#### What I learned working at Travis Wetlands this summer

- Sara Sahagian

What really is the point of a Wetland? Before I started at Travis Wetland I can honestly say I had no idea. To me, a wetland was nothing more than a swamp with some trees, flowers and weedy looking things!

My NZ flora and fauna education started with spraying Willows on Day One. Willows are not native, and when spraying them, there are a lot of other plants (that are native) that look like little willows. They let me come back after that day so I couldn't have done too much damage.



I have learned that Lancewoods are not sick trees, they are meant to look like that! The long thin leaves point down until they reach a certain height or age when the leaves turn upwards. When cutting down pest plants it is important to FIRST identify the tree you are thinking of cutting down. Lemonwood and Hebe trees have become two of my favourite native trees.

As this summer has gone on I have progressively learned to identify a handful of native trees and birds through weeding, spraying, bird counts, planting, pest

fishing, trap setting and working with the Travis Rangers and Wetland Trust members. The Trust members took a lot of time to show me many different species of native plants that are rare but are now taking hold in the wetland.

Bird counts introduced me to White-faced Herons, Black Shags, Terns, Pukekoe and the different duck species. Seventy five species of birds have been recorded in and around Travis Wetland. Spotting a Royal Spoonbill was a highlight. Unfortunately the ayian botulism that hit us was very devastating to native birds and it was very sad to see so many dying.

One of the most important lessons I did learn was never to follow Denise [Ford] into the ponds/swamps/mud. She will inevitably find the deepest, muddiest part. Let her go first, then find another place to cross.

A wetland is so much more than just a swamp; it is an important place for maintaining New Zealand native biodiversity. With so many threats to native bird life wetlands play a major role in providing a safe habitat. Many of the rarer native plants that are being encouraged to grow would not have the opportunity in other areas. I am going back to university with a new outlook on the outdoor environment.

#### Winter Walk

For Photographers and Interested People.

Do join in on Saturday 29 June at 8.15 am.

Meet at the Travis Wetland car park (no-exit end), Beach Rd.

Weather promises to be frosty and foggy with an 8am sunrise perfect for interesting light and mood photography.

Bring your camera; wear very warm clothes and join former professional photographer Grahame Bell on another adventure around Travis Wetland.

Finish time approx 10am at the Education Centre where there will be hot drinks and snack food. Contact traviswalk@ grahamenz.com or info@traviswetland.org.nz

#### Travis Wetland Trust Meetings

The Travis Wetland Trust Board meets monthly on the Tuesday following the work day, from 6.30pm – 8.30pm at the Travis Wetland Education Centre. The Board extends a welcome to all who wish to attend.

#### Travis Wetland Contacts

Park Ranger, Travis Wetland Phone: 941 8999 Email: john.skilton@ccc.govt.nz Email: sean.ward@ccc.govt.nz

Chair, Travis Wetland Trust Phone: 388 5431

The Secretary Travis Wetland Trust 280 Beach Road, Burwood Christchurch 8083

Travis Wetland Trust Website

www.traviswetland.org.nz.

Email

info@traviswetland.org.nz

Facebook

www.facebook.com/pages/Travis-Wetland-Trust/185672953313

## Thanks to our neighbours

John Skilton, Ranger

A great, big Thank You to all our neighbours who fitted bells to their pet cats and secured their boundary fences.

Both the Travis Wetland the Trust and the Christchurch City Council encourage responsible pet ownership. If you are a neighbour of the park, fitting a bell to your cat helps disrupt their hunting. Collars also help the park rangers determine domestic cats from feral cats, especially in the centre of the Park. As you can see in the photo, cats are quite capable of overcoming obstacles.

A number of stray dogs have been seen in the park in recent months. They are a

danger to people, wildlife and sheep. During the summer dogs mauled several sheep and killed one. A park ranger was injured by a stray dog at Travis Wetland in 2011.

If you are a dog owner please make sure your boundary fences are secure.

Thank you also for keeping a watchful eye on the park and supporting

If you have an issue with trees or weeds on your boundary please contact the park rangers before taking any action. Managing overhanging branches on the private property side of the boundary is acceptable but topping, thinning or felling trees in a Council reserve is not allowed.

The Travis Wetland Nature Heritage Park Landscape Development Plan 1998, a publicly notified document, sets out the development of the park including a planting plan and weed control. The park ranger can be contacted via the City Council Call Centre on 941 8999.

# **Travis Wetland**



#### World Wetland Day Event

The Travis Wetland Trust and Avon Otakaro Network (AVoN) combined to celebrated world wetland day with a walk and a BBO on Saturday 2 February at Travis Wetland. Eighty people enjoyed the walk led by Colin Meurk, President of Travis Wetland Trust. Colin's words at various stopping points along the way resonated with the participants who are all concerned about the future of the red-zone along the Avon River.

