

Flight



ISSUE 141 - October 2009





Our business is to harness community, business and government resources to restore and develop lost wetland areas within New Zealand.

Wetland Care members recognise that wetlands are vital to the wellbeing of the environment, acting as huge ecological sponges by soaking up pollutants and filtering water before it reaches streams, rivers, lakes, aquifers and the sea.

Our initiatives focus on matters as far-reaching as groundwater replenishment, flood control, nutrient and contaminant management and climate change – all critical factors for the conservation of freshwater and saltwater wetlands and marshes.

We want to preserve and conserve the flora and fauna of our most endangered ecosystem so that vibrant wetlands are our legacy to future generations.

Funding for projects comes from the Waterfowl and Wetlands Trust which was established by Ducks Unlimited New Zealand Inc in 1991, as well as membership, donations and corporate memberships such as that from Banrock Station Wines.

Central to Wetland Care New Zealand's mission is forming partnerships with people and organisations with similar aims. An example is Banrock Station Wines who place the Wetland Care New Zealand logo on their wine bottles distributed in New Zealand. In return, Banrock contribute a fee, which is based on each bottle sold, to Wetland Care New Zealand.

Money from this partnership has been given to wetland conservation projects done by, among others:

Tutukaka Landcare Coalition
Tawharanui Open Sanctuary Society Inc.
Ducks Unlimited Operation Pateke
Port Charles release 2005 at Coromandel
Henley Trust, Masterton
Karori Wildlife Sanctuary, Wellington
Kitchener Park, Feilding
Manawatu Estuary Trust, Foxton
Mangaone Wetland, Raetihi
Masterton Intermediate School, Masterton
Steyning Trust, Hawkes Bay
Travis Wetland Trust, Christchurch
Wairio Wetland, South Wairarapa
Wetland Trust New Zealand, Rangiriri
Waitakere Branch of Forest and Bird, West Auckland
Yellow-eyed Penguin Trust, Dunedin
Cape Kidnappers pateke release, 2008 and 2009
Fiordland pateke release, 2009

For further information, please contact:
William Abel - Director, Wetland Care
New Zealand, phone 06-362 6675
PO Box 281 Levin.

Manawatu Tararua wetland and predator-trapping recent events

The Silver Fern Farms fellmongery in Shannon in the Manawatu (fellmongery being the process of removing wool from the skin of a sheep carcass and treating the skin for conversion into leather) is creating a 50m² wetland using stormwater runoff from its roof, driveways, grass etc and, filtering this through a series of ponds, releasing the filtered water into the Makerua Stream and thus into the Manawatu River.

This large area adjacent to the fellmongery, owned by Silver Fern Farms, is being planted with flax and other suitable wetland vegetation and the expectation is that birdlife will soon inhabit the wetlands. The runoff area of 11,000 m² would enable 800,000 litres to be treated in a 24-hour period.

At Apiti in northern Manawatu by the Ruahine Ranges, the Blue Duck project is in full flight with farmers of the Oroua Valley laying traps for predators such as rats and stoats. The blue duck, known as whio, is a nationally-endangered species which inhabits clean, fast-flowing river systems. Only 640 pairs are estimated to exist in the North Island and 700 pairs in the South Island.

The World Wildlife Fund has granted \$14,000 over three years for construction of the traps, made of tanalised pine with netting at each end. The construction is being carried out by students of Tararua College in Pahiatua, at the southern end of the Manawatu.

Not only are farmers, New Zealand Deer Association and volunteers participating but also Apiti School senior pupils, who are mainly from farming families. 150 traps have been received and installed and next year another 150 will follow.

Waterfowl and Wetlands



Videos \$30

DVDs \$39

(inc GST)

+ \$5 for Courier

A New Zealand Odyssey

"Waterfowl and Wetlands - A New Zealand Odyssey" is a 75-minute programme that illustrates the value of wetlands, the waterfowl that depend upon them and the efforts being made to reclaim the country's rapidly shrinking wetland areas.

New Zealand is home to some of the world's rarest waterfowl as well as the more common introduced species. Each one is shown in detail. There is information on the various types of wetland and their management, waterfowl predators, the conservation value of hunters and also the Ramsar sites of ecological importance. DVD indexing takes you directly to any waterfowl species, wetland type, Ramsar site and other subjects.

ORDER FROM:

Scientific and Wildlife Films
11 Hanover Street, Wadestown,
Wellington, New Zealand

At the AGM there were two issues raised that we wished to contact members regarding:

We are looking for expressions of interest in two positions:

- Is there a retired accountant or someone similar who would be interested in auditing our books for an honorarium?
- A member who would be interested (training provided if necessary) to load information onto the website as and when it's provided?

Please forward your contact details, with a little bit of history to Ross Cottle, President.

"Job Positions" c/o PO. Box 9795, Newmarket, Auckland
or email info@ducks.org.nz

Insight

*Spring has sprung, the grass has riz
I wonder where those birdies is?
'Tis those birdies on the wing
.... No actually I think those birdies are out
trying to make more birdies.*

The pond out in front of our house has a large variety of birdlife and not just the ducks and swans but a large number of smaller birds such as finches, blackbirds, swallows and some tui - all intent on reproducing themselves. These other birds while not actually waterfowl are attracted to and are an integral part of a functioning 'wetland system'. My point here is that while the wetland was created primarily for waterfowl, the habitat thus created benefits a wide range of fauna and gives a great deal of pleasure to anyone watching.

Ross Cottle
President
Ducks Unlimited New Zealand Inc



Do you have, please....



A pair of Mandarin A pair of Carolinas

*If anyone has some to spare, please contact
Ed Beetham of the Wairarapa, on
(06)3722868, cell 0274464660 or
email edward@highcliffs.co.nz*

Our Mission

*To deliver effective wetland restoration, development, research,
education and advocacy;*

*While supporting the preservation of threatened waterfowl and the
ethical and sustainable use of wetlands*

Flight is published by:
Ducks Unlimited New Zealand Inc.
P.O. Box 9795,
Newmarket, Auckland 1149, New Zealand.
ISSN 1173-2776

Advertising in Flight magazine per issue (ex GST)
Full colour back cover \$400, Full colour page inside \$350,
Full colour half page inside \$200, Black and white full page \$300,
Black and white half page \$180, Black and white 1/4 page \$90.
All to be produced camera-ready.
Discount for long-term ads - ask Editor
Waterfowl adverts are free to members. Please contact the Editor
with any suggestions or to book a space.
Contributions from members and other readers, including
photographs, are welcome.
Deadline for all copy and illustrations, Flight 142:
15 November 2009

Editing & Production:

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Printing:

Lamb-Peters Print,
106A Main Street,
Greytown
Wairarapa

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Main cover photo:

Lakelands at Parua Bay, Whangarei, belonging to Lois and Murray Tapp. This photo taken at dawn by Lois Tapp.

