

Wet & Wild!



NEWSLETTER OF THE NATIONAL WETLAND TRUST

No. 6, Spring 2002

Another year begins ...

I welcome you to this edition of the newsletter and the opportunity to bring you up to date with the activities of the Trust Board. The Annual General Meeting was held on 12 June and the previous Trustees were all re-elected. Since the annual meeting the Trust Board met and co-opted Don Scarlet as the secretary for the current year.

As announced at the Annual General Meeting the Trust has now purchased a property at Rangiriri and that site was paid for using the grants from WEL Energy Trust and Trust Waikato. For those of you travelling through Rangiriri I would urge you to call and visit the site, which is on the northern side of the Heritage Café and is marked by the Wetland Trust sign on the front fence.

The Trustees after following a registration of interest process have now appointed a consortium between Chow Hill Architects and Priest Mansergh Landscape Architects to prepare concept drawings of the buildings and associated integrated landscaped grounds. We look forward to progress on that work in the near future and by the next edition we may have some concept drawings for perusal. Our thanks to Gordon Stephenson and his team on the building sub-committee for undertaking this process. The next task is to raise the money!! We are currently investigating options – any volunteers?

We would also confirm that the Trusts' website is now up and running and I urge you all to visit as it is continually being updated and new material added. The site address is www.wetlandtrust.org.nz. We are grateful to Wave Internet for sponsoring the site and for Karen Denyer and her team on the communications sub-committee for the work involved in that task.

David Sharland and the trails sub-committee team are busy investigating possible wetland trails ranging from relatively minor local trails such as around Lake Waikare to a trail around the South Island. Dr Philippe Gerbeaux will shortly be calling for volunteers to test run the South Island trail that he is currently mapping.

All of these ventures are keeping the Trustees busy but we are also heartened by the work that is being undertaken by other kindred organisations working in wetland fields. National, Regional and Local Government agencies are now becoming much more active in wetland activities. Organisations such as Fish & Game N Z and Wetland Care N Z are also active in protecting and enhancing habitats. It is not the purpose of the National Wetland Trust to duplicate work done by others and it is my belief that it will be necessary in the relatively near future to have a meeting of representatives from wetland organisations to ensure the highest level of co-ordination is achieved.

If there are any ideas or projects that you feel that we should be aware of then do not hesitate to contact one of our Trustees.

David Lawrie
Chairperson



Restoration of the Cocks Block, Whangamarino Wetland

Paula Reeves

Have you ever thrown your hands up in exasperation wondering how to turn a bedraggled piece of crack willow forest into something a couple of beautiful bittern could call home?

Folk at the Auckland\Waikato Fish and Game Council have been doing such on their properties for the last 50 years. Their latest restoration is on their Cocks Block in the Whangamarino Wetland.

An area that was infested with crack willow and an assortment of notoriously invasive grasses was cleared and skilfully re- contoured with a gentle shelf that provides just the right water depths for many native wetland plants to establish. With

crack willow having been resident at this site for the last 50 years the big question was would there be enough native seeds left in the seedbank for the native plants to return. The pleasing answer was yes! Swards of plants such as burr-reed (*Sparganium subglobosum*, a favourite food of waterfowl), kuta (*Eleocharis sphacelata*), jointed twig-rush (*Baumea articulata*) and several native rushes (*Juncus* species) all appeared within several months of the new regime. Many of these species had become increasingly uncommon at the Whangamarino Wetland.

Phil Teal from Auckland\Waikato Fish and Game Council reports that a number of bittern have been sighted using the restored area.

From this



... to this.



Our towering icon

New Zealand's tallest native tree, the kahikatea, forms dense stands on fertile floodplains, lake margins and riverbanks throughout the Waikato and elsewhere in New Zealand. They are a classic landscape feature in the Waikato lowlands, standing like small islands in a vast 'sea' of pasture. They are special places with special needs, so Environment Waikato has produced a factsheet outlining how to look after them for many generations to come. It even provides tips on how to create a kahikatea forest.

For a free copy, Waikato residents can call the Freephone on 0800 800 401. The same information is available on

Environment Waikato's website: www.ew.govt.nz (Search for 'Kahikatea' or follow the "Forest Fragment" links under "Native Plants and Animals").



Kahikatea trees tolerate waterlogged, swampy soils

David's Bird Corner

David Lawrie

This section of the newsletter is intended to provide brief details about the birds that inhabit wetlands. This is to show that wetlands are not only areas for plants and fish but also have important roles to play for bird life.