Both organisations share an interest and a passion in the postearthquake protection and development of waterways and wetlands in Christchurch, with particular emphasis on the red zone along the Avon.

Speakers from AVoN noted that the Travis Wetland was an example of what can be achieved in restoring wetland areas through management partnership between community-driven organisations such as the Travis Wetland Trust, and the Christchurch City Council.



Enjoying the BBQ

#### Dates to Remember

Help Restore Travis Wetland

Travis Wetland Trust Work Days are an opportunity to help the Travis Wetland Trust and Christchurch City Council restore the wetland. Meet people interested in restoring the native biodiversity of our city, share ideas and do some light physical work. Tasks vary according to the seasons and range from planting, release weeding and invasive weed control. Morning tea provided.

When: Third Saturday of every month 9.00am to 12.30pm.

Where: Meet at the Beach Road car park.

What: Bring gumboots or boots, gardening gloves and clothing suitable for the weather and season.

#### Workday dates for 2013 are:

- June 15, 2013
- July 20, 2013
- August 17, 2013
- September 21, 2013 Trees for Canterbury / community planting event
- October 19, 2013
- November 16, 2013
- December 21, 2013





#### From the Chair

Hi to all our trust members out there.

Greetings again from the chair as we head rapidly towards winter. We had our annual May planting day on the 18th. Public planting started at 10.00am. Thank you to all who turned up. We will have images in the next issue.

This is the 21st anniversary of the establishment of the Travis Wetland Trust, and we will be looking to mark this milestone event at our AGM in October this year.

I have at the moment the petition submitted to the Christchurch City Council in May 1994 calling for the purchase and protection of Travis Swamp.



The Petition of 1994

As the petition notes: "Council must pursue the total acquisition of Travis Swamp (130ha) to ensure the future viability of the many biological and visual touchstones of Christchurch heritage – plants, animals, soils and landscapes. All the compromises have been made – 12,000 ha of wetland have been lost in the City; this is the final opportunity to hold the line and create a lasting, living statement of this special dimension of our history; there won't be another chance."

Fortunately the chance was taken. Who knows another great opportunity may be presented to us in the future involving parts of the red zone river corridor – wouldn't that be fantastic?!

It is really pleasing thumbing through the pages of the petition to see so many familiar names from the trust's history and from the local community, and some parties who have maintained a strong connection and involvement with the Swamp and the Trust throughout those last 21 years.

Regards,

Sean Ward

Chair - Travis Wetland Trust.

# Note from the Trust Treasurer, Dave Evans

As usual a sub form is included with the newsletter if your Trust subscription is not up to date. If you think I have it wrong please email or phone me and I will double-check my records.

Dave Evans

Treasurer dave.evansii@gmail.com 366-0628 (H)

#### Not just another summer student!

- John Skilton, Ranger

This summer the regional park rangers were fortunate to have Denise Ford working as a seasonal staff. Denise has been active volunteer at Travis Wetland for many years.

We employed Denise through our student summer work scheme. Denise is doing her Masters Degree in Ecology at Lincoln University and for her thesis, she is examining differences between invertebrate populations in ecological restoration sites compared to non-restored sites. A part of her study involves repeating an earlier study (*Travis Marsh - Invertebrate Inventory and Analysis* R.P. Macfarlane et. al. April 1998).



Denise Ford

For her research, Denise is using malaise traps (bug nets) at various areas around the city, including Travis Wetland.

As a member of Travis Wetland Trust for 13 years (she has been on the Trust Board for most of that time), Denise is passionate about protecting and enhancing the native biodiversity of Christchurch.

Denise has used her IT knowledge to develop the Travis Wetland Trust web site and our Face book page. As well Denise has improved her knowledge of the natural world through extramural university papers.

Denise is a part of the Travis Wetland Manuka Group which maintain this botanically-significant area in the wetland.

The coastal ranger team wishes Denise all the best with her thesis and thanks her for all her assistance this summer.

#### Tents for insects?

- Denise Ford

You may have spotted these strange tent-like objects placed out in the wetland. It is in fact a malaise trap which is used to capture invertebrates. As part of my research on invertebrates in ecological restoration sites I am endeavouring to sample invertebrates in differing habitats in the wetland via malaise trapping. The insects fly into the net and make their way up to the top attracted by the light. They then fall in to a container at the top of the pole from which they are collected.



Malaise trap

In 1998 Rod Macfarlane and colleagues did a comprehensive inventory of the invertebrates at Travis Wetland. They used various means to sample the invertebrate population of the wetland, malaise traps being one.

From their study of Travis Wetland the biodiversity of endemic invertebrates compared favourably with other similar habitats.

Four hundred and sixty seven insect species were recorded with 81% being endemic to New Zealand. 55 species of other invertebrates (spiders, centipedes, millipedes, earthworms etc) were also found. Many of the species found were undescribed, 14-19% of insects and 30-32% of spiders.