Bottom left: Conference attendees viewing one of two wetlands - this is Neil Mercer's one. More photos inside.

Middle photo: Debbie Latoa of Constellation Group which company is the provider of Banrock Wines, at the Conference dinner.

Bottom right: Neil Candy accepts the Chapter Challenge Shield for his Manawatu chapter from DUNZ president and Wairarapa chapter's Ross Cottle.



Welcome to our new members from all over the country

Amelia Geary, Lower Hutt
Peter Olsen, Hastings
Liz Grant, Ashhurst
Lauren McIntyre, Feilding
Ian Johnston, Matamata
Mike Reynolds, Invercargill

National Cycleway coming our way.....

Bill Barrett Trophy recipient Dan Steele reports from Blue Duck Lodge, Whakahoro

Dan Steele was the recipient of the 2009 Bill Barrett Trophy from Ducks Unlimited and this is an excerpt from his August 2009 Blue Duck Newsletter which can be sent by email to any of those interested - just contact Dan at dan@blueducklodge.co.nz

"One of just seven new cycleway projects announced will start from Whakahoro and follow the existing Kaiwhakauka Track through native bush to the Mangapurua Valley and the famous 'Bridge to Nowhere'. From there it will be possible to jet boat to Pipiriki and continue along the Whanganui River Road or travel back to Whakahoro. Work may start as soon as November. This will be a 'must-do' blue duck activity and takes in the Whanganui National Park and areas rich in Maori and early farming history."

President's Report 2009

The term 'steady as she goes' might be applied the running of Ducks Unlimited at the moment.

The current economic situation/recession, whatever you want to call it, has made us all a little nervous, and while we do have some funds available to help with habitat restoration we do not seem to be getting very many applications.

The Waterfowl and Wetlands Trust has taken a fairly significant hit but we are confident it will recover in the longer term.

The Pateke Recovery Programme had a solid year with some good numbers of birds released into predator-free areas.

Once again Banrock Wines of Australia have been very generous with their support in this area.

The Whio Recovery Programme is making slow but steady progress on bringing that species back from the brink of extinction.

Conservation education at the school level has taken a step forward with a week-long conservation course being undertaken at a primary school Masterton.

I would like to thank the Board for their hard work in the last twelve months, made all the more difficult by the economic climate we live in.

My thanks also to Sandra Pipes for her work in administration.

Ross Cottle
President

- ☐ YES, I wish to join Ducks Unlimited as a member
☐ Please send me further information, I may join later.

Title..... First Name..... Surname.....

Address.....

POSTCODE.....

Phone..... Fax.....

E-mail.....



DUCKS UNLIMITED NEW ZEALAND INC.

For Wetlands and Waterfowl.

All subscriptions include GST. Membership is available in eight categories:

Junior (under 16) ☐ \$10 Contributor ☐ \$50 Family ☐ \$60 Business ☐ \$100 Life (one payment) ☐ \$3000

Note: Bronze, silver and gold sponsorships, which can be changed annually, include the membership fee of \$50. For the balance, sponsors will receive a receipt as proof of a tax deductible donation.

tBronze Sponsor ☐ \$80 Silver Sponsor ☐ \$150 Gold Sponsor ☐ \$300

My Donation of \$ is enclosed. Please find my cheque attached.

Please charge my VISA/MASTERCARD No:

Expires: Signature:

Please renew my membership each year and charge my credit card YES/NO

Post to: Ducks Unlimited, P.O. Box 9795, Newmarket, Auckland 1149.

ALL DONATIONS TO DUCKS UNLIMITED NEW ZEALAND INC ARE TAX DEDUCTIBLE.

Minutes of 2008 Ducks Unlimited New Zealand 34th Annual General Meeting

0900am 26 July 2008, held at Quayside Conference Centre, Napier

Welcome:

The President, Ross Cottle, welcomed members to the 34th Annual General Meeting.

Apologies:

William & Jan Abel, Andy Lowe, Glenys Hansen, The Mehlhopt Family, Graham Sperry, Tony & Bets Simpson, Vyndina Smith, Beverley McConnell, Sue & Paul Quin, Shirley Jenkins, Marie & Noel Singer, Ken Barnes, Janet Denny, Anthony Griffin, Lady Isaac, Anne Richardson, Ron and Gay Munro, Pauline Campbell.

Motion: The apologies tendered are accepted.

Moved: John Bishop Seconded: Nancy Payne Carried

Minutes of the last AGM:

Circulated in the 34th AGM and Conference Pack and #136 Flight magazine.

Ian Jensen noted that it is 15 hectares of wetland at Waikanae not 5 hectares as reported.

Motion: That the minutes of the last AGM be accepted as a true and complete record.

Moved: Jim Campbell Seconded: John Dermer Carried.

Matters arising from the 2007 minutes: There were no matters arising.

President's Report:

As circulated in the 34th AGM & Conference pack and #136 Flight magazine.

Motion: The Presidents report is accepted.

Moved: John Bishop Seconded: Ian Jensen Carried.

Matters arising from the President's 2008 Report: There were no matters arising.

Financial Report:

Presented at the meeting

We are up to date on our charities registration.

Motion: That the 2008 financial report be accepted.

Moved: John Bishop Seconded: Di Pritt Carried.

Appointment of Auditors:

Motion: That PriceWaterhouseCoopers be appointed as Auditors for 2008/2009

Moved: John Bishop Seconded: Di Pritt Carried.

Waterfowl and Wetlands Trust Report:

David Smith reported that the balance as at December 2006 was \$472,000.00 December 2007 was \$450,315.00 with \$20,000 going to Ducks Unlimited earlier this year. As at the end of July 2008 the balance is \$366,198.36.

The portfolio is spread over various countries including New Zealand and has taken hits from various sectors, over the last 3 months but we are in for the long term and are not concerned.

Election of Officers:

Board Election:

The President read out the following Statement:

The Constitution states that the Board should consist of not less than six, of which half, but not more than two-thirds shall be permanently appointed Directors.

As of right, the permanent appointments are the Chairman, President, Vice President, Secretary and Treasurer.

Other permanent appointments are David Smith and William Abel

Retiring Directors are John Dermer and Jim Law

Kevin Campbell, was co-opted to the Board during the previous year.

Nominations for the Board:

Standing for Re-election to the Board: John Dermer and Jim Law.

Standing for Election is Kevin Campbell

Are there any other nominations from the floor? None

Motion: That J Dermer, J Law and K Campbell be confirmed as Board Members.

Moved: Neil Candy Seconded: Di Pritt Carried.

