of environmental studies group, Enner Glynn school:	
	organiser of school's activities in the bush.	
Sarah Hammond	NMIT Student. Trapping. Weed control.	
Lionel Solly	Department of Conservation Senior Ranger	
Bruce Dyer	Consultant and Chair of the Society for the protection of K.C.F Inc.	
Murray Leaning	Community engagement, open days and volunteer days. Advisor.	

#### Local Context

The project aligns closely with both national and local environmental strategies. Nelson City Council strategies that the project supports are:

1. Long Term Plan – The environment as a key focus area.

"Council recognises that investing in the environment is essential for our future. A healthy environment underpins the health of our community and the way people enjoy Nelson, supports the economy and means we have functioning ecosystems to support our treasured species.

#### 2. Annual Plan

Good Leadership - A whole of community response. Council is committed to walking the talk, advocating for climate issues, and showing good leadership.

3. Nelson is a signatory to the Kotahitanga moteTaiao Alliance and Strategy

Includes other Top of the South Councils, iwi and DOC. This strategy "Plans to work collectively to restore natural landscapes across the region – from west to east and from the mountains to the sea".

4. TeTauihu Intergenerational Strategy

The Vision for the Strategy is: To Be Good Ancestors.

Particular focus on the responsibility we have, as the current generation, to pass on the taonga in a better state than when these taonga were placed in our care.

5. Council's vision - Nelson is the Smart Little City.

It is a vibrant place - where we are deeply connected with, and committed to, our natural, social and cultural environment.

6. Nelson City Council's Community Outcomes

Our unique natural environment is healthy and protected.

7. Nelson 2060 – Goal 3 - Our Natural Environment

Air, Land, Rivers and Sea – is protected and healthy.

8. Nelson Biodiversity Strategy

Nelson Nature -to improve biodiversity and to improve water quality.

#### Goal 1 - Active Protection Of Native Biodiversity

Nga taonga tukuiho (the treasured resources), native species, and natural ecosystems of Nelson/Whakatu are protected and restored.

*Objective 1: Ecological health, mauri and wairua of natural ecosystems are sustained and native biological diversity is restored, enhanced and, where appropriate, connected.* 

Outcome 1: Nationally and regionally threatened indigenous species are sustained or restored.

*Outcome 2: Rare and representative examples of native communities are protected and restored.* 

Outcome 3: Indigenous biodiversity is ecologically connected to sustain its functioning.

Outcome 4: Degraded indigenous ecosystems are restored and then sustained.

#### Vision

To protect, nurture and expand this 17 hectares of native forest and wetland and share it with the people of Nelson for conservation, education and recreation.

## **Overall Objectives**

#### To protect the Covenanted Area's General Values

- (a) Protection and enhancement of the natural character of the Land with particular regard to the indigenous flora and fauna;
- (b) Protection of landscape amenity of the Land;
- (c) Protection of the landscape amenity of the indigenous vegetation;
- (d) Allow and encourage the natural regeneration of indigenous species;
- (e) Preservation of freshwater life and habitat by restoring riparian margins, reducing erosion and thereby reduce sediment and contaminants getting into the freshwater stream (Jenkins Creek) and
- (f) Protection of the specific values set out below.

#### To Protect the Covenanted Area's Specific Values

#### Flora values

There are at least 100 different species of native plants and trees within the covenanted area and some of these are centuries old. These include a large number of tawa – unusual this far south and a main food source for keruru in the Nelson City area, and matai which is very rare in this area. Titoki abounds. Kahikatea and pukatea grow in the damper parts of the bush. The frost-tender kohekohe grows here – one of the few places this far south. Putaputaweta, rata, tawhai, miro,pate, mahoe, rangiora,ngaio,kamahi, kaikomako,horoeka,hoheriaangustafoliaand various species of maire including the beautiful mairetawake are just a few examples of the trees that live here.

Rare fungi have been discovered by leading expert Marie Taylor. Rare orchids (*Pterostylis*species) have been discovered by Robert Fryer from Future Ecology.

