

Summary of Activities 2021-2022

Overview

Key achievements during the 2021-2022 year have been:

- Completion of visitor signage around the Coleridge basin
- Improvements in volunteer trapping
- Ongoing work with stakeholders investigating willow control options
- Contributed \$10,000 to the DOC/LINZ Rakaia Trapping Project
- CHET communication with landowners broadened

More information about these activities and other work follows.

Relationships with stakeholders

The Coleridge Habitat Enhancement Trust (CHET) Coordinator has continued to liaise on projects with the following key stakeholders:

- Landowners/Managers (particularly of Lake Coleridge Station, Glenthorne Station, Algidus Station, and the Murchison family) – in relation to trapping and other projects
- Braided River Aid (BRaid) – several Trustees and the Coordinator attended the annual braided river seminar
- Department of Conservation (DOC) and Land Information NZ (LINZ) staff – in relation to predator trapping/river bird breeding success on the Rakaia River; and Korowai/Torlesse Tussocklands Park protection
- Environment Canterbury (ECan) – in relation to the braided river weed control programme; and CHET's willow control plans
- Selwyn District Council (SDC) biodiversity officers – in relation to CHET's willow control plans
- Lake Coleridge Tourism Group – in relation to visitor signage

During the year, it was decided that 6-monthly email updates on CHET's activities would be a useful initiative for all landowners/farm managers on land bordering Lake Coleridge. Owners/managers on the following properties were included in this: Glenthorne, Lake Coleridge Station, Murchison family, Coleridge Downs, Peak Hill, Algidus. These updates were also shared with relevant staff within Trustees' organisations.



Visitor Signage

This long-term signage project was completed this year.

High quality signs are now installed in several locations informing visitors of rare and endangered river bird species, as well as information on crested grebes at Lake Selfe.

Completion was enabled with the help of Stephen Yeats, a Te Araroa walker with building skills, who installed the grebe sign at Lake Selfe and built a shelter for signs at the end of Algidus Road. He did this voluntarily with CHET only charged for materials and some travel. Meanwhile Glenthorne Station completed construction of a very impressive sign at Harper Village.

Stephen, in collaboration with Trustpower and Te Araroa Trust, also built a campers' shelter at the Harper Campground, which will hopefully encourage more campers to use this area for camping rather than freedom camping in other locations.

CHET and Trustpower also renewed a number of signs that highlight the river bird nesting season, asking visitors/4WD users to beware of vulnerable birds on river beds and to try to avoid disturbing them.

Predator Control

Trap.NZ app

The Coordinator assisted CHET's volunteer trappers to install and learn how to use the Trap.NZ app this year to record their catches.

This saves the Coordinator from having to regularly chase up trapping catches from each volunteer, it provides much richer information and easier reporting, and enables easier sharing of information with others interested in our trapping activities.

While the app is straight-forward to use when set up properly, it and the associated website are sophisticated and with that came some technical challenges to work through.

As part of this initiative the Coordinator also ensured traps were appropriately labelled with identifying information and 'danger do not touch' signs.

New volunteer trapper

David Anderson approached CHET in early 2022 with suggestions for enhancing habitat for grebes on Lake Ida. His suggestions included setting up predator control around the lake, repairing the causeway to help keep the lake level higher during summer, and launching grebe nesting platforms.

The CHET Coordinator talked to DOC and Glenthorne Station about these suggestions. Platforms are not considered necessary or ideal on Lake Ida given they can break from moorings so need regular monitoring. The Coordinator worked with DOC and David to investigate setting up an official agreement with DOC to allow predator traps around Lake Ida, however David ended up deciding the land area he

would be permitted to trap on and the DOC agreement terms were overly onerous for the amount of predator control he could undertake.

Meanwhile, David's suggestion for causeway repair is less pressing, but once a DOC Trustee is established again on CHET this can be discussed further.

Despite his initial aspirations for habitat enhancement at Lake Ida not progressing, David has been set up on Trap.NZ and is helping volunteer trapper Rosalie Snoyink to check traps around Lakes Selfe, Evelyn and Georgina.

New traps and trap opening tools

Five new DOC200 traps were purchased during the year to replace five Fenn traps that were still in use but are no longer considered best practice. The Fenn traps have been disposed of.