Reports:

Membership:

At this time last year we had a total membership of 533. Unfortunately our numbers are down this year by 30 members with current paid members 464, 67 still outstanding, giving a total membership of 531, equalling no growth but remaining with the status quo. Last year we had 28 new members but this year have only 15 to date. The website and email communication continues to pay an important part in reaching potential new members and keeping everyone informed of what the organisation is planning.

Ideas came from the floor to help raise the profile of Ducks Unlimited

Big DUNZ signs outside members properties with their pond in the background. Jackets/Polos etc with DUNZ logo more readily available.

Articles on our activities in regional newspapers eg Waiuku District Post (31,000 circulation) in time for the shooting season or at other times.

We all take a stack of the new pamphlets into the sporting goods shops and ask if they could leave them on the counter or in a display rack.

Wetland Care:

Neil Candy reported on behalf of William Abel.

The last financial year has seen 9 wetland projects contributed too with our funding - \$22,382. This is a contribution towards earth works and can not be used for planting or fencing. Due to our limited budget and weather factors, we run an agenda that means we have some projects hanging over from previous year at times. This can complicate our ability to contribute, so application forms must be filled in and are considered on a case by case basis as money is not unlimited; these must be returned before any money will be forwarded.

Wairio Wetland: 700 acres

Jim Law reported on this major project. Stage 2 additional planting successful with help from local schools Kahutara and Pirinoa and Rotary. Earth works are completed at stage 3 with fencing planned once ground conditions allow. We require funding of \$10 - \$15,000 a year with \$12,000 from DU and South Wairarapa Rotary making a further donation. Wairarapa Forest and Bird and Ornithological Society also contributed.

Due to some of the earth works Tony Shirley of DOC found 3 rare plants that they have not seen for years by DOC and this means it's a healthy wetland. Key parts have been building the relationship with DOC and have had further involvement from the Greater Wellington Regional Council.

Opuatia Wetland:

John Bishop reported on the second partnership project with DOC; a large project in the Waikato. West of Rangiriri, 2kms across 3 km long; administrated by DOC, with farmers on one side and southern boundary is Environment Waikato as administrators. The water was not being held there, but banded by Environment Waikato with DOC administrating and Environment Waikato working on the block that bounds it. We talked with all parties involved and a Memorandum of Understanding has been signed. Sponsorship and money is coming from a national level so appears to be coming from the top but we are working on getting more of the lower levels like our Waikato chapter involved. Helicopters are ready to spray the Willow trees in stage 1 once they are in leaf.

It was questioned from the floor that surely as DOC are not contributing financially to either of these projects and DOC have a statutory responsibility to do this we shouldn't be? It is hoped that in the future with the better communications between us both that we can work towards this. It is really a funding issue from Government and the situation is going to be worse with even further lack of funds. DOC sees us as apolitical, we are trusted not like some of the other organisations around. That we have other sources of funding available if we wish.

General Business:

Ian Jensen updated the Waikanae decommissioned waste water ponds (15 hectares). It is run and funded by the District Council with good school presence at last Arbour day planting. It is a long progress and planting is going well, it is a 20 year project.

A motion of thanks to Ossie Latham for his work and thanks to Banrock for their sponsorship as we would not be able to do the work without their support.

Moved: John Bishop Seconded: Di Pritt Carried: Very loud applause.

Jim Campbell reported that we had just received a donation of \$2,500 from Michael Treadwell the son of Shane Treadwell (deceased). This is not the first donation from the Pharazan Trust that we have received.

Closure: The President thanked the Board for their work throughout the year.

The meeting closed at 10.05am

Numbers attended: 62

Other Activities over the 34th AGM weekend

Wetland Tour: Cape Kidnappers and Ocean Beach Wildlife Preserve

Saturday Dinner: Lifetime Achievement awarded to: Graham Gurr

Bill Barratt Trophy awarded to: Kevin Evans

Chapter Challenge: Manawatu

Friday evening and

Sunday Talk: Barbara Hanbidge M.Sc

Education Specialist, Ducks Unlimited Canada

Ducks Unlimited Canada - Past, Present and Future

Project Webfoot - Inspiring our Future Conservationists

Photos from this conference appeared in Flight No. 137, October 2008

These minutes were circulated by email prior to Conference 2009





Murray Tapp and David Smith

Murray and Lois Tapp awarded the Ducks Unlimited Lifetime Achievement Award 2009 for the development over the past six years of their beautiful wetlands, Lakelands, at Parua Bay, featured on the front cover

DUNZ vice-president David Smith reports:

Those of you who were fortunate enough to be at the AGM dinner will recall that I accepted the Lifetime Achievement Award on behalf of Murray Tapp who was unable to be there.

It was a bit cheeky of me to do so as Murray had no idea he had been so acknowledged, but it seemed like a reasonable thing to do at the time. And so it proved.



Lakelands at dawn

On the following Saturday I was in Whangarei and rang the Tapp household to see if I could visit. Lois graciously agreed.

I presented Murray with the award on my arrival. Murray clearly felt honoured and proud to receive the award. Lois was very pleased for Murray.

And I also received a reward as I spent nearly two hours in one of Northlands newest and prettiest wetlands. Planted with natives only, the property supports 46 different bird species, including pateke. Murray and Lois's enthusiasm is totally infectious and the more people they infect the better.

Flight No 135, April 2008, published some excellent photos taken by Lois Tapp and an article featuring Lakelands, at Parua Bay, which was begun only six years ago.



Hopelands panorama from the house with Maxine Hayward putting on her boots!

At Hopelands, host family Julie Candy and 20-year-old Chanelle Candy on the large deck in front of their own ponds and wetlands started only in 2005.

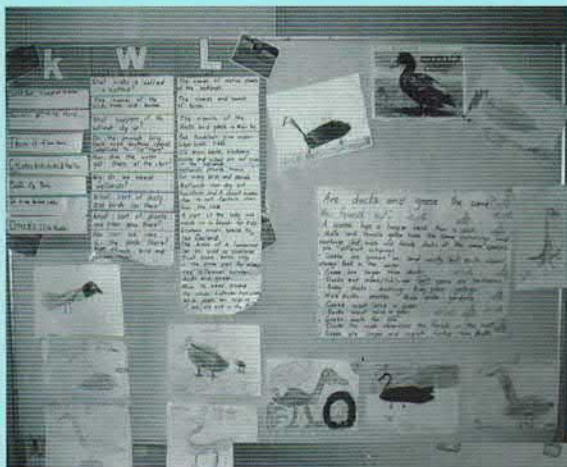


Balloons! - the dinner in the Silks Room at the Awapuni Conference Centre

More conference photos

"The wetland was constructed by Jim Campbell and Gary Thomson in February 2005. There are two dams, both less than three metres high and with a catchment area of just under 50ha. There is no permanent running water, just rain-fed, and fed by springs that run in winter. The ponds are predominately shallow-dropping to deeper water where the dam walls were dug. Planting is on-going, mainly native, but including taxodiums, oak trees, fruit trees, the odd willow and anything that is free!" says Neil Candy.





