

# Flight



ISSUE 160

JULY 2014

**Birds of New Zealand**  
**WetlandCare Australia**  
**Saving Pateke**



# From the President

A range of DU projects are progressing well with the prospects for some new ones. Read more in my President's Report for the AGM on Page 5.

Preparations for our 2014 AGM being held near Martinborough 2-3 August are well advanced with an interesting programme in terms of field trip and speakers. The venue at Brackenridge Country Retreat is great and I'm sure you will enjoy yourself. It is still not too late to register. I look forward to catching up with everyone.

Unfortunately Dave Johnson a DUNZ Life Member passed away recently and a number of our members attended a celebration of his life beside the magnificent pond on his property at Reporoa. Dave was a great supporter of DU and Wetland care NZ and his wisdom will be missed.

**John Cheyne**



## New member

A very warm welcome to DUNZ

Mitchell Beddis of Huntly

## Subs please — please — please — please...

If you have been a bit slow in sending your sub for the current year, April 1, 2014 – March 3 2015, now might be a good time to send it off. It all helps to keep the good ship DUNZ sailing along.

You can bank directly into the DUNZ account. It is 020312-0038729-00 - make sure to include your name or invoice or membership number.

There has been no change in subs, so you can check amounts on the membership form on the inside back page of Flight. If you are a Bronze, Silver or Gold Sponsor you will receive a tax deductible receipt.

Our contributions help to continue DUNZ work with conservation, restoration and development. We support the creation of private wetlands and work with DOC and a whole list of other agencies. You can see that list under Wetland care on Page 3.

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**Cover photo:** A Bittern breaks cover at Wairio just in time to have its photo taken.

**Photo:** Steve Playle. See Steve's trapping report p14.

# AGM venue – a right cracker

Brackenridge Country Retreat is the place for this year's Ducks Unlimited Annual General Meeting, annual dinner and the much anticipated auction.

The weekend event includes a trip to Wairio Wetlands, it has come on leaps and bounds since our last visit, followed by lunch at the Lake Ferry Hotel.\*

Brackenridge Conference Manager Leeann O'Neill said they are looking forward to hosting DUNZ members Conference and AGM at Brackenridge in August.

"For those who missed reading the April issue of Flight we are situated a three minute drive from the Martinborough Square," said Leeann.

Brackenridge has the atmosphere of early New Zealand station dwellings and with a view of the iconic Haurangi ranges.

All members should have received the brochure about events at the AGM, and the information about booking accommodation.

Brackenridge can accommodate 64 guests, so make sure you do not miss out.

- Accommodation -

Studios, two bedroom cottages with two bathrooms and four bedroom cottages with three bathrooms (includes self catering continental breakfast provisions with free range eggs).

- Indoor heated 20m lap pool and gym complimentary for guests (16 years and over).
- On site day spa offering a large range of therapeutic and beauty treatments (bookings essential).

Register now for another fun DUNZ AGM.



**Brackenridge:** Conference centre (above) cottages below.

Brackenridge

White Rock Rd

Martinborough

conference@brackenridge.co.nz

www.brackenridge.co.nz

Ph: 063068115 Fax: 063068119

\*Lake Ferry is a small settlement between the shores of Lake Onoke and Palliser Bay. Settlement in the area dates back hundreds of years. Research suggests people living there from the 12th century until about 1600. Maori settlers lived mainly around Lake Onoke and adjoining lakes.

European settlers brought sheep and cattle into the area in 1844, driving stock along the coast from Wellington. These settlers were the first to establish pastoral farming in New Zealand.

Following a drowning in 1850, a ferry service was established across Lake Onoke. The ferryman needed accommodation and to



supplement his income he opened the Lake Ferry Hotel in 1851.

Lake Ferry is a mixture of holiday homes and permanent residents. Local attractions include the Putangirua Pinnacles, Cape Palliser lighthouse and a seal colony.

## wetland care NEW ZEALAND



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 established by Ducks Unlimited New Zealand Inc in 1991, as well as from membership, donations and corporate memberships.