The area known as TeNgahere Tonga (the South bush)is full of restoration planting, some of it over 30 years old, and now it has a healthy understorey full of self sown species out of TeNgahereRaki (the North and original bush). These include tawa, miro, matai, titoki, kahikatea, pukatea, putaputaweta, hinau, ngaio, horoeka,kamahi, whauwhaupaku, kawakawa, pate, rata, nikau, totara, rimu, kotukutuku, rangiora, mapou, kohuhu, tawhai, horoeka, rewarewa, houhere and many others.

#### Fauna values

Twenty three species of native bird live in and around the covenant area. These includekeruru, tui, korimako, ruru, kotare, karearea, toutouwai, miromiroandpipiwharauroa(full list in Appendix 1). The critically endangered mohua have now been seen here five times by three different people. The endangered (nationally critical) parera(grey) ducks breed here.

Three species of gecko are present including the rare Nelson green gecko.

Giant native earthworms are present and powelliphanta snail shells have been found in good condition suggesting live snails may be present.

Rare native fish in the nearby stream include banded kokopu, inanga (declining), koura and eels.

#### **Other General Objectives**

To protect the area from degradation due to urban sprawl.

## MataurangaMaori

We incorporate aspects of both Matauranga and Te Ao Maori into our project as well as our lives.

We are guided by theArchdeacon Harvey Ruru QSM who is Chair of TeĀtiawa o Te Waka a Māui Trust. He is the longest continuing foundation member of the Trust since 1993.

Harvey is an Anglican Priest. He has been involved with NZ Maori Council for many years where he is a long serving Executive member and has wide ranging governance experience and member of Iwi/Maori organisations, such as: Cawthron Institute Trust Board; former member of Chief Judge Maori Land Court Rules Committee; and, TeTaumata Governance member of South Island Whanau Ora Commissioning Agency. He has iwi affiliations with TeĀtiawa, NgātiTama, NgatiMutunga, Ngati Maru, Ngāti Toa Rangatira, Kati Mamoe, NgāiTahu, Moriori.

Harvey officiates at all our most important activities such as the opening of the pond for the endangered Parera ducks, the visit by Shane Jones MP(TeAupōuri and NgāiTakoto), the planting of our special kawakawa garden and the filmingof the project by Country Calendar. He gave the project its Maori name, "Te Wairua o Kere".

We have a Te Wairua o Kere Roopu which is affiliated with the Toi Toi Maori Committee and includes;

Harvey Ruru (TeĀtiawa, NgātiTama, NgatiMutunga, Ngati Maru, Ngāti Toa Rangatira, Kati Mamoe, NgāiTahu, Moriori.) Murray Leaning (Ngati Kahungunu)

Temoananuiakiwa Guerin (Takitimu, Ngati Kahungunu)

Jordan Stewart (Whakatohea)

Nicole Tamatea Paul (Ngati Kahu and Tuhoe)

William Haare (Whakatohea and Te Whanau-A-Apanui)

Barry Hikairo (Ngati Ringinui)

## **Project Partners**

- DOC-Senior ranger Lionel Solly is an advisor to the project.
- Trees That Count & Project Crimson donate thousands of trees to the project each year. They also provide an ecologist; Michael Bergin who inspects the project.
- Honda, have a team of volunteers who plant here each year.
- Six local timber firms donate sticks to put beside the trees.
- Mitre 10 donates paint to paint the tops of the sticks for visibility as does Trade Central. Mitre 10 also donate spades and paint, free sauasge sizzles, Helping Hands days, organised planting days here etc.
- Farmlands have donated goods to help the project and Placemakers and ITM have donated wood for seats.
- The Nelson City Council have provided trees and money towards weed control.
- Network Tasman weed control.
- Forest and Bird –support and advise.
- Tasman Environment Trust MOU with us and work in partnership.
- NMIT Conservation trainee rangers. MNIT Horticultural students.
- Workers from Z come and help out.
- There are local schools and kindys, cubs and scouts that help especially Enner Glynn school who have this bush as their Special Place for their many conservation activities.
- We have a committee of 15 people plus a pool of volunteers who help with weeding, planting, clearing and running Open Days for the public. We propogate trees in a shadehouse here and grow them on for planting. We water three nurseries especially during the summer which is a daily task. We have planting days for schools, groups and public and this includes some teaching. At our Open days we have fundraising stalls and conservation activities free for children. There's planning, organising and supervising of work and activities plus Health and Safety talks. In the planting season, as well as organising, putting out plants and supervising the plantings, we have regular pick ups of fillet sticks from local timber firms and days