Lakeview
students'
work

Right Sue Singh gives her presentation entitled "Wetlands and Kids Go Together" covering the project her school Lakeview undertook earlier this year, as covered in Flight No. 140 July 2009.



Manawatu received the Chapter Challenge - presented to Neil Candy of Manawatu from Ross Cottle of the Wairarapa during the Saturday night dinner.



Above: Neil Candy and Rathmoy's Christopher Grace

David Vitsky and Maria Aravena of Akitio



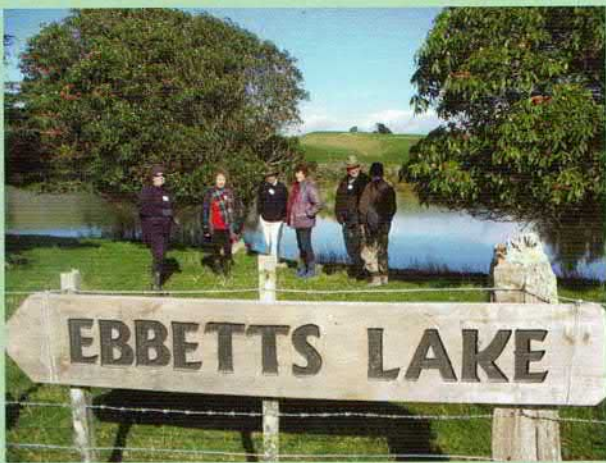
Sandra Pipes, Audrey Pritt, Nancy Payne at lunch in the woolshed at Hopelands. Nancy has never missed an AGM in this country.



Bev Heron

Getting ready for the wetlands tours





Neil Mercer, Bruce Ebbett, our wetlands tour hosts, and Neil Candy, Manawatu chapter chairman and organiser of this year's 2009 Conference



Above: Bruce Ebbett describes the work of his family in creating Ebbett's Lake over generations



Above: Chris Bindon, Robyn Cornish, Diana Chetwin, Fraser Chetwin



Above, wetlands host Neil Mercer, Jim Campbell, Ross Cottle.

Below: Liz Brook, Kath Whitehead, Susannah Grace



Above: Jan Cook, Raana Campbell and Glenys Hansen

Right: Diny Dermer and Te Horo's Mike Jensen



Below: Tim Luttrell, Don Sandbrook, Liz Grant, William Abel, Chris Thomas and Sandra Pipes at Ebbett's Lake





Peter Devlin, newest board member John Cheyne, Gail Cheyne and Dave Conley. The Cheynes hail from Waipukurau and Peter and Dave from DoC were the guest speakers.



William Abel and Sandra Pipes at the Mercers' wetland ponds.. Some of these photos are from Sandra but not this one!



Debbie Latoa of Constellation NZ who provide the Banrock wines, sample of which is in her hands in a novel holder.



Sharon Stevens-Cottle and president Ross Cottle at the Conference dinner



Marilyn and DU director Jim Law of the Wairarapa and notably Wairio

Charmaine, Max and Estelle Voss with Max Smith



Below: Philip Soler, Bruce Gill, Philip Smith at Hopelands outside the woolshed



35th Conference and AGM 24-26 July 2009 in Palmerston North

report from Sandra Pipes

On Friday 24 July 2009 the weather really tested those who were coming from out of town to attend but we still had over 50 turn out for the casual meet and greet dinner. As someone was heard to say, a wonderful opportunity to put a face to a name, and they hadn't realised it was such a social event!

Saturday dawned fresh but with the promise of a beautiful day. As always we started with the AGM, all over in one hour and nine minutes! Not bad for Ross Cottle's sixth and last as president of DU. David Smith has taken over as vice-president and will become president in April 2010. 45 members were present to receive the reports and re-elect the board including our newest board member, John Cheyne. We then quickly downed our morning tea and joined the others on the bus for the wetland trips.

First stop was Bruce and Geraldine Ebbett's dam control structure and wetland, built in 1963, near the Pahiatua Track at Mako Mako, which is open to the public for waterskiing and picnics. Bruce's father (recently deceased) had amazing foresight and must have had the locals talking at the time but he has left them with a fantastic legacy that they are keen to continue. As you can see from the photos it is a beautiful site and were very pleased to have had the opportunity to visit.

We then went to the opposite end of the spectrum to see new ones (yes more than one) being created on Neil and Chris Mercer's property nearby, with ponds near an old quarry. He had gone to great lengths to create a makeshift bridge etc so we could walk around, and climb the hills for the remarkable views of the ponds - again very much appreciated the time and effort that all of this must have taken from both families. Everything was perfect - including the weather - and had everyone inspired.

Lunch was at Julie and Neil Candy's property 'Hopelands' and of course this also went well, thanks to wonderful planning from Neil and Julie and the helpers Julie had lined up. The food in the astonishingly immaculate, old and large woolshed was plentiful and delicious. Sausages, venison steak and venison patties, Banrock Station Wines donated by Constellation Wines, cole slaw, an exotic carrot salad and buns. Home-made slices and biscuits and fresh fruit to follow. Their wetland and gardens all looked grand and a wonderful testament to lots of hard work from them both. Due to limited time everyone then visited the Te Apiti Wind Farm and returned to the hotel about 4pm, time enough to get ready for the evening festivities. Out of the gummies and into the Puccis and Guccis!

The room at the Awapuni Conference Centre looked fantastic from the hard work of Sharon Steves-Cottle and Steve Pipes with the initial setup. It was just as well Neil Candy had booked such a large room as it's the biggest number - over 150 - that we have had at a conference dinner in recent years. Those balloons around the tables really look fantastic and the raffle prizes available certainly made them hot property. Between courses we had Peter Devlin and Dave Conley from DoC speak to us on their work on 'Waterfowl Predator Control and we then progressed to the auctions. A big thank you to all those who contributed to the silent and main auction items and to Bob Wood for keeping us entertained as always. We thanked Sharon and Ross for Ross's six years as President - he has done a wonderful job. The awards on the night were presented as below:

Lifetime Achievement awarded to: Murray Tapp (see page 7)
Bill Barrett Trophy awarded to: Dan Steele of Blue Duck Lodges
Chapter Challenge: Manawatu

On presenting the trophy - once again to Manawatu - Ross was heard to say "I know the result without checking the figures, once again Neil and his team have done a marvellous effort during the year."

The evening came to a close around midnight with the cleanup completed about 1am. It really was a fantastic evening and everyone involved deserves a round of applause.