Central to Wetland Care New Zealand's mission is forming partnerships with people and organisations with similar aims. Money from our partnership with Banrock Station Wines 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**  
**Steyning Trust, Hawke's Bay**  
**Travis Wetland Trust, Christchurch**  
**Wairo Wetland, South Wairarapa**  
**Wetland Trust New Zealand, Rangiriri**  
**Waitakere Branch Forest and Bird**  
**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.





## Bird book to win

**Birds of New Zealand** – A photographic guide put together by Paul Scofield and Brent Stephenson, published last year by Auckland University Press, it has information on 365 species of our birds.

I have been working my way through this amazingly interesting book. It is not the sort of book you just pick up and read from cover to cover. Reading is only part of it, there are so many wonderful photographs to examine and admire.

As one reviewer said, “It is an essential guide to the birds of New Zealand”. With more than 1000 colour photographs, and maps to pinpoint locations, the book covers species that occur naturally in the wild, those that have established wild populations and also rare visitors.

The introduction alone has a plethora of information, including tips on photographing birds and advice on learning to identify songs and calls.

Taking pride of place as the first bird in the book are Kiwi – all five of them.

The introduction to each also gives the reader an indication of its current status. I.e. At risk, Critically endangered, Threatened, Endangered, Self introduced, Rare vagrant, Common migrant, Abundant naturalised introduction and so forth.

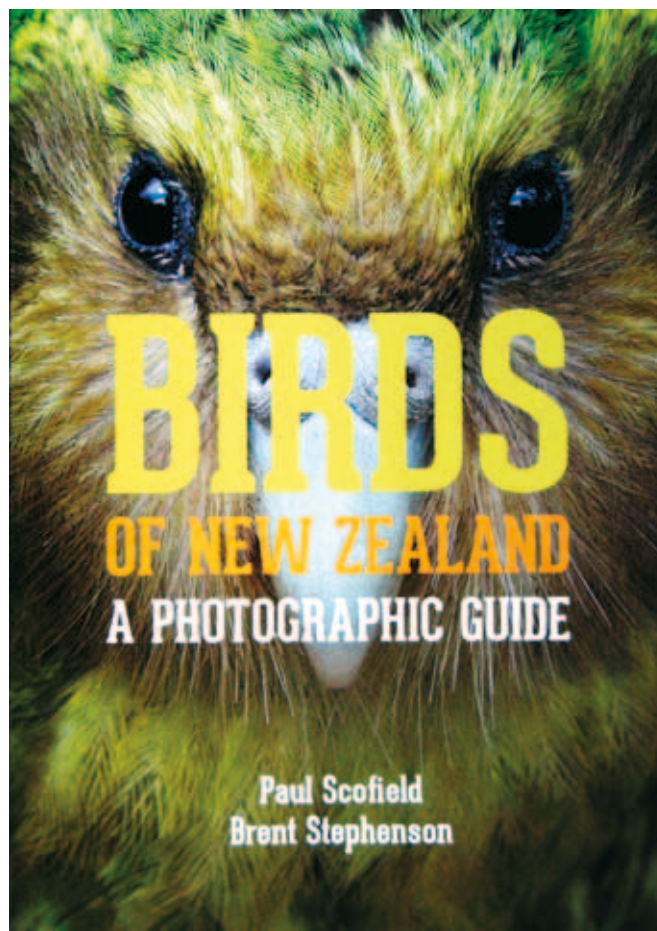
Jodi Salinsky of Southern Bird wrote “Overall, this book gets an A+. It is a “must have” extremely current resource for the naturalist, avian enthusiast, novice bird watcher and serious birder alike.”

Jim Mora, Radio NZ National said “Two fantastic talents involved – Brent Stephenson the photographer and Paul Scofield the natural historian. That’s a great collaboration.”

Available from all good booksellers, \$59.99.

Flight has one of these books to give away to a lucky Ducks Unlimited member.

To go into the draw send me an email with Bird Book in the subject line. Include your address and phone number, or put your address and phone number on the back of an envelope and post it to me.



