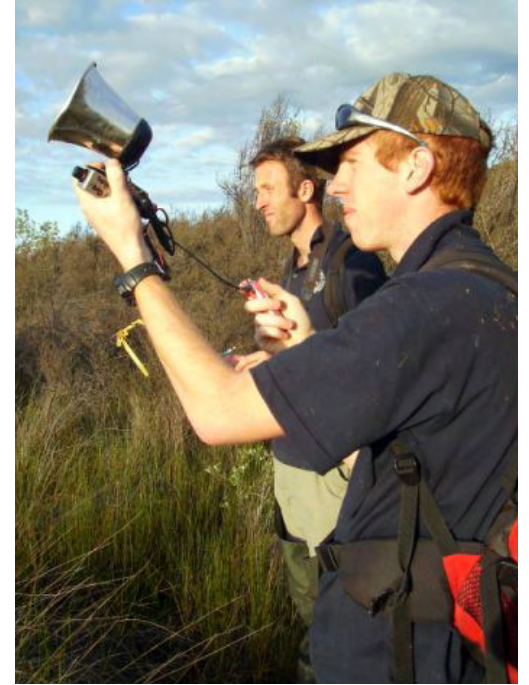


Wet & Wild

SAVING A SWAMP



Left: Waimarino Wetland from the air. Above: Chris and Andrew calling bitterns

Saving a swamp may not sound a very exciting or glamorous project to take on, but that is exactly what the Tongariro Natural History Society is working on in conjunction with the Department of Conservation in Turangi.

The Waimarino Wetland near Motuoapa, where efforts are being concentrated, is part of the much greater South Taupo Wetland that extends around the southern edge of Lake Taupo between Motuoapa and Waihi.

From SH 1 near Motuoapa there are few visual clues of the large body of water lying between the road and the base of the bush-covered headland jutting out into the lake and protecting Motuoapa Bay. A short climb, however, along the track behind the Motuoapa Motels to a lookout over the bay reveals a different picture. The triangle of water and swampland contained between SH 1 and the headland is spread below, contained by the narrow strip of beach and scrub connecting the headland to the mouth of the Waimarino River and the band of bright green crack willows edging Motuoapa Bay.

Thin parallel strips of vegetation running through the wetland mark where the Waimarino River once ran when – in earlier times – it entered Motuoapa Bay. Artificial raising of the level of Lake Taupo to feed hydro electric power stations along the Waikato River has increased the original size of the wetland, which in the past was an important source of food to Maori living in several villages that once stood along the lakeshore near Motuoapa. Cliffs behind the villages and on the headland were used as burial sites.

The word swamp doesn't usually conjure up beautiful mental images - just visions of mucky mud and weeds - but the Waimarino Wetland is a surprisingly serene and beautiful place. It provides very important habitat for a number of threatened species of birds, two rare species of native buttercup and a native snail found only on the headland and on an

island in Lake Taupo. Birds commonly seen on the water are cormorants, scaup or black teal, black swans, mallard and paradise ducks, and white-faced herons, while grey warblers, silver-eyes, chaffinches are common in scrub areas and bell birds and tui occupy the extremely tall kanuka forest on the headland. Less frequently seen are the secretive spotless marsh crakes and bitterns, although booming by the latter indicates their presence. Fern birds frequent patches of manuka and, although hard to see, are located by the double 'tick' sound of a pair of birds.

So why does this wetland, or swamp need saving? It seems healthy enough.

Most of the Waimarino Wetland is owned by local iwi but a portion of it, which extends onto the lower end of the headland, is DoC reserve. The department is very concerned about the spread of grey willow (often called pussy willow), which over decades has infested the entire South Taupo Wetland. Grey willow spreads easily by producing vast quantities of seeds that are carried by the wind. It began appearing in Lake Rotoaira to the south of Lake Taupo and the fear was that it would soon be found

Story continues overpage

Wet & Wild is the National Wetland Trust's quarterly publication. We seek contributions, though published at the editor's discretion. Each issue will be available on: www.wetlandtrust.org.nz within two months of publication, where they can be downloaded as pdfs.

Membership forms can also be downloaded from the website.

Submit articles to slindsay@fishandgame.org.nz

A grateful thanks to Mighty River Power for sponsoring the National Wetland Trust newsletter.

Contact the NWT on www.wetlandtrust.org.nz





in Tongariro National Park and the Kaimanawa ranges. If left to grow unchecked in the Waimarino Wetland it will eventually choke it to death. Environment Waikato shares DoC's concerns as they are responsible for looking after the health of Lake Taupo. Although eradicating grey willow from the entire South Taupo Wetland seems like an impossible task, the decision was made to start with trials on the Waimarino section.

This is where the Tongariro Natural History Society comes in. With its pool of volunteer workers already doing conservation work in the Tongariro Taupo Conservancy it is the ideal organization to carry out the initial surveys to find out just what was in the wetland, and to carry out trials to work out the most effective way of eradicating the willows. Scientific expertise is supplied by DoC and funding for the work has come from Environment Waikato and the Waikato Catchment Ecological Enhancement Trust. Areas that can't be reached on foot are explored by kayak. Walking around in the mud in thigh waders to do this work is hard going, and often entails pushing through flax and scrub laced with blackberry. There are also the dangers of stepping into holes or the very deep mud of old stream beds.

Trial areas of willow were treated with herbicide, either by cutting and pasting the stumps, drilling holes into the trunks, or by boom spraying by helicopter. The herbicide used was one that did not target monocotyledons such as cabbage trees, sedges, toe toe and raupo, and only patches that were almost entirely grey willow were sprayed. Follow-up checks on the trial areas this spring show how successful and cost effective the spraying was compared to other methods: under dead willows that had been sprayed were found healthy sedges and other



monocot plants. Patches of an introduced water weed, with potential to choke the wetland, were also killed by the spray. The other more labour intensive methods will still have to be used, however, on willows that stand within or along the edges of native vegetation.