Another beautiful day dawned in Palmerston North and we headed over to hear our Sunday speakers. First we heard from Debbie Latoa, Trade Marketing Manager of Constellation Group (previously Nobilo Wine Group) on "What a Commercial Enterprise requires of a Voluntary Partner in a joint venture with a public good component."

We had some lively debate and hopefully Debbie came away with some new ideas which you might see in Flight in the future.

We were then presented to a wonderful presentation by Sue Singh - 'Wetlands and Kids Go Together'. You read her report in Flight No. 140, July 2009, and

this morning we got to see even more of the pictures that the kids took of their week, got to appreciate their whole enthusiasm for what they had achieved and the immense fun that they appeared to have along the way.

Sue brought some of the children's art work they had done and we enjoyed looking at it all.

Thanks must also be given to Raana Campbell for her assistance to Sue in finding material and supporting her efforts along the way and getting her to come to conference and present us with the children's work. We could really do a lot with this, as we keep saying "the children are our future", so we should be encouraging and supporting this for all it's worth.

We finished off with our goodbyes and hugs or handshakes all round, promising to keep up the good work, inspired to continue to 'punch above our weight' with all the work that we do and to meet again next year - location yet to be decided - and hopefully further the wonderful ideas and suggestions that came out of our weekend in Palmerston North.

A special thanks must be made to Neil and Julie Candy for organising a wonderful weekend, as we have come to expect whenever Manawatu hold a event and hope they weren't too exhausted by it all, they even turned on the weather! Thank you Neil and Julie - we had a great weekend!

Dr Don Merton patron of Brown Teal Conservation Trust

The Carterton-based Brown Teal Conservation Trust is delighted to announce that Dr Don Merton QSM DSc has become the Trust's inaugural patron, Neil Hayes reports.

Dr Merton is world-renowned for his work in saving a number of high-profile endemic New Zealand birds from extinction; his best-known endeavour being with the Chatham Island black robin and the kakapo. During his work with endangered birds he developed a number of world-first techniques in endangered species management. He received the Queen's Service Medal in 1989 for services to New Zealand and became an honorary Doctor of Science from Massey University for his contribution to science in 1992.

Dr Merton commenced his career in wildlife management as an 18 year-old with the Wildlife Branch of the Department of Internal Affairs. In 1987 when the then-named NZ Wildlife Service was replaced by the Department of Conservation Dr Merton continued to be a major contributor to rare bird management with the department, before 'retiring' in 2005 - after 48 years of continuous service. Since 'retirement' Dr Merton has been busier than ever working as a wildlife consultant.

As one of the key organisations involved with the recovery programme for the endangered brown teal (pateke) the Brown Teal Conservation Trust believes that Dr Merton's involvement as patron will play a major part in helping save brown teal from extinction.

Wairarapa Branch of the Ornithological Society of New Zealand report

Following our very successful Wanganui River Expedition, in June, our OSNZ Region sent a gift of books to Whanganui Awa School. (see story Flight July 2009) Below is the the response from the Principal, Fiona Lovatt-Davis.

"The children, staff and parents of Whanganui Awa School express their delight and thanks for the wonderful gift of books that arrived one wet morning when flu had hit us hard and a tangi was on. The children were there when the package was opened and a very happy morning was spent in buddy reading. When the absent children returned to the school they were introduced to the new titles, like old friends, and indeed, the ties of friendship, forged across the generations, through the shared love of birds, are growing stronger with each epistle."

There continues to be an on-going correspondence between the pupils and the Wairarapa OSNZ members.

More conference photos...



Andrew Pittams and Ray Hayward



Audrey and Di Pritt of Ohakune at Hopelands



At the woolshed, Waitakere's Sharon Davies and Diny Dermer of Manawatu cooking the lunch for the troops



Exploring Neil Mercer's wetland project

*Right:
Christopher
Grace, Pam
Maunsell and
Jim Campbell*



Below: Fraser and Diana Chetwin with Jane Daulton of Dannevirke a potential member



Robin Minton, Chris Thomas



Estelle and Charmaine Voss at Ebbetts Lake



Looking down into Neil Mercer's amazing wetland area, with the isthmus and island in the middle.



*Brian and Wendy
Simmons of Algies
Bay north of
Warkworth*



At Neil Mercer's ponds, these clever pipes take overflow down to the next level. Gail Isaac and Pam Maunsell are amazed.

Stowaway threat to island sanctuaries

A mouse which stowed away on board a boat threatened to wipe out two years of restoration efforts when it landed on pest-free Rona Island in Lake Manapouri in July.

Fortunately for the native species on Rona Island the Fiordland voyage was the last one taken by the mouse. The mouse travelled just ten metres on the island before ending up in a rat trap.

It is unknown whether the large female mouse jumped aboard alone, but the potential threat of pest invasion is serious and constant to all of Fiordland's coastal and inland island sanctuaries. If one pregnant female mouse arrived on an island sanctuary during early summer it could be only eight weeks before the population exploded to more than 50 individuals, all capable of breeding at just 12 weeks of age.

Rona Island was eradicated of mice and stoats two years ago as part of the Pomona Island Trust's efforts to restore both islands to their presumed natural state.

This is not an isolated case of plants and animals becoming at risk from re-invasion. In April this year the alarm was raised on Secretary Island, New Zealand's largest rodent-free island, when evidence of at least one mouse was found.

Department of Conservation Te Anau Biodiversity Programme Manager Lindsay Wilson said, "The work involved in restoring these islands is a massive undertaking for everyone involved. It's both expensive and time consuming and one mistake could mean we lose a lot of the gains made."

The programmes to remove pests from islands like Rona and Secretary are ongoing. "Trapping and monitoring the islands will never cease," said Department of Conservation Biodiversity Ranger Pete McMurturie. "But we need everybody's help to keep unwanted visitors from getting established."

Lakes Te Anau and Manapouri embody numerous pest-free islands so all boat owners, not just those heading out to sea, are reminded of the need to beware of these bio-security issues.

"It's the time of year we all look to find places that are dry and warm. Rats and mice are no exception and with this being another mast year for the beech seeds, there are plenty of rats and mice out there. Your boat will provide the perfect winter home, especially if a bit of food is stored onboard too!" said Mr Wilson.

What can be done

There are three easy things every boat owner can do to keep pests away from these special islands (or indeed any protected area):

- * use rodent poison baits or traps on the boat;
- * check all obvious hiding spots for stowaways before leaving shore;
- * keep doors and hatches closed when the boat is moored.

For more information please contact Department of Conservation Pete McMurturie tel: (03) 249 0200 or email: pmcmurturie@doc.govt.nz.



* Rona Island is situated in Lake Manapouri within Fiordland National Park, in Te Wa-hipounamu - South West New Zealand World

Heritage Area. The Pomona Island Charitable Trust, set up in 2005, is working to eradicate these pests from the island and restore it to its natural state for future generations to enjoy. This project relies heavily on local volunteers and visitors to the area to undertake work on the island. Many local companies and businesses have also contributed resources.