The subject for this newsletter is a very rare visitor to New Zealand, but has been chosen because of the strong association with the Whangamarino Wetland and also the number of Wetland Trust members who have been involved in its observations.

The bird subject is the Black Kite (*Milvus migrans*). This is a species that is widely distributed throughout the world but has never established in New Zealand (so far!!). There is a wide spread population in Australia and the few birds that have been seen in New Zealand are presumably birds flown from that source.

The first observations of this bird were made on 24 and 25 April 2000 by Trust members, David Lloyd and David & Jan Riddle who are farmers at the end of Swan Road near Te Kauwhata on the southern fringe of the Whangamarino Wetland. While they were planting trees on their farmland they observed a strange hawk like bird flying overhead and roosting in trees and which allowed them relatively close views.

They reported the bird to the Waikato branch of the Ornithological Society who undertook several unsuccessful searches for the bird. The bird was identified from the illustrations in a book of Australian birds as a possible Black Kite.

Over the intervening 2 years a number of sightings have been made of presumably the same bird, near Mangatawhiri, Mercer and Waerenga. There has also been a confirmed sighting of the bird on two occasions at Mangere and Papatoetoe.

On 9 May 2002 I made a sighting near Mercer following a report from Gary Turbott and Jan Butcher after the bird had been shadowing the model aircraft that they were flying near the Trig Station at the top of Kellyville Road. This is the fourth confirmed sighting of the bird in New Zealand.

The bird is similar in size and shape to the common Harrier Hawk but it has a long narrow tail with the distinctive v shape (shown in the photo.)



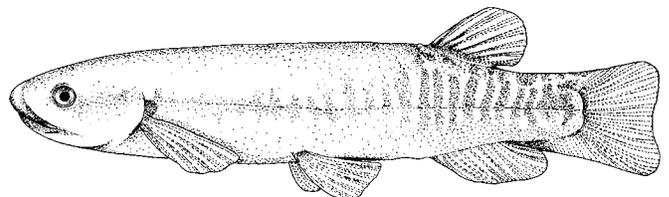
This is an example of observant landowners who have taken the trouble to report a sighting of an unusual bird that has ultimately lead to a successful identification. Sightings of what appear to be strange birds should be quickly reported to the local Ornithological Society Regional Representative who can follow up and hopefully successfully identify the bird.

Taranaki Mudfish

Maggie Bayfield

The Taranaki Regional has been working with the owners of the wetlands which were identified during the planning process of the Regional Freshwater Plan for Taranaki. Several small wetlands that contain populations of the vulnerable brown mudfish (*Neochanna apoda*) are now protected. As they are listed as significant wetlands in the plan they have been eligible for financial assistance (total costs) for protection.

Four landowners (at three wetlands) have fenced their wetlands, planted buffers, and agreed to protect the areas by a memorandum of encumbrance, which is registered on the title. The Department of Conservation will continue to monitor the populations of brown mudfish.



Native heritage sanctuary at Horseshoe Lake, Hamilton

Mairi Jay

A local Hamilton Group, Tui 2000, is promoting the idea of a native heritage sanctuary around Horseshoe Lake in Hamilton. The area is opposite the Hamilton Zoo and Hamilton City Council mostly owns the land. It includes a diversity of landforms that lend themselves to restoration or recreation of the native plant and animal communities that might have existed before European settlement in the region. There is the lake itself and a drain running to Lake Rotokauri, northwest of Hamilton, the lake margins, which still have remnant elements of original native vegetation, ridges, gullies, hillslopes and peat flats.

We would like to see the lake and its entire catchment set aside as a "mainland island", open to the public and protected from introduced animals. The restoration would include the range of plant and animal communities that were typical of the Hamilton basin, including wetlands and a mosaic of lowland forest types (from swamp forest to kauri). It would involve interpretation of the native plants and animals and their ecology, and ideally, it would include recognition of the people who lived there and drew their livelihood from it. The Maori name for Horseshoe Lake is Waiwhakareke, which can mean "marsh crake". We feel that this beautifully expresses its ecological value, and ties us back to its past.