Local iwi have watched the work being done in the wetland with great interest and they are now keen to clean up the areas of willow on their land. They see the potential of the Waimarino Wetland as a place for bird watching, possibly from boardwalks or hides. Kayaking the wetland is another way to see the birdlife, but access to it from Motuoapa entails crossing the bay and this can be tricky in windy conditions.

Restoration of the Waimarino Wetland is just one of several projects currently being tackled by the Tongariro Natural History Society. The Society was set up in 1984 as a living memorial to four Tongariro National Park staff and the pilot who were killed in a helicopter crash on Mt Ruapehu on 9th December 1982. Its aims are to promote a wider understanding of all facets of Tongariro National Park ecology and human history, and to provide recreational, social and educational opportunities for members. It's not all about doing work though and field trips within the park and to other places of interest are organized for members.

Anyone with an interest in the park can join and new members are welcome. For more information about the Tongariro Natural History Society write to Box 238 Turangi, email info@tongariro.org.nz or check out the website www.tongariro.org.nz.



BRaid

In October 2007, a workshop was held in Rangiora, hosted by the Ashley Rakahuri Rivercare Group, from which came an umbrella group to support conservation on braided rivers called BRaid (Braided River Aid). The BRaid group has met regularly since March 2008 in Christchurch. Participants include community groups, government departments, councils, NGOs, commercial operators, and private companies and individuals.

Purpose: "To protect, enhance and restore braided river ecosystems."

The goals of braid are to:

1. Provide effective leadership and advocacy and encourage co-operation between all parties whose interests and activities involve braided rivers.
2. Reverse the decline in ecosystem health of braided rivers.

3. Facilitate a collegiate approach to collecting, storing and sharing data and information on braided rivers amongst all interested parties and organizations.

Key actions to achieve BRaid's purpose include: Education, advocacy, and awareness (e.g. newspaper articles and school programmes, workshops); monitoring and surveys; research/management and for 'grey' literature to be more accessible.

The group is working towards implementation through becoming incorporated and employing a facilitator to: Help form and assist community river care groups; improve awareness / education; assist / coordinate local river surveys; maintain a website and carry out research.

Contact Jack van Hal at jvanhal@doc.govt.nz, or Nick Ledgard at n.ledgard@xtra.co.nz or Eric Spurr at spurre@landcareresearch.co.nz

Countless hours spent in tiny hides

Wildlife photographer Geoff Moon recently died at the age of 93, not long after publishing his latest book on wetland birds. The NWT is selling copies of Geoff Moon's book, and here we would like to acknowledge his enormous contribution to the photography of our bird life.



PATIENCE PAYS: Throughout his life, Geoff Moon spent countless hours in tiny hides, watching and waiting for the perfect shot, such as the inset image of a kingfisher flying to its nest with a worm.

Geoff first began work in New Zealand as a veterinarian in the Warkworth area after arriving here from England in 1947. Despite this profession, Geoff is best known as one of New Zealand's best nature photographers. He published more than 20 books, generally about our bird life as recorded by his wonderful photographs.

He pioneered the technique of using constructed hides to closely observe birds on their nests in a natural environment. Some of his early photographic studies, particularly relating to the Kingfisher, New Zealand Bittern and Morepork added greatly to the previously unknown breeding and feeding techniques of these birds. In fact, all of his bird photography was undertaken with the purpose of learning something about our birds' behaviors, rather than just achieving an aesthetic picture, which he also always did. So while his images won him a worldwide reputation, he also took detailed notes that were of scientific importance.

One of his greatest achievements was to achieve what had previously been regarded as impossible – photographing a Kingfisher in action in the wild. We usually see the Kingfisher's dive as a flash of blue followed by a splash as it aims headlong from its perch into the water

to capture its prey and arrives back on its perch in just 1.5 seconds. So the photographer has to begin shooting his film as soon as the bird leaves its perch with the challenge being to know accurately where the bird is going to dive so that the camera can be aimed and focused on that precise spot. In the hide and its pond Geoff built on his Warkworth property it took him three years before he finally got the results he wanted - focused, close-up images that were so good he was the first to discover the kingfisher has a special membrane over the eye, which closes just as the bird enters the water.

He applied the same dedication and ingenuity to photographing the morepork - a fast silent-flying nocturnal bird - only this was a technical feat that nearly cost him his life. Working at night in a hide high in a tree he had to guess where to focus as his subject carried prey back to its chick. One night a vicious electric shock knocked him out as he tried to change the bulb in a malfunctioning camera flash unit. Luckily he fell safely into the hide rather than out of the tree. His lifetime's efforts required countless patient hours in tiny hides, often 10 to 20 metres above the ground, while even in his 70s he would scramble up cliffs and high into the trees. His extensive knowledge of bird behaviour combined with his veterinary skills also made him a key figure in successful efforts to bring kakapo and other endangered species back from close to extinction.

Moon's earliest photography efforts began with a box camera, photographing birds on the Thames estuary marshes, and he was just 10 when he built his first hide to observe three chicks in a sparrow hawk's nest. Geoff has been noted as saying he hated school "except for sport. And chemistry. And art. And physics. And geography".

He carried out his vet training in London where he later served as an officer in the British home guard on the Isle of Wight during World War II. After the war he was recruited by the New Zealand government and migrated in 1947 to establish the Warkworth Vet Club for the local dairy company, serving 460 farms. He would often be up before dawn to get into his hide and back again at night after a hard day calving in season. Geoff's work was recognised by conservationists, ornithologists and photographers who accorded him many honours. He was a distinguished life member of Forest & Bird, an associate of the Royal Photographic Society, patron and honorary fellow of the New Zealand Photographic Society and an honorary life member of the New Zealand Veterinary Association. He spent the last years of his life at his home in the Waitakere Ranges, near Titirangi, Auckland.