* Secretary Island (8140ha) is situated on the Fiordland coast at the entrance to Doubtful Sound. It is the third-highest island in New Zealand, rising sharply to a height of 1196m and supports a diverse range of plant communities and habitats.

* Rats can squeeze through a 12mm gap and mice through a 7mm gap!

* Animals aren't the only pests that threaten these islands. Weeds and other plant material can easily be transferred by humans. Always empty pockets and clean shoes before arriving on islands to get rid of stray seeds.

Mast years, explained

Every four to six years, sometimes less, beech trees produce far larger than usual numbers of beech seeds, known as beech mast. This causes an explosion in populations of mice and insects due to the abundance of food. The increase in mice and insects means a greater food source for stoats, which then have an extremely productive breeding season. When the beech mast year is over, the mouse population crashes. The boosted stoat population then looks to additional sources of food - especially birds, both adults and their clutches. The birds most at threat during stoat 'plague' years are hole-nesting birds such as mohua/yellowheads, orange-fronted parakeets/ka-ka-riki and kaka.

Photos show John Whitehead and Sue Bennett re-set rat traps on Rona Island. Trap holes are perfect size for a rat or a mouse only.

That which is past – Ian Jensen sent this contribution compiled from older Flight magazines

21 years ago September 1988, Issue 56

There was a superb aerial cover photo by Lloyd Homer, 'Home Lagoon' southern Wairarapa, with centerfold article and photo clearly showing the letters DU as contoured within the Lagoon constraints. In the President's Report, then president Jim Campbell reported that the recent Annual General Meeting exceeded all previous ones in terms of financial contributions.

Noted was the need to support and co-operate with the Department of Conservation and other organisations involved with wetland protection. An interesting itinerary had been arranged for the hosted visit of top executives from DU Canada and Mexico. (continued next page)

Derek Morrison as chapter coordinator had organised several new chapters this season, with the opportunity to expand in many areas; which was a very important task of increasing the membership base.

The Broadlands Wildfowl Trust also featured, showing photos of the constructed ponds and aviaries on the property of Dave Johnston, with credits to Norman Marsh who had created this impressive wetland development.

The proceeds raised at the AGM totaled an impressive \$30,000 under the hammer of auctioneer John Ward, who had stepped in as Bill Wilkinson was away overseas.

Ian Pirani was awarded the prestigious Bill Barrett Trophy.

Eketahuna was the top chapter in the fundraising with \$7500 raised. A simulated field shoot is to be organised for October 30, where the SOS Savage memorial trophy will be shot for.

Auckland: Several keen members had offered their assistance to up the interest with a proposed dinner and auction to be held later in the year.

Wellington: A field shoot is to be held early next year, as is a proposed dinner and auction.

Manawatu: A new chapter has been formed with Andy Tannock and Don Pescini planning their first fund-raising activity.

New chapters are planned for Whakatane, Hawkes Bay and Dunedin

During the last year the Chapters raised almost \$17,000 - Eketahuna - \$7,500, Wellington - \$6000, Central North Island - \$2,000, Hamilton - \$1350.

It was reported that since 1976 there had been 1042 pateke reared by members.

Continued older Flight articles from previous page

15 years ago, September 1994, Flight Issue 81

Cover photo of two young ladies who were Masterton Intermediate Waterfowl Monitors at work feeding waterfowl.

In his President's Report, David reported the need to have a balance between achieving things for DU while having fun at the same time. He noted that at the recently-held 20th Conference it had been a pleasure to host Canada's Executive vice President Stew Morrison and Australia's directors Tony Sharley and Clive Huggan.

People up front were Glenys Hansen, a DU member for nine years, a director for seven years and a committee member for eight years. It is noted that Glenys started the Eketahuna Chapter in 1985.

The other is William Abel who had been a member for four years, Wellington Chapter Chairman for three and recently elected onto the Board of Directors. He had recently purchased a 60-acre Wetland near Manukau and eventually sees himself working there, doing his manufacturing jewellery.

Alan Wilks provided a detailed account as Operation Pateke Project Supervisor of a round trip collecting up pateke for a release at Waikino Cove, Moturua and Urupukapuka Islands.

An article by Tim Porteous covered QEII Trust Wetland Covenants. There is a photo of the spectacular Redcliffs wetland at the western end of the Takatimu Mountains, just a little south of Lake Manapouri, said to be the largest created wetland in New Zealand in 1977.

The Minister of Conservation, Dennis Marshall, formally opened the recent AGM.

Four Directors, William Abel, Carolyn Hooson, Ian Lyver and Ken Cook were nominated from the floor and duly elected.

Auctioneer Mark Cederman was seen to haggle the last dollar out of two bidders during the auction. Breeder Awards were: pateke - Hamilton Zoo, blue duck - Staglands and Royal swan - Sig Bronger.

Also presented was the MacMaster Trophy, a conservation award for school projects which was awarded to Masterton Intermediate School. Alan Wilks presented it to Frazer Mailman the Headmaster and this was an inaugural presentation.

The Chapter challenge went to Manawatu with over \$10,000 raised during the year, with the Bill Barrett Trophy going to DU Bahamas, which was accepted by Stew Morrison on their behalf.

Alan Wilks provided an article on the construction of the Kowhai Flat Wetland development which was featured on the back cover.

Kimihia Opencast Re-development pivoted on wetlands restoration

Solid Energy's re-development of its Kimihia opencast mine near Huntly is the last phase of an intensive and expensive environmental project that has turned earlier workings into a public recreational park.

The pit is scheduled to operate on a short-term basis to recover coal not mined by the original Kimihia opencast mining which dates back to 1887.

With coal prices indicating a partial recovery, the scheme is that Kimihia coal will be blended with the coal from the underground workings and transported by rail from the Huntly East underground mine to New Zealand Steel's Glenbrook steelworks.

Inherent in the project is a continuing rehabilitation that includes creating a lake from part of the pit, establishing a channel from the lake to sustain the surrounding wetlands, recontouring and planting, and removal of mining facilities.

Solid Energy's two major Waikato environmental achievements - the Kimihia Wetland and Weavers Lake, enjoy international status in the sphere of wetlands reclamation.

Lakes Kimihia and Weavers are also global extractive industry showpieces in how wetlands filter out silt from rivers and other waterways.

This is important for environmental groups such as Ducks Unlimited, which use the lakes to further their policy that edges of streams and lakes should have wetland fringes to process silt, sediment, and man-made run-off.