We see it as a long-term project similar in scale to the restoration of Tiritiri Matangi and Karori Reservoir. Restoration would involve the people of Hamilton, through community groups, and it would link to the threatened species work

currently happening at the Zoo. It would bring in the knowledge and skill of horticulture students at WINTEC, the University, Hamilton City Parks and Reserves, and Hamilton Zoo. We would like to see the project as a catalyst for a synergistic partnership between WINTEC, Hamilton City Council, the University, and the people of Hamilton.

Why Horseshoe Lake, and why a nature heritage sanctuary?

Wetlands and lowland forests were the main forms of native vegetation in the Hamilton Basin. There is very little of the original native vegetation left in the Hamilton Ecological District, and the undeveloped nature of the land round Horseshoe Lake means that there is an opportunity to restore the range of ecotypes that were formerly here. The area is highly accessible to the largest population in the Waikato region. Many of the people in Hamilton do not know what native vegetation, native animals and native ecosystems looked like, and how they functioned; the sanctuary and its restoration would be a major way of showing them their biological heritages.

Tui 2000 are developing a video that expresses the vision for the Lake and its catchment. By February 2003 we will have the video ready and will be very happy to provide copies of the video (at cost) and a presentation of our vision to any group who would be interested.

Contact names are: Mairi Jay, 856-2889 x 8834; Dale Lethbridge, 856-9303; Bunny Mortimer, 849-8004.

No wetlands ... No water!

This is the theme of **World Wetlands Day 2003**. To celebrate the day the National Wetland Trust and Auckland/Waikato Fish & Game Council invite you to join us in celebrating our progress on the state-of-the-art National Wetland Interpretation Centre to be built at Rangiriri. The programme for the day, Sunday 2 February, follows:

- 9.30am** Meet at Rangiriri Carpark to depart on a field trip to the Whangamarino Wetland taken by Keith Thompson, wetland ecologist and University of Waikato lecturer. Bus transport provided from the carpark.
- 1.30 -2.30pm** Join us for a BBQ in the Garden Bar of the Rangiriri Hotel. Donation to the National Wetlands Trust appreciated.
- 2.30-3.30pm** Chow Hill Architects and Priest Mansergh Graham Landscape Architects present their vision for the innovative National Wetland Interpretation Centre, at the Rangiriri Heritage Centre Café where you can order afternoon tea.

The Whangamarino field trip will demonstrate both the success of the Whangamarino Weir as well as Lake Waikare's ongoing silt impact on the wetlands. Lake Waikare is a dead lake that Auckland/Waikato Fish & Game, DOC and Environment Waikato are undertaking research to restore.

Please RSVP by 18 January to Shonagh Lindsay, Public Awareness Advisor, Fish & Game New Zealand on email: slindsay@clear.net.nz or PH 09 360 5801 or Fax 09 360 7598 .

Wetland restoration in the Auckland Region

Shona Myers

In the Auckland Region, as in other parts of the country, wetlands have been reduced significantly from their former extent. Within the Auckland region only 0.4% of the land cover of the region remains in freshwater wetlands. Many of the remaining wetlands are small and are associated with the network of small streams and ephemeral headwaters of catchments. More than 80% of the streams in the region are small upper catchment streams.

Wetland types remaining in the region include swamp forests (kahikatea, swamp maire, pukatea, cabbage tree), raupo swamps, dune lakes, rushland and sedgeland dominated by Carex, Juncus and Baumea species and coastal wetlands (saltmarsh and mangroves).

They provide habitats for a number of wetland birds including fernbird, bittern and banded rail as well as native fish and invertebrates and threatened plant species. Close to 30% of the threatened plants in the region are associated with wetlands.

How are wetlands are being protected in Auckland?

One of the mechanisms that are being used in the Auckland region for protection of wetlands on private land is covenanting through subdivision provisions in District Plans.

The proposed Rodney District Plan 2000 includes provision for subdivision that results in legal protection of significant wetlands. Several issues have arisen as a result of these rules in relation to differing interpretation and application of criteria to determine significance of wetlands by applicants.

Rodney District Council has prepared a guide to the preparation and assessment of applications under the District Plan rules, and the definition of significant wetlands in the Rodney District (NB: you can contact Rodney District Council for more information on this guide). Work is continuing on refining methods for assessing significant wetlands in Rodney

District and to develop methods for encouraging voluntary protection through a fencing fund and other initiatives. The development of these guidelines will lead to better quality applications and the protection of a larger number of significant wetlands in the district.