**Email:** [liz.brook@farmside.co.nz](mailto:liz.brook@farmside.co.nz)

**Post:** Liz Brook, 766 Beaconsfield Valley Rd, RD9, Feilding 4779.

**Deadline is August 15.**

## Happy Birthday Manukura

Three years ago staff at Pukaha Mount Bruce had a huge surprise when a kiwi egg hatched and out came a pure white kiwi!

Manukura is a very special white kiwi, and she turned 3 on May 3 this year.

A month of celebration activities was arranged. As well as a daily Manukura ‘fact hunt’ through the reserve there were a number of activities every weekend during that month.

Thanks to the Ten O Clock Cookie Bakery & Café in Masterton, there was a huge birthday cake in the kiwi house with a slice for every visitor.

Footnote: I called in to Pukaha Mount Bruce for a sneaky look at Manukura as she slowly walked around her enclosure in the kiwi house. Carefully she inserted her beak deep into the ground searching for worms and other tasty morsels. She is a big girl now and well worth a visit.

PS. The café at Pukaha has undergone a change and is now called Wild Café - new management but same staff –same delicious coffee and food.

**Liz Brook**

### Manukura – a kiwi that flies

Wairarapa residents travelling around New Zealand and/or the world are being encouraged to take a Manukura soft toy with them. The idea is to take photos and send them back to the local newspaper. Of course you need to purchase a Manukura soft toy.

Check with Helen at Pukaha Mount Bruce [[helen@pukaha.org.nz](mailto:helen@pukaha.org.nz)] and she will arrange to send you one.

If you are keen and have a Manukura toy with you, send your photos to [adverts@wainews.co.nz](mailto:adverts@wainews.co.nz). The best photo will win a \$1000 prize courtesy of a Masterton travel agency.



**Happy kiwi:** Manukura searching for supper.

**Photo:** Mike Heydon.

# Presidents Report AGM 2014

Wildlife is a great joy to all of us whether they are wetland, forest or common species. Sitting writing this I am looking out my office window at the coming and goings of numerous wax eyes and the occasional tui feeding on the sugar water put out for them. I still get a thrill seeing these common species even though I have had the pleasure of working with some of our most endangered species like kakapo and kiwi. Wetlands, waterfowl and marsh birds are no different and this is what drives DU.

The last year has been a good one with our Flight magazine editor Liz Brook, Secretary Jan Abel, and Web Site and Quack Club Coordinator Michelle Cooper all making great contributions in promoting DU and ensuring we operate well on behalf of our members. Their input is pivotal to what we achieve. To the other Directors thank you for your efforts.

Discussions are continuing with Tony Roxburgh Chairman of the National Wetland

Trust as to how we can work together. They have progressed designs for their national wetland centre to be located at Lake Serpentine near Te Awamutu.

Wairio Wetland near Lake Wairarapa continues to be our flagship project with the benefits of the Stage 4 project resulting in 35 hectares of shallow wetland (maximum depth 1.2 metres) being created by the construction of a 1.2 km bund. Waterfowl use is high and includes regular sightings of the endangered bittern. This work was funded by Greater Wellington Regional Council, NZ Game Bird Habitat Trust and DU. Planning for a similar sized project for Stage 2 and 3 is well advanced and should be constructed next summer. Tree planting and maintenance are also major tasks funded from a range of other sponsors. The AGM field trip takes in Wairio so you will be able to see and hear firsthand what has been happening.

We have been long term supporters of a

number of very successful waterfowl projects (Pateke, Whio, White swan). A new focus has been on the endangered bittern (less than 1000 birds in NZ and 750 Australia) and the DU Board are currently considering a proposal to support a study by a doctorate student from Massey University. Bittern will be a great additional flagship species for DU's wetland objectives.

DU's slowly declining membership is still a concern and our members are aging. This will be a focus for the Board this year.

During the summer we lost one of our great stalwarts in the passing of Dave Johnson who was a life member. Dave has been a magnificent supporter and mentor for many of us. His contribution will be sorely missed.