Geoffrey James Harwood Moon, OBE, naturalist, photographer and vet: born Hankow, China, April 22, 1915; married twice, had three sons and two daughters; died Auckland, March 13, 2009, aged 93

Sources: SCOOP, The Dominion Post library, Simon Woolf, Lynnette Moon, Gordon Ell, Forest & Bird and David Lawrie.

National Wetland Restoration Symposium 2010

Registrations will soon open for the 4th National Wetland Restoration Symposium. This will be held in Rotorua with a strong emphasis on learning and sharing practical techniques.

We hope to open registrations before the end of June for those who have some unspent end of year budget – talk to your boss now! We are still seeking sponsors and exhibitors who wish to reach an estimated audience of 200 wetland restoration enthusiasts.

See more on our website: www.wetlandtrust.org.nz/symposia

ARAWAI KÄKÄRIKI

ARAWAI KÄKÄRIKI is a Department of Conservation wetland management and restoration programme that commenced in June 2007. Issue 18 of Wet and Wild (March 2008) introduced the Arawai Käkāriki programme and the important values at the three sites - Whangamarino Wetland in Waikato, Ō Tū Wharekai (Ashburton Lakes and the upper Rangitata River) in Canterbury and the Awarua Wetland/Waituna Lagoon complex in Southland.

The aim of Arawai Käkāriki is the ecological restoration of these wetland sites, with strong community involvement and research, and the promotion of wetland restoration techniques.

Wetland management and monitoring - progress at the three sites

Since the inception of the project, significant progress has been made. Highlights include comprehensive vegetation mapping, willow control, boundary and catchment fencing, weed and pest management, recreation planning, establishment of the Awarua/Waituna Advisory Group and the expansion of the Awarua/Waituna Ramsar site.

Updates on Arawai Käkāriki progress will be regularly described in Wet & Wild and on the DOC website www.doc.govt.nz/conservation/land-and-freshwater/wetlands. In this update, a summary of key management and monitoring actions at the three sites is provided.

WHANGAMARINO WETLAND



Whangamarino Wetland

The Whangamarino Wetland is one of the largest swamp and raised peat bog complexes in New Zealand. Some of the key aims for management are to limit the impact of exotic flora and fauna on native species, protect sensitive habitat from stock and deer, maintain appropriate water levels, and promote sustainable recreational use.

Recent wetland management and monitoring at Whangamarino includes the following:

- Detailed vegetation mapping using aerial photography. This map will help monitor the extent and condition of native vegetation, and identify important habitat for wetland birds;
- Engineering designs for the upgrade to the Whangamarino Weir completed. Although high water levels during February-March 2009 delayed works, when finished the weir will help to restore water levels;
- Installation of hydrological monitoring equipment and a weather station. Equipment will be used to understand the relationship between water levels and wetland condition;

- Survey of threatened plants including *Corybas carsei*, *Lycopodiella serpentina*, *Myriophyllum robustum*, *Utricularia australis* and other rare and endangered flora. Results confirmed many of these species are still present;
- Survey of the fish fauna in Whangamarino Wetland, the first wide-scale fish survey since 1980. Nine native species (including eel and mudfish) and five introduced species (including koi carp) were recorded;
- Collection of mustelids and other pests for gut analysis using stable isotopes. This will provide information on the abundance of terrestrial pests and dietary habits;
- Completed Australasian Bittern monitoring in September/October 2008 using a relative index measure (measuring male birds). Further development of methods to monitor bittern and other cryptic birds is planned;
- Exclusion of stock and deer from sensitive wetland areas via fencing and deer control.



Public meeting at O Tū Wharekai

O TŪ WHAREKAI (Ashburton Lakes and Upper Rangitata)

The Ashburton Lakes and Upper Rangitata River (Ō Tū Wharekai) support a unique assemblage of wetland ecosystems, including tarns, red-tussock swamps, glacial lakes and braided rivers. Key aims for management are to conserve rare vegetation and landforms, limit the impact of exotic flora and fauna (e.g. to support Wrybill nesting), promote sustainable recreational use and limit the impacts of changing land use on wetland values.

Recent wetland management and monitoring at Ō Tū Wharekai includes the following:

- Application of high-resolution aerial photograph for wetland vegetation mapping. This identifies the extent of native and exotic vegetation across the Ashburton Basin;
- Baseline survey of the composition and structure of ephemeral turf, which is a rare vegetation community associated with kettleholes (tarns) at the Spider Lakes;
- 445 ha of willows controlled to date. Annual broom control in the Rangitata also undertaken;
- Post willow control restoration plantings at Lake Heron, Lake Roundabout and Maori Lakes;
- Wrybill nest/territory mapping and monitoring in Upper Rangitata River completed to determine breeding success and habitat use;



- Survey of Australasian Bittern and Marsh Crake. Maori Lakes was the only site where bittern were detected (3 individuals). Good numbers of crake at Lake Heron and Lake Emma/ Roundabout;
- Baseline fish survey recorded small scattered populations of Upland Longjaw;
- Vehicle exclusion fencing erected at Lake Clearwater and Heron;
- Public meeting held on 25th November to identify the preferred options for community involvement in the project. Forty-two people attended with a good mix of individuals, interest groups and landowners.

Awarua Wetlands - Waituna Lagoon

Awarua Wetlands - Waituna Lagoon was the first Ramsar site in New Zealand and contains the one of the largest remaining peat bog-swamp-coastal lagoon complexes. Key aims for management are to identify and maintain appropriate water levels in Waituna Lagoon, work with local community to improve catchment water quality, protect rare vegetation types, and limit the spread of exotic flora and fauna.