spent painting these sticks to make them more visible. We maintain the trails picnic areas, bridges, toilet etc.

• We also have a team of pest control volunteers who shoot deer, pigs and possums and trap rats, cats and mustelids.



## **Accolades and Awards**

We are one of only six projects in New Zealand to receive 5000 trees a year from Trees That Count. They have also chosen our project to be the *South Island Demonstration project*. The project was also chosen as one of only two projects to be visited by Shane Jones while he was in Nelson.

The project is nationally recognised and award winning.

- Winner of the Landcare Nelson/ Tasman Environmental Award (rural section) 2011
- Winner of the NZ Plant Conservation Awards (individual section), 2017
- EelcoBoswijkCivic Award 2016
- EelcoBoswijkCivic Award 2019
- EelcoBoswijkCivic Award 2021

"Kelly's Conservation Forest is a jewel in the crown of New Zealand's conservation efforts. It's critical to protect areas like this native bush as part of New Zealand's commitment to care for our native rākau and whenua: and not only that, to preserve the unique educational resource that the Forest provides for this community." Joris de Bres, Chair, Project Crimson Trust, former NZ Race Relations Commissioner

"We're immensely proud of the dedicated work undertaken by Lindy Kelly and her family to protect and care for the Conservation Forest, which, as recently seen on Hyundai Country Calendar, is an absolute stand-out amongst the 700+ native planting projects we support nationwide. The mature and newly planted bush alike provides habitat for an immeasurable number of native species, and it's vital to endangered flora and fauna on a national level that the land is preserved intact as a home to these unique taonga."

Adele Fitzpatrick, CEO, Trees That Count

Tom Stein | Regional Rep Marlborough, Nelson and Tasman

QEII National Trust | NgāKairauhi Papa

"Your forest is indeed a special place in Nelson because it is a small remnant of the original forests that once covered the foothills behind Nelson. There are very few pieces of mature matai-tawa forest left. [There is] nothing like it this close to the city".

"This area of mature lowland tawa/titoki/matai forest is an excellent example of

what would have clothed much of the lower altitude areas around Nelson city.

Sadly, few of these areas now remain and this is one of the better examples Iknow of."

#### Robert Fryer | Futurecology

"The existing forest remnant is an excellent example of a lowland forest type almost totally depleted in the Nelson area."

**Dylan Hedges** Degree in Environmental Studies, secretary of the Society for the Protection of Kellys Conservation Forest. Principal of Hedges Environmental.

"Kelly's bush is a great natural asset within the Nelson region's urban environment. It provides a type of native large forest tree habitat which is all but lost from the region, within walking distance to Enner Glynn school in Stoke; making it an undeniably important link in the halo chain for the re-establishment of bird life from the Waimara Brook sanctuary to the Grampians, Marsden valley and into the backyards of Nelsonians. This reserve to urban link is vital if the NCC wants to foster public support and awareness for the regional efforts in biodiversity management and its project halo.

In my experience as a volunteer at the Brook Waimara sanctuary, and after achieving a degree in Environmental Studies at Massey university, my opinion is that the Kelly's bush project definitely deserves further support from the Nelson City Council, and requires this support to protect its integrity and to continue the development of the natural assets it contains".