I look forward to seeing as many as you as possible at the AGM at Martinborough. The organisers have a great programme planned.

**John Cheyne**

## Arbor Day planting a tradition



**Eager beavers:** 1700 plants go in.

**Photo:** Ian Jensen.

Seven classes from Waikanae and Kapanui Schools were 'eager beavers' on Friday June 6, when around 1700 plants were planted on the west margin of the northern pond at the Pharazyn Reserve wetland near Waikanae.

The two local schools have been involved for some years now and the planting is a popular

activity with the students.

This latest planting complements work done in previous years in the programme to rehabilitate a wetland margin around the former oxidation ponds for Waikanae that were decommissioned in 2002.

To date approximately half of the margins have been planted over the last seven to eight years. The earlier plantings are doing extremely well with a number of the students proudly pointing out where they had planted in previous years.





**Tableland wetland:** A view of the Lagoon with its abundant Black Swans, Black Winged Stilts and native flora.

**Photo:** WetlandCare Australia.

## WetlandCare Australia restoring Little Llangothlin Lagoon

Little Llangothlin Lagoon is a rare and unique tableland wetland, internationally listed as one of the most important wetlands in the world! WetlandCare Australia are currently working with landholders around the Lagoon planting trees, fencing and more to provide a buffer to this vitally important waterbird haven.

Protecting and restoring this wonderful wetland will not only provide secure habitat for wildlife and native plants, it will also improve the health of the entire catchment with benefits to local agriculture and communities long into the future from clean water, abundant wildlife and healthy pastures.

The Little Llangothlin Lagoon catchment area is located on the Northern Tablelands near the township of Guyra in New South Wales. The Lagoon itself is a part of the Little Llangothlin Nature Reserve which covers an area of 258 hectares and is listed as an Australian Ramsar site.

Supporting various threatened plant and animal species, the Reserve incorporates several threatened ecological communities. Protecting these valuable ecosystems is key to securing the health of the catchment for years to come.

## Ducks in suburban Australia



**Photo:** Charles Steell

A friend writes:

We have two duck ponds in our estate and the ducks are protected.

When Mum and Dad wander around the estate with their ducklings everyone gives them right of way. They know how protected they are:

When I first moved here with my cat Roxanne she watched mum and ducklings with dad on the end, wandering past my house.

She was about to pounce when father duck came charging over, flapping his wings and quacking as he attacked her. She has never challenged the ducks since. In fact she completely ignores them now!

I wish she would at least chase them away as they leave a lot of deposits on my driveway.

Some “quacking” information for you.

# WetlandCare Australia discovery programme for primary schools

WetlandCare Australia launched their Wetland Discovery Programme last March, a curriculum-linked environmental teaching package for primary schools. It's a practical and hands-on programme already proving to engage students in their local environment. WetlandCare Australia, with the support of the National Australia Bank, has been working for 18 months to develop the Programme with Ocean Shores Public School as their test case.

"I've been amazed at the enthusiasm of students, teachers, parents and the broader community. It really is a programme they can all work together on, that is what makes it unique and effective" said Cassie Price, Regional Manager for WetlandCare Australia.

The Wetland Discovery Programme includes a kit for teachers and students with tailored lessons appropriate for each stage (1-3). The kit contains material that relates directly to a wetland in their local environment. "Even if there isn't a wetland the students can access readily, most activities can still be undertaken without that element, but it is what makes it most relevant for the students, so it's a key feature of the Programme" said Simone Haigh, Senior Project Officer for WetlandCare Australia.

WetlandCare Australia has assisted Ocean Shores Public School to get the most out of their Wetland Discovery Programme by installing a walking trail through their local wetland, with learning stations that relate to the Programme activities. Nest boxes with cameras and microscopes that can link back to the class interactive whiteboards have also added to the innovations.

The Wetland Discovery Teacher and Student kits are available as a free download from the WetlandCare Australia website. Those schools that want to take the Wetland Discovery Programme further than just the kit, with a trail, learning stations, nest boxes and more, are encouraged to get in touch with WetlandCare Australia for assistance in sourcing funding for additional resources.