Recent wetland management and monitoring at Awarua-Waituna includes the following:

- 20,000 ha Awarua Wetland Ramsar site extension officially opened by the Minister of Conservation;
- 240 ha of high conservation value, remnant lowland habitat purchased as a new land acquisition by the Nature Heritage Fund. This provides opportunity for research projects into ecological restoration as a large portion of it is retired farm land;
- A new Environment Southland/DOC funded land sustainability officer employed to promote and implement sustainable catchment land use;
- Riparian fencing and planting of tributary streams and creeks in progress;
- Ongoing Spanish heath control;

- Baseline survey of fish fauna, including eels and Giant Kokopu completed. Good numbers of eel and Giant Kokopu were recorded;
- Construction has commenced on the new 6 km Waghorn Track on the northern edge of the Waituna Lagoon;
- The Waituna Landcare Group held a field day and the project assisted with subsidised helicopter flights over wetlands. Over 120 people turned up for the field day and 65 people took the flight.

Research - supporting wetland management

Arawai Kākāriki is also supporting research on wetland management and restoration. Research outcomes will improve understanding of the ecology of New Zealand wetlands and help assess the effectiveness of wetland management actions. Current research includes:

- Development of standardised methods for the survey and monitoring of swamp specialist birds, such as Australasian Bittern and Marsh Crake;
- A review of current knowledge of the mammalian predator in New Zealand wetlands;
- Collation of current and historical records of the distribution of Australasian Bittern across New Zealand, including important breeding sites;
- Assessment of the ecological requirements for maintaining submerged macrophyte beds in Waituna Lagoon;
- Palaeolimnological investigation of the historical water regimes and water quality of coastal/lowland and inland/glacial wetlands (in collaboration with University of Otago; and University of Canterbury);
- Development of indicators for monitoring wetland restoration.

Research findings will be presented in future Arawai Kākāriki updates in Wet & Wild.

Article by Richard Suggate and Hugh Robertson, Department of Conservation. Photograph above of Spoonbills at Awarua Wetlands-Waituna Lagoon by Sally Chesterfield, DOC

Another wetland treasure from the NZ Native Forest Restoration Trust

I recently had the pleasure of attending the opening of the Marie Neverman Reserve – a 23 ha block of land on the South Kaipara Peninsula, about 45 minutes north of Auckland. The reserve is also known as the Tupare Lake and Wetland because 14 ha of it is a wonderful open lake with extensive raupo and reed beds. Backing onto the Kaipara Harbour, the reserve has been purchased by the Native Forest Restoration Trust (NFRT).

NFRT was founded in 1980, following the experiences of a number of its founding trustees who were involved with successful efforts to save giant totara from logging in Pureora Forest. It is New Zealand's leading organisation involved in forest restoration. Since its inception, NFRT has acquired land at the rate of 250 ha a year to protect important species, restore their habitats and to improve the quality of New Zealand's waterways. It now has 25 reserves throughout New Zealand with a total of nearly 6,000ha of protected native forests and wetlands.

The purchase of the Marie Neverman reserve was made possible by generous donations from a number of NFRT supporters of which Marie Neverman was one. The location of the reserve suited the desire of NFRT to have an accessible reserve close to Auckland to showcase its goals of restoring natural habitats and protecting native flora and fauna.

The purchase of a wetland area in the Auckland Region is significant. Less than 0.5% of wetlands remain in the Rodney District where the reserve is situated. Surrounded by farmland on three sides the Marie Neverman reserve illustrates the vulnerability of wetlands and the importance of protecting the remnants that remain.

NFRT has had considerable support from the South Kaipara Landcare Group (SKL) who, along with the Ornithological Society, has for many years turned out every Anzac Day to count wetland birds. Species recorded include dabchick, little grebe, a nesting colony of pied shag, white faced heron and grey teal. In addition to waterbirds, the surrounding habitat provides shelter for many other species including bittern, fernbird, spotless crane and kingfisher.

Some years ago SKL installed nesting boxes for grey teal. In autumn, from boats, they clear the nest boxes of starling and sparrow litter in time for the grey teal to select their winter nest sites. The boxes appear to be very well used.

Around 100 people came to the opening. We all congregated on the open paddock which provides panoramic views of the wetland. The reserve was officially opened by Sir Paul Reeves, the patron of NFRT. Some wonderful talks were then provided by a number of people on the importance of the wetland. These included Michael Taylor, a noted ornithologist and long-time NFRT stalwart, and Geoff Davidson – another NFRT stalwart – who showed us a species of Mistletoe recently found on the reserve by Maureen Young from the Auckland Botanical Society.

Following the formalities we had a walk around and a wonderful barbeque put on by SKL. NFRT are not content with what they have purchased to date around the wetland and are seeking funds to purchase a block of land adjoining the wetland so that they end up with a larger wetland, which links through to the Kaipara Harbour. NFRT and particularly the generous donors – along with Michael Taylor and Geoff Davidson – deserve a great thank you from us for this inspiring purchase.

Jo Ritchie

Golden Plover Wetland Research Award

Closing : 31 May 2009 Level : Masters Value : \$1,000

This Award is intended to support a student who is conducting original research into any aspect of the ecology or management of wetlands at Masters level at any university in New Zealand. The Golden Plover is one of many migratory birds who make their way from Alaska to New Zealand.

The name symbolises this connection between the two countries, as the key donor was originally from Alaska but now resides in New Zealand.

The Award was established in 2001 by Drs Tony Reiger and Steven Messerschmidt, in conjunction with the National Wetland Trust of New Zealand and the University of Waikato. The Current donors are Dr. Reiger and the National Wetland Trust.

The applicant must clearly demonstrate that their research meets two or more of the following criteria:

- Increases the appreciation of wetlands and their values by all New Zealanders;
- Facilitates the enhancement and restoration of wetlands;
- Increases the understanding of wetland processes by all New Zealanders;
- Establishes good experimental design that will lead to an increase in scientific knowledge of an aspect of wetlands;
- Improves communication about wetlands to key target groups (i.e. wetland landowners, policy makers, and councillors).