**Geoff Button |** Trainee Ranger Lead Tutor - Nelson Marlborough Institute of Technology | TeWhare Wananga o Te Tau Ihu o Te Waka a Maui

"I run the Trainee Ranger programme for NMIT and we have spent some time working in this area with my students to help to cull some weeds, work on plant propagation and help with some track infrastructure.

I believe this is a unique and important remnant of lowland forest which needs broad community support to maintain and improve. There are a number of weed issues there which need to have some continued effort to at least control to ensure a healthy ecosystem.

I support Lindy's submission for greater partnership with the council to help achieve better biodiversity outcomes for this special place. "

#### Michael North | Ecologist

"I first visited Lindy Kelly's bush in 2007, to undertake an SNA ecological survey for Nelson City Council. (NCC has this report on file). The forest is an impressive remnant of gully forest with original canopy species of tawa and matai, remarkable for such a bush remnant in such close proximity to the city, and for its potential for public engagement and enjoyment.

Over the last year or two the group Nelson-Tasman Weedbusters, that I co-ordinate, has begun weeding pest vine species (old man's beard and banana passionfruit), that had been controlled by earlier programmes funded by NCC and before that, Forest and Bird. Our concern in taking on this site was that all the earlier hard work would come undone unless a maintenance programme was started, - work that was beyond the scope of the landowner on her own to undertake. We feel that the values of the site fully justify our involvement here.

I have also been hugely impressed with the extent of revegetation that is being undertaken around the forest margins to increase its area and ecological viability, and for the level of engagement by school groups and others in helping to realize this vision".

#### lan Price (2017)

"I support efforts by Lindy Kelly to work with Nelson City Council in regards establishing a legal covenant which would be registered on the title of the land known as Kelly's Bush and owned by Lindy Kelly. This covenant would give permanent protection from future development that in any way would damage or cause harm to those native plantings and forest".

Mary-Anne Baxter | Statutory Land Management Advisor

Department of Conservation—Te Papa Atawhai

It was so great to see Sunday's Country Calendar episode which highlighted your property and all the conservation work you do there so well!

It was great to see some of the fabulous bush that I didn't have time to see when I visited the property the other year. I also had delight in showing my family that this was something I had a part in protecting forever.

Keep up the great work you are doing.



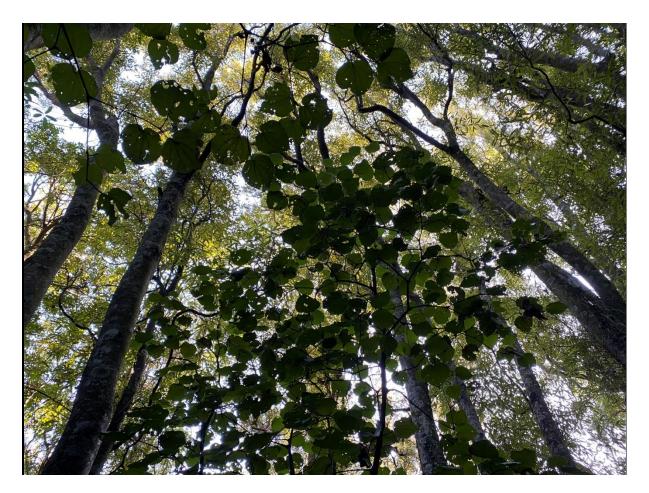
## Map of Kellys Conservation Forest

Marked in pale green.



#### **Objectives for each area of the forest**

## TeNgahereRaki(North Bush)



This area is a Significant Natural Area (SNA) with a 'high rarity' score on it. Some of the trees here date back to pre-European times and species include tawa, matai, titoki, kohekohe, kahikatea, pukatea, puriri, kamahi, pate, whauwhaupaku, kawakawa, rata, makomako, porokaiwhiri, kaikomako, houhere, horoeka, rewarewa, mahoe, ngaio, hinau, tawhai, putaputaweta, miro, rimu, manuka, kanuka and many more, including some rare orchids, ferns and fungi.

