



## Study looks for predators

By Kate McKeowen

The predator-monitoring programme continues from last year with the help



Shelly Morgan, radio tracking cats.

of Landcare predator ecologist Andrea Byron. Tracking tunnels set for a week in February showed tracks of mice, ferrets, and possibly stoats.

Predator monitoring will be carried out in May, as part of an ongoing programme to help identify predator patterns. The aim of this study is to determine what type and how many predators live at Travis and to help understand what effect the predators are having on native wildlife.

Shelley Morgan, a cat-loving master's student from Lincoln University, is continuing her study of cats in Travis.

The response from residents in the area has been wonderful with a number offering their moggies for study. A radio-tracking programme began in March, and will continue until next January — so if you see cats with odd boxes on their collars, don't be surprised.

Shelley is hoping to find out just where our fluffy friends wander to at night and whether they are going into Travis. This will help us to design Travis Wetland to deter predators.

## Our wetland "SkyTower"

By Eleanor Bissell

Anyone walking at Travis Wetland several years ago may have been excused for thinking a new bird species had landed in New Zealand.

Swaying precariously in the tree tops was young Colin Meurk boldly trusting his life to young Joe Greenaway, who was trying to stop the remaining sections of ladder from sinking. The new bird species was gaining an elevated view across the wetland to determine the best height for a viewing platform.

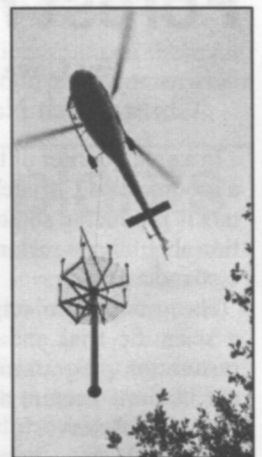
From that time on, a progression of people discussed positioning, soil depths, water depths, design and, of course, COST!!

1998 saw an application lodged with the Stout Trust to see if they would fund our 'dream' project.

We were very jubilant and honored to receive their financial backing and architects were engaged.

Finally all was agreed on. On February 21 this year, the two towers were lifted by helicopter into place.

Come and see the wetland from it. Thank you Stout Trust — you're awesome!



The Stout viewing platform being lifted in by helicopter, in February.

## School & Group visits

### Singing and the rain

By Eleanor Bissell

When the Fendalton Brownies came to Travis Wetland with the intention of finding out about pukeko, these normally 'people friendly' birds kept their distance.

However, the girls did discover where they lived and what they needed to survive.

Just as they were about to become both artists and scientists, the rain and wind set in.

Undaunted, the girls completed the programme the following week at Brownies — ironically on a sunny, still afternoon!

This pack didn't let their wet, cold experience at the wetland put them off.

Recently they visited again — this time to see if they could earn a conservation badge.

They discovered the secret Travis Swamp and learned about the reasons for species becoming endangered or extinct.

Kiwi Conservation Club members also had a very dampening experience at Travis while being 'Artists & Scientists'.

On this occasion, we all retreated to the old cowshed near the proposed Education Centre to complete our programme successfully.

Roger Lusby expertly guided K.C.C. and the Fendalton Brownie pack through a song he has composed called *Hey Pukeko*.

The first public performance of *Hey Pukeko* takes place at the opening of the viewing platform on June 10.

It's great — be there!

## Celebrate the platform opening

Saturday, June 10

**11.30am** Planting — meet at Clarevale Reserve, off Travis Country Drive

**12.15pm** BBQ for planters

**1pm** Tower opening & launch of Kiwi Conservation Club's song *Hey Pukeko*

All welcome

# Great excitement at the swamp for birders

By Jonathon Banks

Andrew Crossland recently saw a bittern on a mud bank in the central pond area.

Bitterns are an extremely shy species of endangered bird.

They are active at night (nocturnal), are large like a heron, and are about the size of a turkey.

When disturbed they often freeze and point their bill skywards in attempt to blend in with the raupo.

Another new bird has also

been seen at the wetland — an immature pied cormorant was seen in the central ponds, bringing to three the number of cormorant species seen in the swamp.

Other new arrivals include two more

harrier hawks with courting and display dives occurring, so we are hopeful some rapturous breeding may occur.

Two views of the Australasian Bittern: left do-doing about in a normal sort of way, and right, in freeze mode pretending to be a raupo stork!



Other excitement of an avian nature involves the confirmed spring and summer breeding at the swamp of black swans, Canada geese, paradise shelducks, mallard/grey ducks, New Zealand shovellers, grey teals, New Zealand scaup, pukeko, spur-winged plovers, pied stilts, black-billed gulls and welcome swallows.