## New Wetlands education toolkit

The Queensland Wetlands Programme (QWP) in the Department of Environment and Heritage Protection recently completed a wetlands education toolkit as a teaching resource to complement the Science and Geography curriculums. The toolkit is aimed at the middle years of schooling and provides information on activities, field trips and learning opportunities relating to wetlands and water.



**Attention getter:** Children at Fox St Pre School, Ballina, get a friendly visitor to celebrate the launch of WetlandCare Australia's Wetland Discovery Programme.

**Photo:** WetlandCare Australia.

## Farewell shorebirds

BirdLife Australia and thousands of people across Australia were invited to farewell Australia's amazing Shorebirds during April/May.

Every year from late March onwards, thousands of birds leave the shores of Australia to embark on their arduous 10,000km journey northwards to their breeding grounds in Siberia and the Arctic. To celebrate this incredible journey, BirdLife Australia launched a nationwide event, Farewell Shorebirds, focusing on the fascinating lives of some of the 35 species of shorebirds.

Farewell Shorebirds ran from mid-April until mid-May, concluding on World Migratory Bird Day (May 10). This campaign highlighted the story of the shorebirds' annual global migration from Australia to the Arctic, and explores why the birds make this incredible journey and how they rely on Australia's wetlands, coastlines and estuaries for their survival in the landscape.

## Protection plan for Mexico wetlands

The National Protected Natural Areas Commission, or Conanp, has released a plan to protect the 139 wetlands in Mexico, the country with the second-largest number of protected wetlands in the world.

"The national wetlands policy comes from recognition that these ecosystems are extremely vulnerable to climate change," Conanp director Luis Fueyo said during the plan's presentation in March in the south eastern state of Campeche.



# Wairio work

## Tree protection trial

The accompanying photos show Cabbage and Totorā trees planted in Grotectors (tree protectors) at Stage 2 in the Wairio Wetland. They were designed by Don Bell, a DU member who has been involved with the Wairio Restoration Project since its inception. These protectors are being monitored as part of the various plant survival studies being conducted by Victoria University students. It is also hoped

to get students from a local secondary school involved in the monitoring process.

As the photos indicate, the plants protected seem to be doing well versus their unprotected neighbours that were similarly planted on spot sprayed sites. In addition to enhancing growth rates, the sheer visibility of the Grotector enables easy follow-up release spraying.

Based on the good results from 2013 the restoration committee decided to use these protectors for the larger plant species this year, especially Kahikatea and Totorā.



## Rotary support at Wairio

The South Wairarapa Rotary Club (SWRC) recently made a \$1600 grant towards the restoration of the Wairio Wetland. The SWRC has contributed \$14,480 in total since 2007 – they have been great supporters of this project.

It is one of the long-term environmental projects they support in the South Wairarapa. In addition to the cash contribution that goes towards the cost of plants (sedges, flaxes and specimen trees, the likes of Totorā and Kahikatea) being used in the restoration of the Wetland Rotary members assist in the planting days. It is one way Rotary both contributes to, and participates in community activities. DU certainly appreciate the contributions.



## Wet day planting at Wairio Wetland

A team of environmental enthusiasts turned up in late April for this year's first planting at the Wairio Wetland. It was a wet day, great for the plants and not too bad for the enthusiasts but coats were definitely required!

Planters included a great team of young women from Taratahi's equine school who worked tirelessly in the rain. There were the usual Ducks Unlimited stalwarts and representatives from Greater Wellington Regional Council

and Doc. Unfortunately, attendance by teams of students from the local primary schools had to be cancelled because of the wet weather. A GWRC team also put on a BBQ that was most popular once the allotted 650 plants were in the ground.

The planting was in a newly fenced off area of Stage 4 along the south eastern fringe of the wetland improved by the construction of a bund wall during 2013. This area has become very

popular with local waterfowl with hundreds of ducks, swans and native waders taking flight when the planters arrived. In the years to come waterfowl will be able to fly into a much enhanced wetland as a result of the good work by the planters.