Wetland restoration

A number of projects are being undertaken in the region to restore and protect wetlands. Many of these projects are being undertaken as partnerships between landowners, community groups, volunteer groups, Councils and DoC. These projects are helping to raise the profile of the ecological value of wetlands and the practical requirements of restoration such as fencing, planting, weed control or restoring natural hydrological regimes.

Lake Pokorua – an example of landowners working together to restore and protect wetlands

Lake Pokorua is located at Kohekohe, at the southern end of the Awhitu Peninsula. It is one of a number of dune-impounded lakes scattered along on the west coast of the region on both the Awhitu peninsula and the Kaipara Peninsula. It is one of the largest dune lakes in the region and contains significant areas of wetland vegetation around the edges.

In February 2002, the Lake Pokorua Landowners Group won a National Wetland Award from Department of Conservation (DoC) for their work in fencing and protecting the dune impounded Lake Pokorua and its wetland margins. The presentation of this award recognised the group's hard work in fencing this regionally significant wetland and dune lake. This project was undertaken in partnership with all of the landowners surrounding the lake, with the support of ARC and DoC. The success of such work has led to other groups being interested in fencing and restoring wetlands and dune lakes in the Auckland region, e.g. South Kaipara Landcare Group involvement in fencing Lake Kuwakatai.

Regional Park Projects

The Auckland region has an extensive network of 22 regional parks covering over 37,000ha managed by the Auckland Regional Council. A number of the regional parks contain significant areas of wetlands that are being protected and restored, as well as restoration of coastal and lowland forests and scrublands. Many of the parks are located in coastal areas and in the forested ranges of the mainland of the region. Over 80,000 native trees are planted each year, many by Park volunteers.

The ecological restoration work being undertaken on Regional Parks has included a significant amount of wetland restoration work particularly at Tawharanui, Shakespeare and Awhitu Regional Parks. Wetland Restoration Plans have been developed for each of these areas and ecological monitoring programmes are being established.

- Tawharanui – Tawharanui Regional Park (588ha) is the northernmost coastal park and lies at the tip of the Takatu Peninsula east of Warkworth. Existing wetlands are being restored as part of the planned “Open Sanctuary” for the park, including coastal rushland, cabbage tree swamps, saline wetlands and raupo rushlands. These wetlands will eventually cover around 100 hectares and provide habitat for threatened species such as fernbird, bittern and brown teal.
- Shakespear – This park (376 ha) lies at the tip of the Whangaparoa Peninsula and provides a linkage for native birds from the mainland of the region to Hauraki Gulf islands such as Tiritiri Matangi Island. Restoration is being undertaken in saline wetland ecosystems in Okoromai Bay and protection of a significant raupo swamp in Te Haruhi Bay.
- Awhitu – Awhitu Regional Park (114ha) lies on the southwest shores of the Manukau Harbour. Restoration has been extensive in three wetland areas at Awhitu following the blocking of drains after the purchase of the park in the 1970s. Intact sequences of wetland vegetation from salt meadows to rushland and sedgelands have developed providing habitat for fernbird. These wetlands are an amazing success story and provide the largest area of restored wetland habitat remaining on Regional Parks. They also contribute significantly to the extent of remaining wetlands in the Awhitu Peninsula and the Auckland Region.



Wetland snippets

Monitoring your wetland

The Handbook for Monitoring Wetland Condition is now available from the National Wetland Trust website:

www.wetlandtrust.org.nz/Handbook.pdf.

The handbook describes a set of science-based indicators for estuarine and palustrine wetlands that has been designed for managers, landowners and community groups.

Maori indicators for wetland condition

Another handbook for monitoring wetland condition has also been produced recently. This one documents a generic set of Māori indicators to monitor wetland condition and trend and is based on work carried out with a large number of Māori organisations and individuals. The document can be found at:

www.landcareresearch.co.nz/research/social/maoriindicators.asp.

Rudd get the boot

Environment Waikato's freshwater ecology team have spent much of the past year working collaboratively with DOC and NIWA on a project aimed at refining techniques to remove rudd from several small peat lakes in the Waipa District. The project is important to preserve the rare, completely native, aquatic plants found within the lakes. This project has been underway for two years and is showing excellent results. Want to know more? Contact Grant Barnes at Environment Waikato.

Need help identifying wetland plants?