The swamp is developing in to one of Christchurch's premium sites to observe birds and their behaviour.

## Forest restoration approached scientifically

By Dave Evans

### Christchurch Native Habitats

In a small corner of the Travis Wetland, a group called Christchurch Native Habitats is producing some valuable information about forest restoration techniques in wetland areas.

The group's project, which comprises a scientific trial and a separate habitat restoration programme, is being carried out in a one hectare area adjacent to the Clarevale Reserve.

The philosophy behind the restoration project is to work with nature to produce the most effective regeneration possible using only limited resources.

From winter 1998, this energetic group of volunteers began clearing willow, gorse, broom, blackberry and other sundry weeds by hand. No chemicals (herbicides, fungicides, pesticides) have been used as the group believes these can harm biodiversity by killing insects, soil microbes, and inhibiting the growth and survival of native seedlings.

Work on the restoration project and the scientific trial is now in its third year with the planting of more than 1200 young natives in the restoration areas and 800 kahikatea, a tall native wetland conifer, in four separate trial plots. Each plot is 200 metres square and contains 200 kahikatea planted on a one-metre grid. As each tree was planted the soil conditions were recorded along with the tree's measurements.

Over the following months, the group has applied four weed-suppression treatments to each plot, with help from Travis Wetland Trust workday volunteers.

The treatments consist of; newspaper with mulch; bark; inter-planting with the fast growing native *Coprosma robusta*; and no treatment (as a control).

This has been done to investigate the dynamics between the growth and survival of the kahikatea and the exotic weeds in each plot.

Christchurch Native Habitats is also examining how much weeding maintenance is required to get the optimum survival and growth conditions of native plants in these heavily weed-infested areas.

The plots were left for a year to allow evaluation of the weed-suppression treatments before a series of weeding/management regimes began.

Each treatment in each plot receives a different weed management regime — for example regular/high intensity weeding, or infrequent/low intensity weeding.

The aim of the study is to find out which combination of weed-suppression treatments and long-term management gives the best results in terms of native forest restoration. Results are being made available as quickly as possible to help other groups working on projects in similar environments.

Initial results show pleasing kahikatea survival and growth rates after 18 months (> 80%), with some increasing in height by up to 40% in first year. Of the trees that did not survive the first year the highest mortality was in better-drained soils, and in plots with poorer-drained soils the highest mortality was recorded where newspaper was placed with mulch as a treatment.

The reasons for this are still being considered — perhaps the newspaper was preventing oxygen from reaching the soil, or possibly the absence of surrounding weeds increased moisture loss due to exposure to harsher sunlight in spring and early summer.

Perhaps the most surprising finding is that even though the newspaper/mulch

treatment was the most effective weed suppressant, and the most aesthetically pleasing, it soon broke down to provide the perfect exposed seed bed for the wetland's nemesis — grey willow.

Other fascinating results include the different weed species and communities that have established in the different treatments.

In areas treated with bark there are some masses of buttercup, or tall woody weeds, depending on soils and drainage. These results will be written up in peer-reviewed scientific journals and made available to other restoration groups via the NZ Ecological Restoration Network's *Bush Telegraph*.

In between bouts of work on the scientific trial, the members of Christchurch Native Habitats satisfy their thirst for weed destruction by clearing adjacent areas of willow, gorse and blackberry.

To date, more than 3000 square metres have been cleared, some of which has been planted with the help of volunteers and the local community.

The group has cleared willow from a large wet depression on the southern edge of the site and is hoping to plant this area with raupo and flax this winter, to complement the ribbonwoods thriving around its edges.

The group has a vision of a kahikatea forest with a diverse understory attracting native forest birds back to the wetland.

New volunteers to help with this exciting project are always welcome, so if you feel like removing a few weeds, planting native trees, or nurturing some kahikatea saplings, then give me, Dave Evans a call on 366-0628.

The group also includes Simon Gulland, Nick Early, Lou Stella, Liz Webb, Fiona Carmichael, Matt Oliver and Stephen Ulrich.



# Ranger ready for role at Travis

Hi. My name is John Skilton, I have recently been appointed as the ranger for Travis Wetland Heritage Park.

Before to being interviewed for the position I spent some time reading reports and visiting the wetland. It was both an inspirational and humbling experience to see the years of largely voluntary effort that have gone into ensuring the protection of Travis and the scope of plantings, weed control and development of waterways and habitats.

I hope as ranger I can assist the Travis Trust, its member groups and the Christchurch City Council achieve the objectives of the Landscape Development Plan.

I am very excited to be involved in the Travis Wetland project and look forward to developing a working relationship with all those involved.

Thank you for the warm welcome I have received from all I have met.