The next planting was July 4. Hope they had a great day.



**Volunteers:** Members of the planting team including Taratahi equine students.

**Photo:** Jim Law.



# Dogs doing what dogs do at this time of year

## City slicker finds her roots

### Or is that her webbed feet. (right)

Rosie is my daughter's dog, a three-year-old spaniel, and totally a city pet. I was babysitting her while my daughter was shifting house. This was Rosie's first time in the wilds and she was totally into things. It was the last shoot of the "Home of the Duck" consortium at Broadlands, just down the road from the late David Johnston, and once owned by Ian Pirani. The property has been sold after 25 years.

**Photo:** Mark Newcombe

### Smart dog 'maimai'!!! (centre)

The smartest dog Maimai any side of the Black Stump.

"Tried to get my Architectural group to list this in my portfolio of work. I thought it was rather catching as we all talk about the roof over our heads, they had other ideas - my request was declined.

"Still the dogs like that spot."

From left, Nik, Jax and De-Jay. Jax is De-Jay's Dad, and they scrap from time to time.

**Photo:** Ian Jensen

### Watch dog (bottom right)

De-Jay keeps an intent eye over the wetland. He is the youngest of Ian Jensen's three Labs.

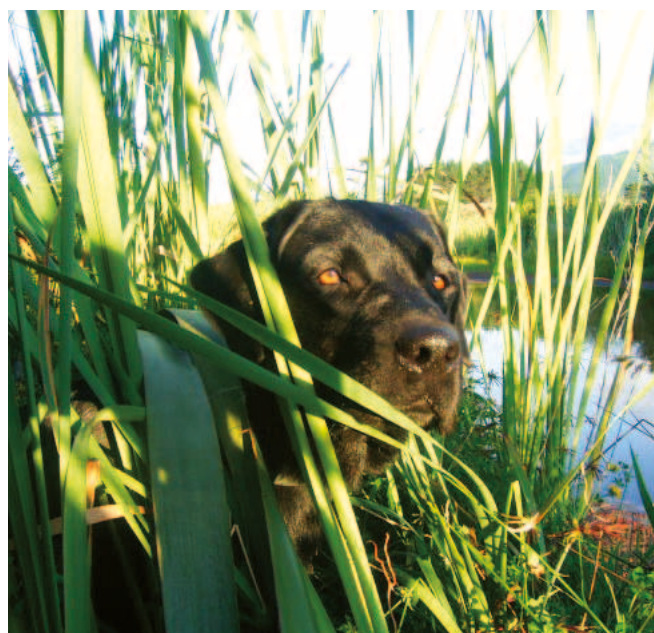
**Photo:** Scott Gregory

### Di's dogs (below)

Di Pritt and her team ready to go.

**Ed's note:** Tried to check on the correct spelling of maimai. It seems maimai is the NZ term and then mai-mai is an Australian aborigine hut. And certainly not to be confused with the term Mai-Mai that refers to any kind of community-based militia group active in the Democratic Republic of the Congo to defend their local territory against other armed groups.

Any other ideas on this spelling, caps or not caps, or pronunciation would be welcome.





*From millions of Pateke spread throughout New Zealand until the 1800s the decline to less than 850 by 1999 represents the world's most dramatic decrease of a waterfowl species ever documented!*

## Valiant efforts to save ducks from extinction

**A brief History of Ducks Unlimited Operation Pateke.**

**Neil Hayes QSM, DUNZ Life Member**

Time is overdue to document what I believe is the most significant contribution made by any conservation group in the world – that is Ducks Unlimited (NZ) efforts to save the endangered NZ Brown Teal (*Anas chlorotis*) from extinction.

The contribution by DUNZ starting in 1975 was inspirational. DUNZ was founded in 1974 by Jack Worth - with a few like-minded individuals: Ian Pirani, Paul Pirani, Neil Hayes and Trevor Voss - all wetland and waterfowl enthusiasts.