The Award is available for study at any university in New Zealand.

The full regulations and application form are available on: www.waikato.ac.nz/research/scholarships/pdf/GoldenPloverAward.pdf

Wetland Trails update

We have received funding from Lottery for the Bay of Plenty wetland trail signs to cover our printing costs; and we have submitted an application to Environment Bay of Plenty for the labour costs involved in the development. We are still awaiting a response from ASB for the Waiheke wetland trail sponsorship.

The NWT was recently contacted by STEPS, a Mt Albert stream restoration group interested in creating a wetland trail in the Auckland area. The Trust sent them our Guide to developing a Trail (see our website) and contacted Shona Myers (ARC) for information on wetlands in the area. We hope to meet with STEPS in July to explore the route.

NWT NEWS

OUR WEBSITE

Visit NZ's Ramsar Wetlands on our website. The Ramsar Convention encourages the "wise use" of wetlands, so that they can be sustained economically, socially and environmentally.

The Ramsar sites around the world acknowledge the flyways of migratory birds. Visits to New Zealand's wetlands by migrating birds is a constant reminder of our global connections, with some birds travelling distances of 12,000 kilometers non-stop from the Arctic. Our website now has links to information and graphics on our six Ramsar sites (internationally significant wetlands).

- Farewell Spit at the top of the South Island
- Firth of Thames in the Hauraki Gulf
- Kopuatai Peat Dome on the Hauraki Plains
- Manawatu Estuary near Foxton
- Waituna Lagoon in Southland
- Whangamarino wetland in the northern Waikato

WETLAND EVENTS – tell us and we'll tell everyone else!

Our wetland events page should be in your favourites list, check it regularly to find out about seminars, field days, planting days and more. Let us know about your wetland event so we can add it and a link to your site or contact details for further information. Email us at enquiries@wetlandtrust.org.nz

WETLANDS TO VISIT

The Trust plans to build an on-line database of wetlands people can visit in New Zealand. Here we will feature wetlands that have public access and facilities such as boardwalks, interpretation panels, picnic areas, and viewing hides.

Please contact us if you would like your wetland to be featured or if you would like to sponsor the development of the directory. enquiries@wetlandtrust.org.nz

NATIONAL WETLAND CENTRE FUNDING

Transpower - via their second funding round - are giving the NWT the rest of the original \$68,000 sought to develop the National Wetland Centre plans. We also received \$10,000 from Trust Waikato. Thanks Transpower and Trust Waikato!

SUBMISSIONS

It's been a busy time for policy submitters lately. The NWT wrote submissions recently on: the Resource Management (Streamlining and Simplifying) Amendment Act; the National Policy Statement on Freshwater, and the National Environmental Standard on Ecological Flows.

Resource Management Act

The proposed amendment to the Resource Management Act is a result of the National-Act confidence and supply agreement: "National and ACT agree to promote investment, jobs, wages, employment and prosperity, as well as environmental improvement, through amendments to the RMA."

The NWT submitted on its concerns around proposals that will weaken public participation, e.g. increasing costs to appeal a council decision, limiting notification of consents, and removing the Minister of



"Will the Minister of Conservation lose the power to approve or decline coastal permits acting as the 'landowner' on behalf of all New Zealanders?"



"Water takes and discharges are not the only activities that destroy wetlands as this bulldozing of peat bog vegetation shows."

Conservation's role in approving permits for restricted coastal activities. We also expressed alarm at the proposal to limit councils' ability to protect native trees in urban areas, noting, among other things, their important role in protecting urban streams and wetlands from pollution and microclimate extremes.

Our submission said: "The NWT is generally opposed to the range of clauses that weaken public participation in the RMA process. The Act governs management of the environment, an entity with no voice of its own, that is of interest to all New Zealanders, and which suffers significantly from the tragedy of the commons. The 'voice' for the environment provided by various concerned citizens and community groups must not be stifled by limiting notification requirements, restricting the ability to contribute to further submissions, narrow definitions of affected person, and increasing appeal fees and the ability to seek costs from legitimate appeals against environmental degradation."

On the positive side, our submission did support increasing fines for offences under the RMA, and the establishment of an Environmental Protection Agency in the hope it will result in more consistent and informed decision-making on major consents, and develop long-awaited national policy statements, such as an NPS on Biodiversity. We requested it be adequately resourced, expressing concern at the recent severe budget cuts to the Ministry for the Environment.

"We have long awaited the promised NPS on Biodiversity, in the hope that it will recognise and provide for the ecological values of wetlands,

a factor of diminished importance in the water allocation and quality focussed proposed NPS on Freshwater Management. We wish to remind the panel of the Statement on National Priorities for Protecting Biodiversity, that specifically refer to wetlands as a national priority."

National Policy Statement on Freshwater Management



"The Blue Springs on the Waihou River is the source for bottled 'Pump' water. The NES on ecological flows aims to ensure there is sufficient water for nature as well as for human use."

The proposed National Policy Statement on Freshwater Management was released for public comment late in 2008, and further submissions were called for in April 2009. National policy statements are developed by the Ministry for the Environment under the Resource Management Act. They enable central government to prescribe objectives and policies on resource management matters of national significance. They guide subsequent decision making under the RMA at the national, regional and district levels. Only two NPS have been developed since the RMA came into force in 1991 (NZ Coastal Policy Statement and the NPS on Electricity Generation).

The NPS on Freshwater is intended to lead to improved water quality, more efficient use of water, and better management of the increasing demands for water. Local and regional councils will have to give effect to its objectives and policies through their plans and consent decisions.