From extrapolations of the data there are probably around 700 species of resident insect species and of these, 22-25 species could be listed as regionally rare. An example being the Christchurch endemic flightless crane fly *Gynoplistia pedestris*.

Fragmentation and loss of habitat not only affects vertebrate species but also invertebrates. Abundance and diversity is affected and this may potentially lead to problems within our ecosystems. Invertebrates have many diverse and important roles; pollination and decomposition being only two of many.

I am interested in the role of restoration on invertebrate communities in urban areas. As at Travis Wetland and other sites around Christchurch, native planting has been done to try and restore some resemblance of the natural ecosystem to our city. My question is: "If we plant the plants do the bugs follow?" With my research I hope to shed some light on this question.

#### References

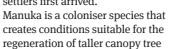
Macfarlane, R. P., Patrick, B. H., Johns, P. M., & Vink, C. J. (1998).

Travis Marsh: Invertebrate Inventory and Analysis: Christchurch City Council report.

#### Manuka at Travis Wetland

- Dave Evans, with advice from Colin Meurk

One of the many things that makes Travis Wetland a significant asset to Canterbury conservation is the presence of a stand of manuka (Leptospermum scoparium in the myrtle or gum family) on the western side, between the board walk and western boundary. It is a remnant of the abundant kanuka and manuka woodland that dominated the Canterbury Plains when European settlers first arrived.





Manuka area

species such as matai and kahikatea. It can thrive on both well-drained, usually poor soils and in the wetter conditions that the taller kanuka can't tolerate. Neither like to grow in the shade so eventually are overtopped and shaded out by the bigger trees. However on peat soils, like those at Travis, manuka is semi-permanent. It has the ability to develop aerated stem tissue that keeps oxygen circulating around the roots allowing them to 'breathe' in otherwise waterlogged and anoxic (without oxygen) soils.



Restoring manuka shrubland is made difficult by manuka blight - an association between an infestation of scale insect and sooty mould, which feeds on the scale's exudate. The scale insects (*Eriococcus orariensis*) apparently migrated across the Tasman Sea from Australia (where there are many cousins of manuka) in the late 1930s when it was first seen at the Orari Gorge. A second species of scale insect

(*Eriococcus leptospermi*), with a less severe effect on the manuka, was found near Conway in 1948. It's thought that both species of scale insect were accidentally, or self-introduced from Australia, but their spread throughout the country was aided by farmers wanting to control the encroachment of manuka onto pasture. By the 1960s the blight occurred throughout New Zealand, but has had the most severe effect in drier areas such as Canterbury.

This could be because the sooty mould builds up more in the absence of frequent rain and covers all the photosynthetic surfaces, causing the manuka to be literally starved of light. Fortunately the first species of scale insect has itself been decimated by a fungus and the bulk of infestations remaining are of the less severe second species. Regardless of which species is present at Travis Wetland many individual manuka are badly affected by scale insects and its dependent mould, and often don't survive.

Travis Wetland Trust members have nevertheless found a very effective way of propagating manuka with a good survival rate. After heavily cutting back exotic sedges and grasses, newspaper is thickly laid on the ground and manuka branches, bearing seed capsules, are then laid on top. Finally, the cut grass is spread over the whole lot. Manuka sprouts profusely from the seed and the method seems to work at least as well as the labour-intensive growing of seedlings in a shade house and then planting them out.

Manuka provides a source of nectar for native insects as well as introduced honey bees. And it is well known as a source of pharmacopia. So, this once-demeaned native small tree is an important intermediary in habitat development, provides food for insects, honey and medicinal compounds for people, and lovely blossoms and fragrance during the summer.

(Information on manuka blight from the paper: "The rise and fall of manuka blight scale: a review of the distribution of Eriococcus orariensis (Hemiptera: Eriococcidae) in New Zealand" Kees (C.W.) van Epenhuijsen, Rosa C. Henderson, Alan Carpenter & Garry K. Burge in New Zealand Entomologist 23: 67–70 (December 2000)

#### Umbrellas donated to Trust

Thanks to a generous grant from Piko Wholefoods (temporarily relocated to 248 Stanmore Rd following the earthquakes) the Trust now has two large sun umbrellas for the picnic tables outside the Education Centre. They will be much appreciated by visiting school groups as well as work-day volunteers. Thanks Piko!



Sun shades, thanks to Piko Wholefoods

### Christchurch Earthquake Appeal Trust



The funding of the earthquake repairs to the Wetland Walk has been acknowledged with a sign an the Information Centre.

The funding enabled the Christchurch City Council to undertake the repairs and maintain the standard of access to a popular park quicker than anticipated. Visitors to the park are very appreciative of the post quake repairs.