Paul Champion and Paula Reeves from NIWA are running a workshop on how to identify emergent wetland plants, including both native and introduced species. This will be held at the University of Waikato on the 13 & 14th February 2003. Fee is \$280 (\$50 for students) and includes a taxonomic key and a fieldtrip to Waikato wetlands. No previous botanical experience needed. To register contact Paul, ph 07 8561-796 or email p.champion@niwa.co.nz.

Waipa Lakes Focus

The signatories to the Waipa Lakes and Wetlands Accord have launched a new look and new name. The 'Waipa Lakes Focus' consist of Environment Waikato, DOC, Waipa District Council and the Auckland/Waikato Fish and Game Council. The group is committed to working with landowners, tangata whenua and community groups towards the restoration of the lakes and wetlands in the Waipa District. The new 'brand' signifies the collaboration of the signatories and provides an identity that can be developed to support restoration projects and foster community participation.

Dear Dr Bog...

We thought it might be useful to include in the newsletter a wetland advice column. So if you have any questions send them in (p.reeves@niwa.co.nz) and we'll do our best to find an answer.

What is the difference between a swamp and a bog?

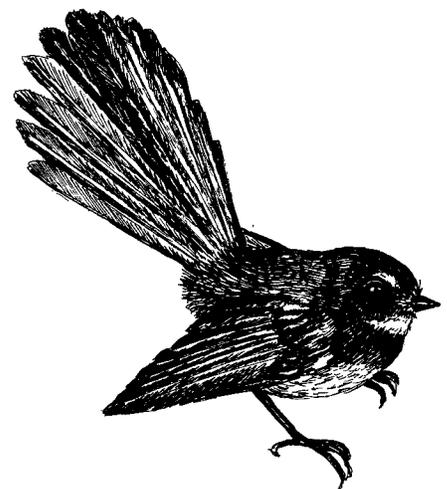
The difference between most wetland types is based on where they get their water. Swamps get water from surface run-off and/or ground

water that have been in contact with soil. As a result they are quite rich in nutrients and the water table is usually permanently or most of the time above the ground surface. Bogs only get their water from rainfall and therefore have very few nutrients. This results in acidic conditions, which few plants are able to tolerate, which is why most bogs are home to very few species such as wirerush (*Empodisma minus*) and sphagnum moss (*Sphagnum* sp).

Our wetland pond is covered in a tiny floating green plant. What is it and how do we get rid of it?

The plant is probably one or a combination of three tiny floating plants present in NZ; duckweed (*Lemna minor*), purple-backed duckweed (*Spirodela punctata*) and watermeal (*Wolffia australiana*). All of these species like fertile, sunny, wind protected conditions. So to get rid of them or to reduce the amount in your pond you will need to alter these. You can do this by planting trees to shade the edges of the pond and by stopping nutrients reaching the pond (i.e. fence out stock, plant edges to filter out nutrients from run-off). If none of these work or they're simply not practical then try skimming the pond with a fine-mesh net on a regular basis.

Diquat, the only herbicide that is registered for use in NZ streams and ponds, is not very effective on duckweed and will not kill watermeal.

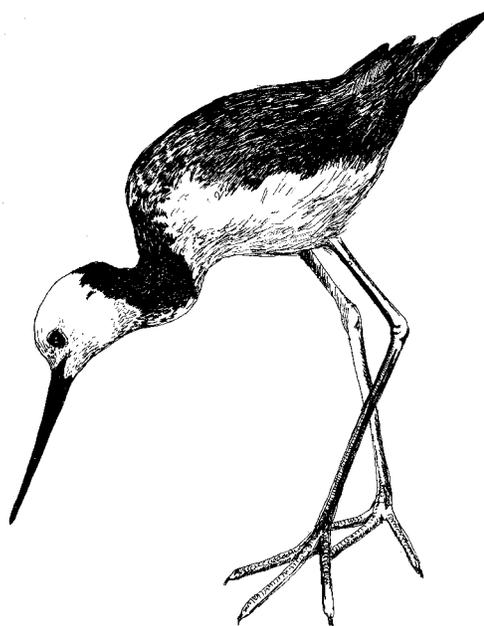


KEEPING IN TOUCH WITH THE TRUST

To submit a contribution for the next newsletter please contact:

Paula Reeves
ph: 07 8561738
Email: p.reeves@niwa.co.nz

All the wonderful images contained in the newsletter are by Sonia Frimmel. We thank Environment Waikato for making these images available to us.



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