## Background

I bring a mixture of skills and knowledge to this position.

Last year, I returned to Lincoln University and completed a Post-Graduate Diploma of Applied Science in Ecology for Nature Conservation.

I originally completed a Diploma of Parks and Recreation at Lincoln some years ago.

After several years working at various national parks I changed my focus to outdoor recreation and education. This involved working with a wide variety of people at several educational centers including Outward Bound.

I was able to travel and work in the USA and Antarctica, visit some wonderful places in Aotearoa, eventually coordinating the Outdoor Leadership and Management course at Tai Poutini Polytechnic in Greymouth.

I maintained my interest in ecology and



Recently appointed: John Skilton, Travis Wetland Heritage Park Ranger.

conservation and incorporated these into my outdoor education programmes where ever possible.

## Work continuing on rare native plants

By Niky Bodger & Daphne Banks  
Manuka Group, Travis Swamp

Among willows, in the south-west corner of Travis Swamp, are remnants of native shrubs, trees and small plants.

A group of specialists spend a few hours there each week, maintaining and clearing areas of exotic plants to allow regeneration of native species to occur.

The natives need a helping hand, in the form of letting light in, suppressing weeds and replanting.

The first priority was marking female willows that were duly poisoned or cut down to prevent them spreading.

However, willows are ideal in protecting young native seedlings and shade-loving plants. They also provide a habitat for what native birds are left in the area, namely grey warblers, kingfishers, fantails and flocks of waxeyes at times.

Each month there is something happening, be it the reappearance of native orchid, *Corybas iridescens*, after it's winter rest, or *Celmisia graminifolia* flowering and reminding us all of some past tramp into the hills.

The re-establishment of manuka seems very promising. Fortunately the small area of manuka left seems to always have some plants in flower. Work has been done on

preparing an area and broadcasting seed.

There have been several plantings by various groups, often using plants sourced from the wetland itself.

The population of *Microlena avenacea* is based on 20 plants that were bought by a trust member and donated for reintroduction into the swamp. Not only has it grown well but has seeded profusely.

Depending on available resources, our objectives for the next year are to broadcast manuka seed, reintroduce relevant native plants to allow future sourcing, increase the numbers of the rare native species that are left, and further poisoning/removal of willow.

## Volunteer work mornings

Third Saturday of every month

By Joe Greenaway  
Work Co-ordinator  
Travis Wetland Trust

The morning typically starts by meeting at 9am at the Mairehau Road car park, fine or wet — weather is secondary to some keen and dedicated volunteers for whom getting wet from the feet up or head down makes no difference if you really enjoy the wetland.

We work in areas wanting attention and quite often these tasks can be quite physical and suit the stout-hearted. Others are kept busy with a constant supply of seedlings that need repotting and planting work that suits people who prefer lighter work.

Looking back 10 years, I see the Mairehau Road sand dunes covered in black-

berry and much other prickly hardy growth, and the outer swamp infested with grey willow.

It is now a pleasant walkway and the outer swamp ripples in the wind with the sway of the regenerating *Carex secta*. Early volunteers found the work hard as it was a soul-destroying job with the weeds seemingly to grow twice as tall behind us.

Now, thanks to the past efforts of volunteer work days and the city council help, our workdays are more rewarding and enjoyable, often finishing with a BBQ.

Although winter is approaching, there is still plenty to do — remember to wrap up warm and hopefully we will see you on one of the workdays — everyone is welcome.

## Travis Track Update

By John Skilton

Since last October's newsletter, there have been some developments to the track network.

- The Clarevale track to the Stout viewing platform was completed, and now includes a section of hard-surface track and a section of boardwalk.

- The Anne Flanagan Dell boardwalk construction has been completed thanks to the success of the 'Sponsor a Boardwalk' programme.

More sponsorship is needed to complete the track through the willow forest to the lookout. Contact Jessica for Sponsor a Board forms phone 354-1470.

Weed-eating and mowing of the Inwoods to Mairehau Roads track has tidied up this area. Shortly the Mairehau Road track will be surfaced with the addition of crusher dust to complete this section, — work to be carried out by Te Roopu tu Tangata Trust.

# UFO spotted at Travis!

By Simon Johnson

A strange, Unidentified Fishy Object (UFO) was seen on the banks of Travis stream in the heat of a midsummer's day last year.

Just like the saucer variety, it was gone in the blink — this one flapping and flipping its way out of the mud on the stream bank, diving into the safety of the stream.

But, what was it? Inanga, or adult white-bait? Maybe — but what was it doing out of the water, in the mud on the stream bank? Spawning possibly.