Five new DOC250 traps were also purchased. These were purchased because ferrets are being caught more often around Lake Selfe in particular and DOC250 traps are recommended for ferrets. They will replace DOC200 traps in some locations in this area (to be swapped out in spring 2022).

All the above traps were purchased from the Ashley-Rakahuri Rivercare Group – a voluntary community group that makes traps to fund their predator control work on the Ashley-Rakahuri River.

Because DOC250 traps are even harder to set than DC200 traps, the Coordinator arranged for trap setting tools to be made for free by Lyndon Armishaw in Lake Coleridge Village for each volunteer, which will help volunteer trappers more safely and easily re-set traps.

Catch statistics

Four volunteers, with occasional assistance from the CHET Coordinator, have continued to monitor traps in areas where predators are a particular risk to ground nesting birds (either river birds or grebes).

The traps were originally purchased by CHET, BRaid and Trustpower.

Trapping results reported during the year were:

- **Harper Village area** - 24 traps (12 DOC200, 12 Timms) monitored by Trustpower/Manawa Energy's Brian Lancaster
 - Brian started using the Trap.NZ app to record his catches from May 2022.
 - During the 2021-2022 year, the following catches were recorded: 13 cats, 1 ferret, 5 hedgehogs, 7 rats, 4 weasels, 1 stoat, 1 mouse, 1 possum, 1 hare = **Total 34 catches**
- **Lakes Selfe, Evelyn, Georgina** – 18 DOC200 traps monitored by Rosalie Snoyink and David Anderson
 - Rosalie and David started using the Trap.NZ app from April 2022.
 - During the 2021-2022 year, the following catches were recorded: 8 stoats, 1 rat, 6 hedgehogs, 2 ferrets = **Total 17 catches**

- **Lake Hill's Boat Harbour, Lake Coleridge** – 5 DOC200 traps monitored by David Murchison
 - David started using the Trap.NZ app from early December 2021.
 - During the 2021-2022 year, the following catches were recorded: 3 stoats, 2 rats, 2 hedgehogs
= **Total 7 catches**
- **Landowners** continue each year to do significant trapping operations on their land, in particular to control numbers of possums, pigs and deer. Vespex is also used to control wasps.

\$10k towards Rakaia River Trapping managed by LINZ

CHET again contributed \$10,000 to the Rakaia River Trapping programme.

This year Land Information New Zealand (LINZ) took over management of the programme from the Department of Conservation (DOC) and overall funding was increased.

LINZ reports that they had nearly 1,000 traps on the Rakaia (true right of the river) and spent nearly \$79,000 on the predator control programme, which caught 449 predators including:

237 hedgehogs

96 cats

36 weasels

32 stoats

28 rats

12 possums

6 mice

In addition, a rabbit shooting operation was carried out by High Country Contracting, with 285 rabbits, hares and predators shot.

Unfortunately, a Southern Black Backed Gull cull did not proceed due to a key stakeholder withdrawing support, but the issues have been resolved and SBBG population control will take place again in 2022-2023.

The programme included monitoring breeding success of the endangered Black Fronted Tern/Tarapirohe (BFT). LINZ spent \$110,000 surveying three BFT colonies, with 23 nests being monitored. Unfortunately, they recorded no fledging success this season due to flooding, predation and nest disturbance. Key findings:

- 10 high water/flooding events during the nesting season was the most significant cause of failure, but predation was also high.
- Predation was observed in approx. equal proportion by both black-billed gulls and back-backed gulls. Banded dotterels were also observed disturbing BFT nesting (assume they view terns as a threat).
- No mammalian predators were observed taking adults/chicks/eggs, but their presence cannot be ruled out (although the 'island' location of nesting areas reduces mammalian predator risk).

- Future recommendations: much more intensive monitoring (5 days/week by 2-person field team during peak breeding season) and use of a drone and jet boat to improve access.

CHET has again offered \$10,000 towards the programme for 2022-2023, which will be the last year in what has been a 6-year programme. LINZ is changing the focus of the BFT monitoring in 2022-2023 to instead do a review/lessons learned from the 6-year DOC/LINZ programme with some recommendations on how Rakaia trapping should continue.

Riverbed weed control

CHET is continuing to stay informed about the LINZ/ECan/DOC-managed riverbed weed control programme in the region (called the Braided River Flagship Programme - BRFP).