In 1974 Jack suggested the DU profile could be considerably enhanced by dedicated recovery programmes for brown teal and grey teal. “Operation Pateke” and “Operation Gretel” were launched with clear objectives. These project titles were unique to DU and it was the first organisation to use the word “Pateke” (Maori brown teal).

Operation objectives were:

1. **To establish 50 breeding pairs of Brown Teal in captivity**
2. **To breed over 1000 Brown Teal in captivity and release them into suitable areas**
3. **To save Brown Teal from extinction**

In 1976 I was appointed Director of the project and continued in this role until 1991.

My introduction to Pateke was in 1970 during a visit to waterfowl enthusiast Trevor Voss – a dairy farmer near Stratford. Trevor was the pioneer of breeding Pateke in captivity and on the day of our visit he had 21 recently reared Pateke in a mobile aviary on his lawn.

Just on dusk Trevor asked me to help catch three Pateke in an aviary to move to another aviary. The aviary was knee deep in grass and after a half hour of trying to find them we gave up – but just on dusk they appeared! I thought what a strange bird and I've spent the last 40 years attempting to understand Pateke.

By 1973 I was breeding Pateke in captivity, starting with a wild pair caught on Great Barrier Island by NZ Wildlife Service. Within three months they hatched five offspring and reared all five.

Over the next 19 years we reared close to 200 Pateke in our Wainuiomata home garden – this featured numerous times on national TV, generating great publicity for DU and Pateke!

### **Pateke in the wild - 1973**

My introduction to Pateke in the wild was during a trip to Russell, Bay of Islands, December 1973 to visit to wife Sylvia's sister's family.

My interest in saving brown teal prompted Sylvia's sister to say “there are hundreds just down the road”. How right she was!

At Parakura Bay south of Russell on the east coast we counted 96 brown teal and when Grant Dumbell was completing his PhD on Pateke between in 1986 - 1991 there was still a healthy population. By the mid 1990s there were none.

### **Brief natural history of Pateke**

Fossil research by Trevor Worthy determined Pateke have been present in New Zealand for over 10,000 years and was once the most populous New Zealand waterfowl. Pateke were found throughout New Zealand's once vast wetlands and inhabited lakes, rivers, lagoons, ponds, creeks, forest streams, swamps and estuaries.

The 2002 fossil research confirmed what Peter Scott (Founder of the Wildfowl & Wetlands Trust) wrote in 1960. **“Brown teal are an ancient and primitive form of duck”**.

Large Pateke populations were also on Stewart Island, the last sighting in 1972 and on the Chatham Islands, last sighting in 1920. Pateke were believed to have become extinct in the South Island during the 1980s.



**Up close:** Pateke at Hayes property, Wairarapa.

**Photo:** Wairarapa Times-Age.

So, from millions of Pateke throughout the country until 1800 the decline to less than 850 by 1999 represents the world's most dramatic decline of a waterfowl species!

Pateke are believed to have evolved from the very beginning of life in New Zealand, resulting in them having many unique dabbling duck behavioural characteristics, as well as unique colour, body shape, egg size, vocal sound and more.

Once New Zealand's most common duck, estimated at several million, Pateke have been under threat of premature extinction (influenced by humans) since Europeans arrived in New Zealand in the 1840s; accompanied by rats, cats, dogs, ferrets, stoats, weasels and hedgehogs; all of which found the country's endemic birds easier to kill and probably more palatable than imported rabbits, hares, possums, mallards, black swan, geese, etc!

These alien predators also enjoy the eggs of our endemic birds and so wreaked havoc amongst the country's endemic bird numbers. This was recognised as early as the mid 1850s.

European immigrants bought sporting firearms and duck hunting had a major impact on Pateke survival and in spite of Pateke being accorded legal protection in 1921 many continued to be shot during duck hunting season.

Wetland destruction was also rampant until the 1990s this, in association with predation and duck hunting, impacted heavily on Pateke survival.

Prior to 1990 70 percent of New Zealand once vast wetlands and 50 percent of New Zealand indigenous forests had been eliminated.