The proposed NPS has nine objectives and nine policies that largely relate to water quality and quantity (i.e., focussed on abstraction and water pollution). The NWT submission sought greater emphasis on biodiversity, cultural and other values of water bodies, seeking a more holistic treatment of aquatic ecosystems. We sought inclusion, for instance, of policies and objectives related to other damaging activities like drainage, infilling and vegetation clearance from wetlands.

Our submission said: "Given the recent amendments to the RMA to include roles and responsibilities of local authorities to maintain biodiversity, the 2007 National Priorities for Biodiversity specifically mentioning wetlands, the existence of a national biodiversity strategy and the reluctance of government to produce a NPS on biodiversity, we are surprised at the scant mention of biodiversity in the draft NPS, other than an acknowledgement that water "crucially underpins important parts of New Zealand's biodiversity and natural heritage."

We noted New Zealand's failure to adequately protect wetlands, and the need for stronger provisions to meet our Ramsar obligations to stem the progressive encroachment on, and loss of, wetlands now and in the future. We also noted that herbaceous (palustrine) wetlands often fell

through the policy gap, not being 'land' not being 'water', which can lead to some buck-passing between the water-focussed regional councils and the land-focussed local councils. We also sought stronger requirements on local authorities to adequately monitor and report on the extent and condition of wetlands, reminding them of the monitoring guidelines available from the NWT website.

The NPS also proposed requiring councils to identify notable values (ecological, cultural, recreational, etc) of outstanding and of degraded freshwater resources. It then directs them to develop water quality and quantity standards for the "protection of Notable Values of any Outstanding Freshwater Resources and the enhancement or restoration of Notable Values of any Degraded Freshwater Resources." We asked about those wetlands that fall between the extremes of outstanding and degraded.

It appeared from the summary of submissions that other submitters made similar comments. We were able to put in further submissions supporting or opposing comments made by other submitters. Public hearings will be held in mid-2009. An independent Board of Enquiry will then consider all submissions before making their final determination.

Other National Policy Statements in the pipelines include:

Flood Risk Management

Urban design

Renewable electricity generation

Readers can find out more on the Ministry for the Environment website.

National Environmental Standard

National environmental standards (NES) are government regulations issued under the Resource Management Act and apply nationally. They prescribe technical standards, methods and other requirements for environmental matters. Every regional, city or district council must enforce the same standard (although in some circumstances, councils can impose stricter standards).

Three are currently in force in NZ (air quality, drinking water and telecommunications), with several more in development.

In 2008 an NES on 'ecological flows and water levels' was proposed. Ecological flows and water levels are the flows and water levels required in a water body to provide for the ecological function of the species living within that water body and its margins. If the levels of rivers, groundwater systems, lakes and wetlands run too low it can risk animal and plant life and impact on water users. The focus of the standard is on water abstraction.

The drafters took a very protective view of herbaceous wetlands, requiring that no variation to their water levels be permitted. While their intentions were well-meaning, this would affect wetland restoration projects, such as installing weirs to elevate artificially lowered water levels. We sought reference to protection of wetland water levels appropriate to their maintenance and restoration needs.

Our submission said: "While we generally applaud the protective approach regarding modification of wetland water levels, note that in some cases it may be necessary or desirable to raise, lower, or fluctuate water levels in wetlands to restore, maintain or enhance ecological values.

We submit that exclusions should be provided for the express purpose of protecting, enhancing, creating, or restoring wetlands to maintain or enhance indigenous biodiversity, or where indigenous biodiversity will not be adversely affected, to enhance recreational, cultural or spiritual values of wetlands." Unlike NPS, there is no provision for putting in further submissions on the NES. The Ministry for the Environment staff will consider submissions and draft a final regulation for their Minister and Cabinet to approve.

TREASURER'S REPORT

It has been some time since the Treasurer has had a report in one of the Trusts' newsletters. I therefore provide the following information relevant to the financial workings of the Trust.

1. Subscription Renewals

Enclosed with this newsletter will be subscription notices for those who have not yet paid their 2009 subscriptions. If you do not receive a notice then you can assume that you have already paid and need take no further action. The subscriptions have been kept deliberately low as we try to build a membership base to enable contact to be made with as many people interested in wetlands as possible.

It would be appreciated if people could check the contact details to which the newsletter has been posted and provide any changes to enable our records to be kept as accurate as possible. People could, in particular provide, the updated postal codes which would save a considerable amount of time in compiling the address list.

2. Charitable Status

The Trust has been re-registered as a Charitable Organisation in terms of the New Charities Act. This means that the Trust retains its status as a Charitable Organisation to which any donations over five dollars are tax deductible. It should also be noted that the Government has changed the legislation to remove the arbitrary limit on donations that are tax deductible, which opens the way for all donations to be included within tax returns reducing the tax burden.

3. Auditor

It is with real regret that I report that the Trusts Honorary Auditor died of cancer near the end of March. Merv Baker had been the auditor since the Trust was formed, often providing helpful advice to the treasurer. This does create a dilemma for the Trust as we need to find a new auditor to deal with the annual accounts prior to the Annual General Meeting.

If there are any members who are willing to take on this relatively minor but responsible task and hold the appropriate qualifications they should contact me at the earliest opportunity. The constitution and the Charities Commission Registration require us to have the accounts audited each year and having a Scottish background I am loathe to have to pay for the services if there is someone willing to do it on a voluntary basis.

4. Newsletters

The Trust is currently investigating options for the printing of newsletters, which have over the years been sponsored by Mighty River Power. We are hopeful that the sponsorship can continue into the future but the Trust is looking at other options, one of which is providing the newsletter in an electronic format directly to members.

This would save the cost of printing and postage, the delays that are associated with having all those processes completed manually, and is better for the environment! If you are unable to download your newsletter off the web and would prefer a paper copy, please indicate the appropriate box on your sub renewal form. For those happy to receive an electronic copy, ensure your email address is written on your sub renewal form, and we will send out notification of when the newsletter is available.