Soon, Leanne O'Brien was on the case, arriving to check out the reported unlikely sighting. The stream had some potential mudfish habitat but wasn't exactly brilliant, as a digger had recently disturbed it. Nonetheless, the wetland had great potential, and she was off, looking over each area of the wetland, ruling out most, but others? Well... best to try and catch one to see!

Using traps from Canterbury University where she is doing a PhD of mudfish, Leanne trapped nothing of interest for a whole week — nothing except for eel, a tadpole and one inanga.

Time to try electric fishing, a more reliable

tool than traps. Again, nothing but eel.

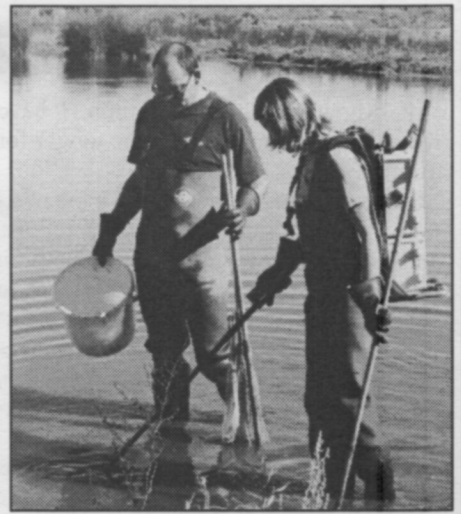
Mudfish are notoriously 'cryptic' — not being able to catch one is of no surprise to experts. And they really are strange critters, able to burrow a metre or more into soils when their usual forest ponds dry up, and live without water for long periods.

Canterbury mudfish, *Neochanna burrowsius*, young tend to live in open water, feeding during the day.

They become more secretive and cryptic once they are about 30mm long. Adult mudfish feed at night and grow to about 90-100mm in length, and they tend to be aggressive and opportunistic carnivores, eating most aquatic organisms and taking insects from the water's surface.

They are not protected outside parks and reserves. The Canterbury mudfish is probably the most threatened of the four species found in New Zealand due to the region's widespread habitat modification.

Mudfish can live alongside eels but are able to tolerate lower oxygen levels in the water as well as higher water temperatures. Catching so many eel in the wetland is not a good sign for mudfish, but doesn't altogether rule them out. One or two of



Martin Rutledge from the Department of Conservation, and Leanne O'Brien from the University of Canterbury, electric fishing in the central pond area.

the wetland's waterways are prime mudfish habitat.

Leanne's investigation of the wetland's waterways has led to discussion and agreement for future translocation of Canterbury mudfish to the wetland. She has expanded her search to look for a suitable site for mudfish at the wetland where they will best survive the presence of eel.

## Polytechnic students join Travis restoration

By Simon Johnston

In early 1999, the staff of the Recreation, Sport and Adventure Program at Christchurch Polytechnic recognised the need to encourage environmental and social responsibility among their students.

It was decided that Travis Swamp offered good long-term learning opportunities for the students.

The Travis Wetland Trust accepted the polytechnic 'Travis project' proposal and agreed to allow the students to work their own patch of the wetland. Work began along the northern Marieha Road boundary, 100

metres east of the car park, in March this year.

The students are timetabled to spend one day each semester at Travis for the duration of their course (six days over the three-year diploma).

Field days are coupled with assignments and some lectures relating to the project.

As a result of the Travis project, it is hoped the students will have the confidence and knowledge to initiate local action in their place of work.

As part of their introduction to the wetland, the students walk around the Clarevale

Loop, through parts of the western woodland and the manuka patch. Collecting plants from the Manuka Group nursery on their way, the students return to their Marieha Road site to plant them. Planting is soon all done, the long lunch hour appreciated!

The students then learn how to maintain the plantings and how to prepare for future plantings. Some try their hand at 'pricking-out' native seedlings supplied by the Manuka Group into pots of Travis peat they prepare themselves. These plants are returned to the nursery for use next season.

## Travis hosts first Native Plants Please! planting

By Kay Holder

The first of Christchurch's Native Trees Please! plantings happened at Travis on March 7.

Each city council Community Board is sponsoring one of these plantings in its own area during the year.

Children, parents and teachers from Parkview, Windsor, Queenspark and Freeville Schools planted out an area by the central pond, and as it was a millennium project, 2000 trees were planted. A temporary windcloth fence shelters the plants from the worst of the wind and also from Canadian geese.

Thanks to all those who helped with the planting — you will be encouraged to return to the wetland to help with weed control and mulching around the plants.



First Coast Care's Jason Roberts explains to Parkview primary students how to plant trees at the Natives Plants Please! planting on



March 7, and then they go to it — in this case Windsor school students.