LINZ reports that ground control of weeds was carried out from January to May 2022 in the main tributaries of the Upper Rakaia River. Nearly \$72,000 was spent on ground control with species targeted including broom, gorse, buddleia, crack and grey willow, false tamarisk and Russell Lupin, plus 40 nassella plants were identified and removed to stop spread into the lower reaches of the river. Yellow flag iris was controlled at the northern end of Lake Heron and the upper reaches of Lake Stream.

In addition, around \$215,000 was spent on two aerial survey flights plus aerial weed control operations across the entire upper catchment from November 2021 until April 2022 targeting larger patches of woody weeds (broom, gorse, willow, buddleia and false tamarisk). Aerial spot spraying was used for smaller patches to minimise by-kill.

The weed control programme will continue in 2022-2023. It will comprise more ground control and less aerial search and control.

The strategy that guides this programme (Rakaia Riverbed Weed Control Strategy), which was created 10 years ago, will be reviewed during 2022-2023 thanks to joint funding from LINZ and ECan.

CHET has not contributed financially to this programme in recent years, but both CHET and Trustpower have done so in the past and will consider doing so again if deemed useful.

Australasian Crested Grebe nesting platform

CHET launched a floating platform in a sheltered bay in the south-west corner of Lake Coleridge in late 2017, designed to give crested grebes a safer nesting site. The platform was similar in design to those successfully used on Lake Wanaka aimed at providing a nesting site that would rise and lower with changing lake levels (to mitigate the risk of lakeside nests being drowned or stranded) as well as being safer from mammalian predators.

Over three summers grebes showed no interest in the platform and it was put in storage in 2020 after breaking from its mooring. Since this time the CHET Coordinator has learned that the Lake Wanaka

grebes often take more interest in platforms that already have a largely pre-constructed nest, so its deemed worthwhile to try the platform again in the same location but with more nesting material already on it. The platform will hopefully be relaunched for the 2022-2023 nesting season.

Canterbury Knobbled Weevil survey

During the previous year (2020-2021), CHET commissioned Lincoln University entomologist Mike Bowie to conduct a survey to look for the Canterbury Knobbled Weevil as well as other species living in the same habitat.

Mike was given permission to have survey sites on the Peak Hill Conservation area and at Algidus Station. Longer notice of the survey project could have encouraged other landowners to also participate, but nevertheless significant new data on insect species was still obtained. While Mike didn't find any knobbled weevils, there were some other unexpected finds.

Mike presented his report to CHET in early 2022 and it has been published on the CHET webpage - <https://www.lakecoleridge.co.nz/habitat-enhancement.html>

Knobbled weevils live on *Aciphylla aurea* (Golden Spaniard/speargrass), which is an important plant for many native insect and lizard species.

Mike's primary recommendation was to ensure remaining pockets of this plant, both on private land and on road reserve, are protected as much as possible from being shaded out or damaged by herbivore pest animals (particularly pigs digging around plants).

Mike's findings were shared with Selwyn District Council staff and all landowners/farm managers in the immediate area around Lake Coleridge.

Pest animal culls (pigs, deer) were undertaken by Lake Coleridge and Peak Hill Stations as well as DOC during the year. Some pines threatening to shade spear grass growing on road reserve land were also felled during the year.

Willow control

There was progress, but also frustrations, during the year in CHET's plans for starting crack willow control in the Coleridge basin.

The CHET Coordinator produced an 'Operational Plan', which gained the support of all landowners, based on a trial approach using a drone to treat small areas of crack willow around Lake Selfe and in the Scamander Wetland.

This approach was designed to comply with the numerous regulations for vegetation removal in ecologically-protected areas, while also being affordable for CHET and landowners.

However, in applying for a Certificate of Compliance from Environment Canterbury (ECan), it became apparent that Lake Selfe (CHET's primary target for willow control) required a full Resource Consent because of its 'critical habitat' status, regardless of how small the treated area was or what method was used.

The requirements for obtaining a Resource Consent are arduous and costly. Therefore, for cost-effectiveness reasons, as a first step CHET decided to investigate whether a Resource Consent could be obtained for willow control throughout the whole Coleridge catchment, not just for Lake Selfe. CHET commissioned Boffa Miskell to review our Operational Plan and consider our options for obtaining a 'Global Resource Consent'.

Unfortunately, a Global Resource Consent does not seem to be a realistic option. It would require ecological assessments of every area of willows, and different control methods appropriate to each area stipulated, along with an outcome monitoring regime for each area. This is too large and costly an undertaking for CHET.