NZ Native Freshwater Life Website

Established in 1999, the NZ Native Freshwater Life website is well worth a visit. It focuses on the existence of a natural wonder on many of our doorsteps. Most New Zealanders are unfortunately unaware of the amazing aquatic animals and plants that live even in our backyard streams.

Continued maintenance: The need for conservation efforts to maintain New Zealand's unique freshwater biodiversity.

Their plight: Some species are already under threat of extinction, and there is insufficient knowledge about the status of many others to be able to know whether they are safe or not.

Habitat destruction: The widespread and damaging destruction of native freshwater life habitats, and that there are alternative ways to live better alongside our 'fellow New Zealanders'.

Scientific knowledge: The low level of scientific research and limited knowledge we have concerning these aquatic plants and animals – how can we protect what we don't even know we have?

The website seeks to encourage people carry out these public awareness activities:

- Displays of native fish and aquatic plants to increase public awareness;
- Interesting articles in various local and international magazines and newspapers;
- Lobby national and local government in support of native aquatic life;
- Work with governmental agencies to protect and restore aquatic habitat;
- Work with ecological restoration groups to provide a freshwater perspective to restoration activities;
- And educate the next generation so that they can do a better job of protecting this amazing natural resource.

Check it out at: www.nzfreshwater.org

Rare ornithological visit to Democratic Peoples Republic of Korea

A team of local ornithologists visited a militarily sensitive 30km stretch of coast near Mundok, 80 km north of the capital Pyongyang in the Democratic Peoples Republic of Korea (DPRK) late last month.



Winston Peters broke the ice for the ornithologists' field trip during his visit to the DPRK as Minister of Foreign Affairs in November 2007 when he put forward the possibility of a team from the Miranda Naturalists' Trust (MNT) visiting the country to undertake a survey of migratory shorebirds with Korean scientists.

The team were intent on surveying Red Knots (*Calidris canutus*), birds that annually migrate from New Zealand to Siberia where they breed, passing somewhere through East Asia on their way. Red Knots must refuel on their journey, probably on the tidal shores of the Yellow Sea, but the exact whereabouts of most of them remains unclear.

Most of the suitable coastline of the Yellow Sea has been searched but not the coast of the DPRK, and published data on shorebirds in the DPRK is very limited.

With considerable assistance from the Ministry for the Environment, (MFAT), DoC, DPRK/NZ Friendship Society and the Korean Natural Environment Conservation Fund (KEF), approval from the DPRK government for the MNT visit was eventually forthcoming.

The team of three MNT members led by Chairman David Lawrie, along with members of the KEF and two Korean scientists, surveyed the area known as the Mundok Migratory Bird Wetland Reserve (MMBWR) known to hold some shorebirds, but with limited information on their numbers.

Mundok is an important wintering place for ducks, geese and swans, and over several days the team counted approximately 5,750 shorebirds of 22 species. Unfortunately no Red Knots were seen, perhaps because the tidal flat sediment in the area may not contain the small bivalves the birds favour.

The most rewarding sightings were the more than thirty colour-banded and flagged Bar-tailed Godwit (*Limosa lapponica*) seen in a flock of 2,200 birds. These birds had been caught and banded in North and South Island NZ, Victoria, southeast Queensland, northwest Australia (Broome) and near Shanghai, China, with their details still being sought. Several other species with flags from China were seen and a Dunlin (*Calidris alpina*) with Alaskan bands was also discovered.

The Mundok area was found to hold internationally important numbers of Bar-tailed Godwit and Saunders's Gull (*Saundersilarus saundersi*, a species classed as vulnerable), which was of great interest to the reserve staff as this will help raise awareness with the DPRK government of the importance of this site.

The west coastal plain of the DPRK is under intensive cultivation with rice paddies on the flat land and low rolling hills covered in various vegetable crops, apple orchards and small scattered villages.

Thousands of people worked in the fields, preparing for planting with few powered implements, and small fishing boats operated out of most small rivers to fish in the inshore waters of the Yellow Sea. Human pressure on the coastal habitat is considerable with most tidal flat areas being worked over by crab and shell fishermen. Marine worms are also collected.

Ensuring the survival of these vital coastal habitats is challenging all round the Yellow Sea where such a huge human population lives and works. The destruction of Saemangeum in South Korea in 2006 has had a dramatic effect on the populations of several shorebirds species migrating through the Yellow Sea, which only increases the urgency to protect the important areas that are left such as Mundok. The work the MNT team undertook will help to highlight this need.

MMBWR staff are seriously under-resourced but are enthusiastic, and it is hoped the increased awareness generated by the MNT visit will lead to more resources for them in the near future.

The local people were exceptionally friendly and hospitable as were the scientists involved, as well as KEF staff who work tirelessly for nature conservation with very limited resources.

The MNT signed a cooperation agreement with the KEF, and hope to return to the DPRK in the coming years to continue surveying the coast for migratory shorebirds in the hope of finding the elusive staging site of the Red Knot and other shorebirds passing through the area. The MNT has been undertaking similar voluntary work at Yalu Jiang in China just across the border from DPRK since 2004.

For more information contact: David Lawrie at: lawrie@ps.gen.nz. For information on the Miranda Naturalists Trust visit: www.miranda-shorebird.org.nz

“Shelducks, jewellery and Big Lagoon wetland area”

Early in the morning on Saturday 7th February a team of volunteers arrived at the Big Lagoon Reserve (The Southern Wetlands Trust) near Invercargill to learn a new trade: duck banding! Volunteers arrived at the lagoon before 7 am to discuss tactics and quickly got underway with the field work. The work brought together people from many walks of life: Senior DOC staff, Southern Institute of Technology (SIT) staff and students of Environmental Management, lagoon owners, local hunters and wildlife enthusiasts participated in the mornings activities.