There are two smaller bridges built in this area with wood donated by the Kelly Family and built by Joe Kelly. Steps have been built with donated wood and funding. Snail shells from powellinphanta have been found in this area.

#### To protect this piece of forest from;

**Weeds**: particularly invasive vines. **Pests:** including deer, possums, rats, mice, wild catsand mustelids. **Degradation:**caused by the actions of neighbouring property owners e.g fire, flooding, erosion, noise, dust, domestic pets, sewage etc.

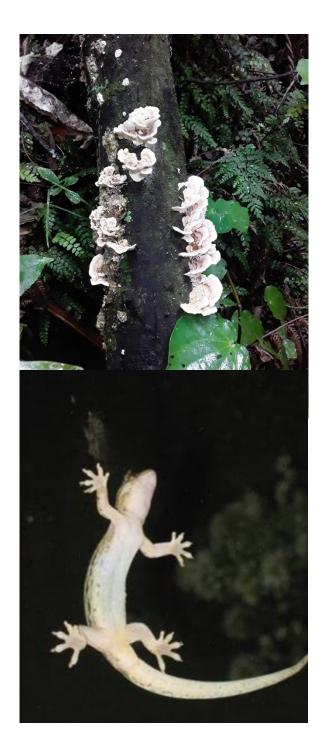
**Trails:** to maintain these for easy and safe access. Maintaining the bridges and steps. **Fences:** to maintain these to keep stock out.

Actions needed: A sweep through the area twice yearly to take out any pest vine species. Weed control around the perimeter to stop gorse and vines creeping back in, again biannually. Pest control carried out continuously. Maintenance of trails, steps, bridges and perimeter fences. Releasing of young trees in Spring and Autumn –there are young pukatea and kahikatea on the West side that need protection for a few more years yet and a patch of young kahikatea and houherialyalli that need intense protection from the network of invasive vines we are trying to eradicate on the East fringe. Teaching school children, trainee rangers, horticulture students and volunteers. Fundraising.

**Monitoring:**Because this is a demonstration project for Project Crimson/Trees That Count, the area has 8 plots set out through it and these are carefully monitored and studied. We were able to see, for instance, that we lost 17% of the new plantings during the very bad drought in 2018/19. (The 83% survival rate was one of the best documented by Trees That Count). This enabled us to plan for and order replacement trees for the next year. Chosing only those species with the best survival rate, we planted those during the autumn/ winter of 2019 and the survival rate for the 2019/20 summer drought was increased to 93%. The areas are inspected by Environmental scientist Micahel Bergin on behalf of Project Crimson and Trees that Count. Regular photos are taken of the areas. The project is checked regularly by the committee, volunteers, workers trappers and hunters and feedback given.



Mohua photo-copyright Glenda Rees



TeNgahere Tonga (South Bush)



This area has been cleared of weeds and replanted over the last 37 years by volunteers mostly schools and community planting days such as Mitre 10's Helping Hands - who also donated the wood for the seating and built the seats. Wood for the first bridge was donated by ITM and built by Ian Eyles, Lindy Kelly and the NMIT trainee conservation rangers. The second bridge was built by the Trainee rangers with wood donated by Lindy Kelly.Don Sullivan has made and donated weta boxes for this and the north bush for visitors to study. The area also has a shadehouse in it built with funding from The World Wildlife Fund. The area now has some mature establishment species in it with other species such as tawa, matai, titoki, kahikatea, ponga, houhere, kaikomako, porokaiwhiri, makomako, nikau, totara, kawakawa and pukatea etc regenerating under its protection. There are some lovely young kohekohe growing here, some hoheria angustifolia, hinau, lots of flax and tikouka in the valley bottom with plenty of ribbonwood, and kahikatea, red and black matipo with some lovely bigputaputaweta.