However, ECan staff are now more engaged in CHET's endeavors*. It is hoped that this will result in practical and affordable willow control solutions that are appropriate for each area progressing further over the coming year.

**A site visit with two ECan staff, along with the CHET Coordinator, farm managers and drone operator Richard Cookson went ahead on 2 September 2022.*

Wilding pine control – Scamander Wetland

During the year, ECan and the Ministry of Primary Industries extended their wilding pine control work in the Coleridge basin to include the Scamander Wetland. After experimenting with a drone (due to the difficulty of walking in the wetland)* they chose to send a ground crew through to remove wilding pines.

The result is now a wetland that looks significantly different to how it did a few years ago. It is completely clear of any visibly growing pines.

Wilding pines are expected to reappear in the wetland, so another removal operation will be needed in years to come.

**CHET also funded experimental drone spraying of wilding pines in the Scamander Wetland in April 2019, which appeared to have an impact on some of the trees but not all.*

CHET's project prioritisation processes

CHET continued to be guided by project prioritisation work undertaken in 2020. At each meeting Trustees have received progress updates on all currently active projects as part of a list of all potential projects. The system has helped CHET to better manage workflow and keep track of all the different projects the Trust has an interest in.

Vehicle damage in the Korowai/Torlesse Tussocklands Park

This is a 21,000ha DOC-managed park, which includes Lake Lyndon and land considered part of CHET's catchment. Damage in the Park from 4WDs and off-road motorbikes has been a long-term problem. There are also health and safety issues associated with firearms use alongside walkers and mountain bikers.

During 2021-2022, DOC progressed fencing and signage improvements. However, there remains significant opportunities to further protect the Park and make it a safer and a more enjoyable place for everyone.

In October 2021, CHET had an initial discussion with Springfield-based ecologist Claire Newell about the issues and opportunities. Claire has previously done ecological research in the Park and has an interest in helping to further protect and enhance it. She has not however yet managed to talk to CHET further about this work, but CHET remains open to considering funding work to this aim.

Eel protection

CHET has continued to express interest in learning more about the Eel Management Trust's activities and research this Trust commissioned around 2014 into eel populations in the Coleridge catchment. It is disappointing that our inquiries have not yet been answered, but CHET will continue to ask for information from the Trust and ultimately would like to have a closer relationship with this Trust. Protection of eels was ranked highly by CHET Trustees during the project prioritisation work undertaken in 2020.

Events attended

- BRaid's annual seminar (14 July 2021 and 6 July 2022)
- Lake Coleridge Tourism Group AGM (7 June 2022)

CHET Trustee Representatives

Below are the people who represented Trustee organisations during the 2021-22 year:

- Selwyn District Council - Councillor Bob Mugford (Chairperson)
- Trustpower/Manawa Energy - Holly Simperingham
- Department of Conservation – Vacant (short-term representation from Dulkara Martig)
- Landowners – Rebecca Rose
- Fish & Game – Lyndon Slater
- Forest & Bird – Donna Field
- CHET Coordinator – Toni Barlow
- CHET Secretary – Judith Pascoe

CHET has been pleased to have Lyndon Slater join the Trust this year as a new Trustee from Fish & Game. We are hopeful that another Trustee from DOC will be appointed again soon.

During the year CHET Coordinator Toni Barlow indicated she would like to resign from the Trust Coordinator role, but is happy to continue until a new Coordinator is appointed. Toni has been in the role since early 2016 and enjoys it immensely. However, the Trust has become increasingly active during her time and she does not think she is progressing projects as quickly as they could be because of her other work commitments. Also, she lives in Wellington and believes someone living in Selwyn would be better-placed to progress projects. Trustees have taken the opportunity to consider the Coordinator role and how it contributes to the Trust's overall objectives and whether changes could be made to the role. Interviews are being done in late 2022. Toni is happy to assist with handover and will continue to keep projects progressing as long as required.

In early 2022, Trustpower finalised the sale of its retail arm and company name, which have been taken over by Mercury. The remaining electricity generation assets are now part of a newly-branded entity called Manawa Energy, which will continue to support CHET going forward.

For more information:

Coleridge Habitat Enhancement Trust
www.lakecoleridge.co.nz/habitat-enhancement.html

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