A capture pen was set up on the lagoon bank. Kayaks and row-boats were used to quietly guide the ducks up onto the bank and into the pen. Only ducks that had not yet completed moulting and could not fly were captured. Approximately 50 birds were safely captured, banded and released back into the lagoon. The species banded were the native Paradise Shelduck – Putangitangtangitangi (*Tadorna variegata*).

The aim was to teach the art of bird banding to staff and students of Environmental Management at SIT. Other volunteers were also present to learn the technique. The Paradise Shelduck is a non-endangered game bird and relatively robust, making it the ideal species upon which to learn. It is also reasonably docile so no volunteers were injured by angry birds! A long term study on the shelduck population at Big Lagoon will be managed by SIT with banding-day occurring as an annual event.

SIT staff and students learned lots of skills: how to capture ducks, how to handle them safely, how to band them and how to collect data. Bird banding is a useful practical skill in conservation management, which is an important part of the Environmental Management programme at SIT. Big Lagoon is a regenerating wetland area owned by Dr. and Mrs. Anthony Reiger. It serves as a reserve for many wildlife species: New Zealand Shoveler, Canada Geese, and Pied Stilts to name a few.

The Shelduck population at Big Lagoon will be monitored as part of an ongoing study at SIT. With the support of Dr. and Mrs. Anthony Reiger other research projects studying wetland regeneration are proposed to be carried out by SIT students at Big Lagoon. SIT are calling for community participation in this study. If you shoot or find a banded Paradise Shelduck, please call the number on the band and make a report. You are welcome to keep the band but please report it. We need your help!

Enquiries to Nessa O’Sullivan nessa.osullivan@sit.ac.nz or Tony Reiger on 03-235-2271 or wetlands@woosh.co.nz

Wetland Project Picks Up Pace

By Denise Gunn courtesy of Straight Furrow

Plans for a community wetlands area in the Manawatu’s Pohangina Valley are underway thanks to funds raised from the inaugural Main Farm Naturally festival. The festival, organised by the Sustainable Mai Farm Trust, was held late last year to raise public awareness of organics and sustainability. The event celebrated 100 years of the Mai family’s involvement in farming in the Pohangina Valley. Firth generation dairy farmer Reuben Mai of the Sustainable Mai Family Trust said the festival was a roaring success. “We’ve had great feedback and interest in raising awareness around sustainability,” he said. “It was a great way for people to get connected with the land and the environment.”

The wetland project is now gathering momentum with plenty of support

from the local community. The McDonald family has offered a portion of land bordering Mai Farm to form a combined wetland area of two hectares. And the nearby Pohangina Valley Wetlands Trust has also given the scheme the thumbs up.

Mr Mai said the wetlands site, at the base of Raumai Hill, has a large water catchment area, which will ensure a constant summer water supply. The first stage of the project will be to fence the wetlands area and to excavate a large pond. Weeds will then be removed before planting commences. Manawatu District Council contractors offered to work on the project at cost price. Mr Mai would also like to involve local school pupils with raising seedlings and planting trees in the wetlands. Pupils from Awahou School in the Pohangina Valley have already planted a 500m stream back on Mai Farm with a selection of native plants. When trees become more established, Mr Mai hopes the wetland area will attract insects and native birds. “Those driving down Raumai Hill will see wetlands laid out before them,” he said.

The Mai Farm Sustainable Trust is planning another festival on November 28 with plans to increase the number of workshops on farming aspects relating to organics and sustainability. “We also plan to sell trees for people to walk over to the wetlands and plant,” said Mr Mai. “It’s a great opportunity for people and sponsors to get involved in a good community project.”

DoC Research on Wader Populations in New Zealand

Populations of waders, especially migratory species, tend to be in decline worldwide, with concern for some time about the status of some endemic species in New Zealand. Counts of waders in estuaries throughout New Zealand were made during summer (November-December) and winter (June-July) from November 1994 to June 2003, and compared with results from the previous decade.

Populations of most species breeding in New Zealand appeared to be stable or increasing, but banded dotterels (*Charadrius bicinctus bicinctus*) had clearly declined. No species of Arctic migrant appeared to have increased in number, and only eastern bar-tailed godwits (*Limosa lapponica baueri*) and pectoral sandpipers (*Calidris melanotos*) appeared to have arrived in similar numbers to the previous decade; numbers of the other species had declined, some substantially. There were disproportionate local gains and losses between sites in several species, suggesting local habitat change.

In winter, lesser knots (*Calidris canutus*) are now concentrated on Manukau Harbour and turnstones (*Arenaria interpres*) seemed to have moved away from Southland. Species that depend on a small number of sites nationally, especially wrybill (*Anarhynchus frontalis*) and lesser knot, are particularly vulnerable to changes at their wintering sites. Some declines in Arctic migrants clearly reflect problems elsewhere on their routes, but there is growing recognition internationally that impacts on non-breeding sites are critical. Consequently, recent changes to coastal environments in New Zealand are of concern.

The above new publication is now in press and can be downloaded from: <http://www.doc.govt.nz/upload/documents/science-and-technical/drds308entire>. **Ian Southey, DOC Research & Development Series 308. 70 p.**



The National Wetland Trust was established in 1999 to increase the appreciation of wetlands and their values by all New Zealanders. Our first major task is to build a wetland interpretation centre for people to learn more about wetlands and experience their special qualities. For more information visit our website: www.nationalwetlandtrust.org.nz

Other Trust aims are to:

- Increase public knowledge and appreciation of wetland values;
- Increase understanding of wetland functions and processes;
- Ensure landowners and government agencies commit to wetland protection, enhancement and restoration.

The trust has thirteen elected trustees representing: iwi, landowners, tourism and farming industries, local government authorities, Fish and Game Councils, the Department of Conservation, NGOs, Crown Research Institutes, and universities.

MEMBERSHIP FORM

An annual family subscription is \$20

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