In effect the old Raki bush has spread out into this area. Some species have appeared here, not seen in the north bush, the seed possibly wind blown or brought in by birds -eg karaka, nikau and totara. Rimu and tanekaha are growing well here too as well as kamahi and kohekohe. Some more trees were added to the West side of this gully in 2018 to replace those washed out by landslide from the neighbour at 32 Enner Glynn Road. Some poplars and willows were added in here as a temporary but fast fix to the landslide and sediment run off into the creek.



#### To protect this piece of forest from:

Weed: particularly invasive vines but also gorse, broom and pampas. Pests: including deer, possums, rats, mice, hares, cats and mustelids. Degradation:caused by the actions of neighbouring property ownere.g fire, flooding, erosion, noise, dust, domestic pets, sewage etc.

Actions needed: A sweep through the area twice yearly to take out any pest vine species, plus the gorse, pampas and broom. Pest control carried out continuously and recorded. Maintenance of trails, shadehouse, picnic areas, bridges. Releasing of young trees in Spring and Autumn. Work in our propagation shade house, where we propagate trees from our own seed for planting into the new areas. Teaching school children, trainee rangers, horticulture students and volunteers. Fundraising.

Trails: to maintain these for easy and safe access, plus the bridges, steps and picnic areas.

**Monitoring:** Because this is a demonstration project for Trees That Count, plots are carefullymonitored and studied. The areas are inspected by environmental scientist Michael Berginon behalf of Project Crimson and Trees that Count. The project is also monitored by the committee, volunteers, workers, trappers and hunters and feedback given.



## TeNgaherelti (Small Bush)

This area was cleared of mostly gorse, blackberry, OMB and passionfruit vine in 2008. The regrowth was sprayed twice 6 months apart then prepared and planted the following year, 2009. Not enough plants to fill it completely so have added some each year since. Now full. There were some massive eucalyptus trees left along one side. Have been trying to find a way to remove these.

To protect this piece of forest from:

Weeds: particularly invasive vines but also gorse, ivy and pampas, wild cherry, contoneasta and seedling eucalypts.

Pests: including deer, possums, rats, mice, hares, cats and mustelids.

Actions needed: A sweep through the area twice yearly to take out any pest vine species, plus the gorse, pampas and wildling eucalyptus. Releasing of young trees in Spring and Autumn. Pest control carried out continuously and results recorded. Maintenance of trails. **Planting**: to replant where any young trees have died and fill up areas as cleared. Keep

releasing young trees as they establish in Spring and Autumn. Teaching school children, trainee rangers, horticulture students and volunteers. Fundraising. Getting rid of eucalyptus.

Trails: to maintain these and bridge for easy and safe access.

**Monitoring:** Plots are carefully monitored and studied. The areas are inspected by environmental scientist Michael Bergin on behalf of Project Crimson and Trees that Count. The project is also monitored by the committee, volunteers, workers, trappers and hunters and feedback given. Trappers have their own monitoring system. Pictures below; left :Z volunteers, right: Shane Jones MP with Lindy and grandchildren.



## TeNgahereRawhiti (East Bush)

This area was planted in 2018 with approximately 4,000 trees. Trails had been made through it first, by Dylan Hedges and Greg Winn. Wood was donated by Goldpine for a lookout seat and that was made by Ian Eyles and Lindy Kelly. The trees were all planted by our volunteers with the addition of volunteers fromHonda and the Maitai group.

To protect this piece of forest from:

**Weeds:** particularly invasive vines but also gorse, broom, woody nightshade, foxgloves and mullen.

**Pests:** including deer, possums, rats, mice, hares, rabbits, cats and mustelids. **Trails:** to maintain these for easy and safe access, plus the lookout seat.

Actions needed: A sweep through the area twice yearly to take out any pest vine species, plus the gorse, broom, woody nightshade, foxgloves and mullen. 'Blanketing' was done in 2019, replacing any trees that had died. Survival through the drought was 87%. Pest control carried out continuously and recorded. Maintenance of trails and lookout. Also signage –donated by Guerins. Replanting if needed. Releasing of young trees from grass growth. Teaching school children, trainee rangers, horticulture students and volunteers. Fundraising.