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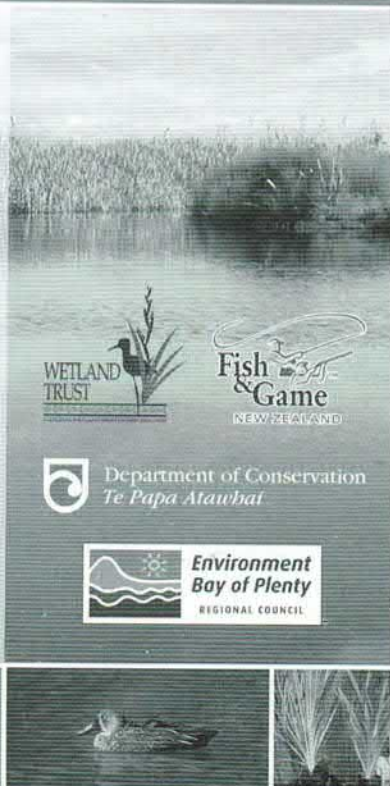
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Genetics does matter:

Implications for the captive breeding and release of brown teal

Gemma Bowker-Wright completed her Masters in Ecological Restoration degree at Victoria University after having investigated the genetic diversity of wild, captive and released brown teal. Here, Gemma, and one of her advisors, Murray Williams, report on her findings and their implications for the present recovery programme of this beleaguered little duck.

For the past 36 years Ducks Unlimited members have bred brown teal in captivity in the hope that their release into the wild will establish new populations. "Operation Pateke" is the longest running and most productive captive-breeding programme for any rare species in New Zealand and it remains at the very heart of today's recovery programme for this precarious little duck.

It is fair to say that not everything has gone swimmingly. Although some small island releases have worked (Tiritiri, Kapiti, Mana, Karori, and Mayor perhaps), it took over 25 years to finally get a new population of consequence established on the mainland, at Moehau on the Coromandel. In the meantime it has been "all hands to the pump" to secure teal at their 2 remaining wild haunts in Northland (Mimiwhangata) and on Great Barrier Island. Getting things suitable on the ground, and keeping them that way, is still a very challenging task!

While DU has been battling away to save brown teal, the practice of reintroducing birds to new habitats has well and truly come of age. Whereas in the 1980s successful reintroductions were few, now there have been some hundreds in New Zealand and perhaps thousands around the world. The ingredients for a successful reintroduction are pretty clear: apart from the obvious habitat quality and predator/competitor issues, numbers released and the frequency of releases loom large as criteria for success. Job done some might say.

Not quite so! The vast majority of bird reintroductions, irrespective of whether they have been wild-to-wild transfers or releases from captivity, have involved only small numbers of releasees. The resulting small populations, despite initially growing and showing promise, often struggle and fade. A decline in breeding performance due to mating with near relatives (termed inbreeding depression) is usually diagnosed as the root cause. This same problem arises in small declining wild populations too, of which kakapo is a classic example. These small populations may also struggle with outbreaks of disease or parasites.

Modern DNA technology has been used to evaluate many reintroductions and give insights into reasons for their success and failure. It is now clear that the persistence of reintroductions can be traced directly to the genetic makeup of the initial releasees (the "founders"). The more unrelated the founders the more likely it is that the introduction will succeed and the population grow and persist. Conversely, the more related the founders the greater the likelihood of failure. Indeed, so overwhelming is the accumulated evidence for the importance of genetic diversity in the persistence of small isolated populations of both animals and plants that there is no longer any serious debate about it. As one New Zealand researcher recently put it, "the debate has moved on to how we can make genetic diversity a fundamental component in long-term management strategies for threatened species".

Conservation programmes based extensively or exclusively on captive breeding, as that for brown teal is, have additional genetic concerns though. For a start, the birds taken into captivity are usually only a tiny fraction of those remaining in the wild. These few are seldom representative of the genetic diversity still remaining in the wild. This genetic under-representation (termed a "bottleneck") is further compounded by some birds breeding more prolifically in captivity than others and, over time, their descendants coming to dominate the breeding stock.

But there's more! Long-term captive breeding inevitably produces birds that are particularly good at surviving and breeding in captivity. A few generations removed from the wild stock and they can become larger, tamer, more fecund and generally stupid – evidence of genetic-based adaptation to captivity. Rare plumages, behaviours or conditions may emerge – evidence of rare genetic combinations normally quickly exterminated whenever they arise in the wild. In short, prolonged captive breeding of initially limited stock can lead to genetic changes that make their progeny increasingly unsuited for successful release into the wild.

When DU's commenced breeding of brown teal for release in 1973 there were 22 teal then in captivity, and a further 39 wild birds were added over the next 3 years. Not until 1987-88 was another 15 wild birds added; they, like the others, were sourced from Great Barrier Island. There have been no other deliberate additions to the captive stock, although since 2000 another 16 birds from Great Barrier have dribbled opportunistically into captivity. That's only 92 in (and about 2100 out) over 35 years!

Genetic results

All of the above is by way of context for Gemma's research. Her initial intent was to see if the birds now used for captive breeding embrace all, or just some, of the genetic diversity still present in the wild at Great Barrier Island and Mimiwhangata. Her second intent was to see if the birds at Moehau and 3 new populations (Tiritiri, Mana, Karori Sanctuary) contained the full genetic diversity present in the captive population. In essence, Gemma was trying to determine whether the two steps, wild-to-captivity and captivity-to-release, were each introducing a genetic bottleneck, and she did this first by looking at each bird's mitochondrial DNA (mt-DNA).

What is mitochondrial DNA?

A mitochondrion is a small organelle present inside every cell of an animal's body and which provides energy for cell growth and activity. It contains its own tiny piece of DNA. The mitochondrion and its DNA are passed from one generation to another in the egg, so is contributed solely by the female. Because the mt-DNA is inherited from the mother as a single unchanged unit (termed a haplotype) the similarities or differences between mt-DNA from different individuals can be used to infer historic relationships. Think of a haplotype as a "surname" (in this case provided by the mother). If all teal at a place have the same "surname" they clearly all share a similar maternal ancestor sometime in the past and probably their numbers were once quite few. If, at another place, there are many different haplotypes present this would indicate many maternal family lineages and a larger historic population. Big differences in the chemical structure of these haplotypes can indicate immigration into the population whereas small differences in structure can indicate the presence of "near-family".

Using feathers plucked from 85 wild and 20 captive birds from which to extract the mt-DNA, Gemma found 12 different haplotypes (lets call them A-L for convenience), 11 (A-K) present at Mimiwhangata, 2 (A, L) at Great Barrier, and 1 (A) in captivity. Thus, haplotype A was present at both wild sites and in captivity, haplotype L only on Great Barrier, while the other 10 were unique to Mimiwhangata.