**Monitoring:** Plots are carefully monitored and studied. The areas are inspected by environmental scientist Michael Bergin on behalf of Project Crimson and Trees that Count. The project is also monitored by the committee, volunteers, workers, trappers and hunters and feedback given.



## TeNgahereHauauru (West Bush)



This area was planted out in 7500 trees in 2019. The few that died over the summer drought 2019/20 (93% success) were replaced in Autumn 2020. Previous to the planting, trails were established all through this area with a flat piece chosen for a picnic area. Wood was donated by Placemakers for seating and this was built by the NMIT Conservation rangers. At the same time we connected this area to the North bush with a stile and trails. Signage was donated.

To protect this piece of forest from:

**Weeds**: particularly invasive vines but also gorse, broom, woody nightshade, foxgloves and mullen.

**Pests:** including deer, possums, rats, mice, hares, rabbits, cats and mustelids. **Degradation:**caused by the actions of neighbouring property owners directly on boundary adjacent e.g fire, flooding, erosion, noise, dust, domestic pets, sewage etc. **Trails:** to maintain these for easy and safe access, plus the lookout seat. Actions needed: A sweep through the area twice yearly to take out any pest vine species, plus the gorse, broom, woody nightshade, foxgloves, tutu and mullen. Pest control carried out continuously and recorded. Maintenance of trails and lookouts. Also signage. Replanting if needed. Releasing of young trees. Teaching school children, trainee rangers, horticulture students and volunteers. Fundraising.

Trails: to maintain these for easy and safe access, plus the lookout seat.

**Monitoring:** Plots set through it and these are carefully monitored and studied. The areas are inspected by environmental scientist Michael Bergin on behalf of Project Crimson and Trees that Count. The project is also monitored by the committee, volunteers, workers, trappers and hunters and feedback given.



## **Management Schedule**



#### January

- Shadehouses to be kept weeded and watered.
- Tracks, bridges, seats and picnic areas maintained.
- Volunteers cutting and pasting vines.
- Seed collection.
- Preparation for next Open Day: trails cleared and weeded, bridges, seats and shadehouse checked for any repairs needed.
- Make plan of funding applications for the year.
- Committee meeting.
- Pest control.
- Monitoring.

#### February

- OPEN DAY: advertise, put out trail signs, clean toilet, arrange stalls and stallholders, helpers on the day, donations of plants etc.
- New students coming from NMIT.
- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Volunteers cutting and pasting vines.
- Pest control.
- Monitoring.

#### March

- Autumn weed control starts; spray weeds in East, West and Little bush areas cut and paint vines in North and South bush areas. Contractor.
- Seed collection. Propagation.

- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Maintenance of previous year's plantings
- Release new plantings.
- Pest control.
- Monitoring.



#### April

- Autumn weed control continues; spray weeds in East, West and Little bush areas.
  Cut and paint vines in North and South bush areas. Contractor.
- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Maintenance of previous year's plantings.
- Release new plantings.
- Monitoring.
- Preparation for next Open Day: trails cleared and weeded, bridges, seats and shadehouse checked for any repairs needed.
- Funding applications.
- Committee meeting.
- Pest control.

#### May

- OPEN DAY: advertise, put out trail signs, clean toilet, arrange stalls and stallholders, helpers on the day, donations of plants etc.
- Autumn weed control continues; spray weeds in East, West and Little bush areas Cut and paint vines in North and South bush areas. Contractor.
- Spray circles for tree planting.
- Trail, bridge, seat, picnic areas maintained.
- Pest control.

Monitoring.



#### June

- Planting.
- Seed propagation. Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Maintenance of previous year's plantings.
- Volunteers cutting and pasting vines.
- Pest control.
- Funding.
- Ranger Students.
- Monitoring.

#### July

- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Maintenance of previous year's plantings.
- Pest control.
- Preparation for next Open Day: trails cleared and weeded, bridges, seats and shadehouse checked for any repairs needed.
- Funding applications.
- Committee meeting.
- Monitoring.

#### August

- OPEN DAY: advertise, put out trail signs, clean toilet, arrange stalls and stallholders, helpers on the day, donations of plants etc.
- Trail, bridge, seat, picnic areas maintained.Shadehouses to be kept weeded and watered.
- Seeds and cuttings attended to.

- Source quotes for trees. Apply for trees.
- Maintenance of previous year's plantings.
- Volunteers cutting and pasting vines.
- Pest control.
- Monitoring.

#### September

- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to. Repotting.
- Maintenance of previous year's plantings.
- Spring weed control starts; spray weeds in East, West and Little bush areas Cut and paint
- vines in North and South bush areas. Contractor.
- Release new plantings.
- Pest control.
- Monitoring.

#### October

- Spring weed control continues; spray weeds in East, West and Little bush areas Cut and paint vines in North and South bush areas. Contractor.
- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to. Repotting.
- Maintenance of previous year's plantings.
- Preparation for next Open Day: trails cleared and weeded, bridges, seats and shadehouse
- checked for any repairs needed.
- Funding applications.
- Committeemeeting.
- Release new plantings.
- Pest control.
- Monitoring.

#### November

- OPEN DAY: advertise, put out trail signs, clean toilet, arrange stalls and stallholders, helpers on the day, donations of plants etc.
- Spring weed control continues; spray weeds in East, West and Little bush areas, vines in North and South bush areas. Contractor.
- Release new plantings.
- Pest control.
- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Monitoring.

#### December

- Shadehouses to be kept weeded and watered. Seeds and cuttings attended to.
- Volunteers cutting and pasting vines.
- Contractors knapsack spraying weeds in East and West blocks.
- Maintain plantings. Volunteers get-together.
- Pest control.
- Monitoring.



Plans for 2022 included developing and restoring a wetland area and expanding the covenant over approximately 3 more hectares, which we've done.

Plans for 2023 include planting out another 2.5 hectares of land, 'blanking' areas damaged by erosion in the West bush and restoring trails and bridges.

#### Appendix 1.

## Kellys Conservation Forest - Native tree species list

Hungere (Hoheria Hoheriapopulnea Kaikomako Angustifolia) Mountain cedar Tainoka (broom) Korokia Wharangi-Meliacope Kohuhu Horoeka Chatam island daisy Miro Matai Rewarewa Rata Hinau Puriri Pate Kowhai Small leaved milkwood Pohutakawa (red & Kanuka Kamahi yellow) Manuka Hebes –various kinds Rangiora Akeake Large leaved coprosma Kapuka Taraire Kauri TiKouka Tanekaha Karo Kawakawa Akeake Maire Tawake Kakabeak (white and red) Tarata Poroporo Roporo Maire Caffinialeptophylla Keike Puka Horoeka whauwhaupaku Totara Titoki Kowhai Kauri Makomako Matipo (black and red) Tawhai Tawa Griselinia –various kinds Tawhairanui Putaputaweta Manatu Tahwairauriki Karaka Horopito Rimu Tutu Kohekohe Kahikatea Hibiscus trionum Tanekaha Kotukutuku-tree fuchsia Vines: tecomanthe, Whau Porokaiwhiri puawhananga,kiekie Nikau Pukatea Mahoe Various rare and unusual Ngaio fungi and orchids (e.g. Mapou Green hooded orchid) Black beech

Heketara

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## **Kellys Conservation Forest- Native Bird species list**

Keruru	Kotare	Tui
Weka	Warou	Ruru
Parera	Tauhou	Toutouwai
Karearea	Riroriro	
Kahu	Yellowhammer	
Poutangitangi	Popokatea	Rarely seen;
Pukeko	Piwakawaka	Mohua
Poaka	Miromiro	
Pipiwharauroa	Korimako	

People regularly trapping here believe they have seen kakariki in the bush and have heard kaka.

At least a dozen introduced species