What does this mean? Haplotype L was found in just one of the 36 birds sampled on Great Barrier so it is undoubtedly rare there and if it was ever introduced into the captive population it has now been lost. Because haplotype A is so common on Great Barrier, and no further haplotypes were detected there, this strongly suggests that the island's population was once quite small and the modern abundance stems from an expansion from those few. This actually accords well with the historic bird records from the island, e.g. a survey in 1868 did not record any brown teal there at all.

On the other hand, having ten unique haplotypes at Mimiwhangata is a sign that it is a remnant of what was once a very much larger and more widespread population. The presence of haplotype A, the common Great Barrier "surname" at Mimiwhangata is almost certainly a "footprint" of DU's captive releases there around 1990; 16 of the 49 birds sampled had haplotype A and it was the second-most common haplotype found. Structurally, haplotype A is very different from most of the unique Mimiwhangata haplotypes and we don't think it was ever present at Mimiwhangata until DU "released" it there.

Thus, Gemma's initial aim has been satisfied. The present captive breeders do not represent all of the mt-DNA genetic diversity present on Great Barrier Island (the rare haplotype is missing), and do not include any of the other 10 found at Mimiwhangata.

As for Gemma's second question – whether the four new populations (Moehau, Karori, Tiritiri, Mana) contain all the mt-DNA genetic diversity present in captivity – the answer is a simple "yes" because there is only one haplotype in captivity and, of course, all 42 birds examined from the new populations had it too.

There is, however, another and more sensitive way for Gemma to investigate her second question – analyse DNA microsatellites from the nucleus of body or blood cells.

What is microsatellite DNA?

Within each cell's nucleus lie the chromosomes on which all genetic information is carried. Each chromosome is a long piece of wound and bunched DNA and in specific regions along its length particular combinations of the DNA's constituent chemicals (nucleotides) control cell growth, form, and metabolism. There are also regions which have no controlling function, called microsatellites, and where the precise chemical sequence of the DNA is repeated many times over. The number of repeats at any particular microsatellite (or locus) may be the same

in all individuals in a population, in which case this locus is said to be monomorphic. When the number of repeats at the locus differs among individuals in the population, the locus is termed polymorphic and each different number of repeats is termed an allele. The number of different alleles (i.e. different numbers of repeats) found at this locus can then be used as a measure of genetic

diversity within and between populations. In genetic diversity studies the same locus is investigated in all individuals, and usually several loci are studied. In the laboratory, Gemma examined the structure of the same 5 DNA microsatellite loci in all birds. Three of these were monomorphic i.e. in all birds the number of repeats was the same. In the other two however, the number of repeats varied considerably; at one locus Gemma found 14 different variations



Legend to picture:
Gemma Bowker-Wright at her genetics laboratory desk.

(alleles) across all of the birds, and at the other, eight – a total of 22 in all. All 22 of these variations were found in birds from Mimiwhangata, 18 in both Great Barrier and captive birds (one at each was not present at the other), 15 at Moehau, 12 at Karori, 6 at Tiritiri and just two at Mana. The smaller number of birds sampled from Karori, Tiritiri and Mana may contribute to their lower scores, but all these populations have fewer than 20 birds and there is evidence that just one or two family lines now dominate each of them.

Like the mt-DNA results, the microsatellite DNA analyses show that Mimiwhangata has greater genetic diversity than Great Barrier, and the captive breeders still retain much but not all, of the genetic diversity present on Great Barrier. But, and this is the most important finding, the new populations are genetically poorer than the captive birds from which they are derived. The captive-to-release process is introducing a genetic bottleneck, and a significant one at that!

Conservation implications

Both steps - wild to captivity and captivity to release - have caused genetic reductions or bottlenecks. There is less genetic diversity in captivity than in the wild, and there is less genetic diversity in the new populations than in captivity. Both are highly undesirable for reasons outlined earlier. And they take on even more importance because in the present brown teal recovery programme the only way to start new populations is via captive breeding – no transfers of wild birds to create new populations are mooted.

What to do? Far be it for researchers to tell managers what to do (although Murray finds that hard to resist!), but here are two questions we think are worthy of discussion.

1. Is the captive breeding programme composed as it would be if it was being established today?

We suspect the answer may be “no”, and for two principal reasons: the remaining genetic diversity in the wild is not adequately represented amongst the present captive breeders, and the present birds are too many generations removed from the wild stock. Starting completely anew, with all fresh wild stock, and limiting the stock to being no more than one generation from the wild source (thus producing birds for release that are no more than two generations from the wild) may have its appeal, and may also conform better with international guidelines.

2. Do the birds being released represent the “best shot” at creating and (especially) maintaining a new population?

We pose this question because we are aware that genetically diverse populations are much better equipped to respond to environmental changes or stresses – their diversity confers what is often called “adaptive potential”. For example, the teal (and us) face the certainty of significant global climate change and although this is something they’ve faced many times during their evolutionary history, they do so this time with probably the least genetic diversity they’ve ever had. How can we be sure that the restricted genetic diversity of the present productive captive breeders includes the genetic characteristics that will allow their released descendants to adapt to this change? Aren’t we, in effect, gambling? Why wouldn’t we want to equip all new populations with as much genetic diversity as possible, just in case?

To bring this question closer to home....recent releases have been made at Cape Kidnappers, a landscape well known for its summer and autumn dryness (and forecast to get even drier with climate change), and into the comparatively nutrient poor wetlands of miserably wet and cold Arthur valley of Fiordland. The same stock, birds whose forebears once came from the warm, moist, pastoral and estuarine environment of Great Barrier, has been released at these contrasting sites. Both might work, one might work, or both might eventually fail. But if birds embracing a broader genetic complement were included in the mix, at least we could be sure that we have provided each release with the “best chance” still available.

Understandably, concerns about the conservation status of brown teal are still based on numbers alone, but this is a perspective to which new knowledge of genetics can now contribute. Other bird recovery programmes are embracing this new knowledge as evidence for the importance of genetic diversity in the growth and persistence of small isolated populations accumulates. For these, conservation management is becoming less focussed on number of populations or minimum overall numbers but more on equipping populations with the greatest potential to respond and adapt to future environmental challenges – what some might call “future-proofing”. We hope that Gemma’s research offers a way of introducing genetic information into the brown teal recovery programme and eventually leads to the genetic enhancement of all existing populations of this rare and troubled duck.

Pohangina Wetlands in spring

Gordon Pilone of Pohangina Wetlands writes:

“You might appreciate the wonderful detailed drawing of the Pohangina Wetlands by local artist Liz Grant that she prepared as an illustration for the cover of the recent edition of the NZ Journal of Ecology.

Go to: <http://www.pohangina.org/wetlands/pohangina.wetlands.html> and click on the small image of the illustration.



The joys of spring - pukeko interaction at Pohangina

Below, Swan and shag at Pohangina and below right, swan and blue duck sharing the water



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