Self introduced species such as harrier and pukeko also influenced the decline of Pateke, and all New Zealand endemic birds, frogs and invertebrates.

### **Captive breeding**

While captive breeding of Pateke was gradually increasing, with 19 birds reared in 1976, 18 in 1977, 29 in 1978 and 45 in 1979, numbers increased dramatically soon after DU was awarded a Mobil Oil Environmental Grant in 1979 - to hold a Brown Teal Management Seminar in Auckland in July 1980. Twenty five people attended, including from the NZ Wildlife Service, personnel from Auckland and Wellington Zoos, major aviculturalists and DU members keen to join the recovery programme. In addition to this important award, and immediately upon his appointment as Director of the NZ Wildlife Service Ralph Adams MBE phoned the DU Secretary in 1979 informing him that the entire brown teal recovery programme was to be handed to Ducks Unlimited.

The proceedings of the seminar were published by DU in 1981, the



outcome being that annual productivity jumped to 89 birds reared by DU participants in 1981. Another 47 were reared by the Mt Bruce National Wildlife Centre.

The published document entitled “The Aviculture, Re-Establishment & Status of the New Zealand Brown Teal” covered aviary design, the needs of Pateke in captivity, the Re-Establishment programme and the numbers of Pateke in the wild in 1981.

After publication, Pateke reared in captivity expanded dramatically, as did the number of breeders and by 1984 DU had 39 captive breeders spread from Northland to Southland holding over 60 pairs and producing over 100 Pateke/season, with a record 153 reared in 1987.

All this was greatly assisted by the injection of new blood from Great Barrier Island in 1974 by the Wildlife Service and a 1987 capture totally organised by DUNZ.

For many years the Wildlife Service paid breeders \$5 and DU also paid each breeder \$5 for each Pateke reared.

DU's success with Pateke was recognised as the world's most successful captive breeding programme for an endangered waterfowl species and the same DU flock mating programme began to be used world-wide and is now a standard procedure. Such status and recognition was an incredible achievement for DUNZ.

### Aviaries

One thing learnt early in the captive breeding was that each pair must be retained in their own ‘exclusive’ aviary – because a mated pair of Pateke is the most murderous of all waterfowl. In a captive situation paired Pateke will kill other waterfowl in the aviary, including other Pateke.

The Mobil Oil Seminar publication discussed the aviary requirements for holding a pair of Pateke in captivity and it was soon determined that a flock mated pair would breed in their first season, with the number from each broods averaging four.

A combination of a good size pond, clean water, lots of cover, a food tray that only needs filling once per week, at least two nesting boxes, loafing platforms, a dabbling area, a totally rat/mouse/predator free environment, were all found to be an excellent guide to success. So much so that one captive female Pateke lived to be 24 years and 3 months. Lots of others have lived to be 12 to 18 years. This indicates the simplicity of the recovery programme – provide Pateke with a quality, predator free environment and they survive for many years.

In the wild we know of one male Pateke was captured again 90 kilometres from where he was released 8 years earlier.

With such large numbers being reared a facility was needed to hold large numbers of birds prior to release and Jim Campbell built a large holding aviary at his farm north of Masterton.

Pateke reared in the South Island were air freighted to Wellington, picked up by DU and delivered to Jim's aviary – well able to hold 100s of Pateke over fairly long periods. Most reared there went to release sites in the North Island.

The added value of the holding aviary was many birds were bonded as pairs before they were released.



**Captive breeding:** Pateke enclosure Wainuiomata.

**Photo:** Neil Hayes.



**Doing well:** Pateke Parakura Bay 1973.

**Photo:** Neil Hayes

### Pateke worth saving

Having evolved from the beginning of life in New Zealand and with unique features not found in any other species of waterfowl makes Pateke worth saving. Some unique behaviours are:

- Nocturnal behaviour. It is believed this trait was generated by Haast's Eagle (*Harpagornis moorei*) and the trait, once termed as crepuscular, expanded as the harrier population grew into millions
- Unlike other endemic waterfowl Pateke were once widespread throughout every type of New Zealand wetland.
- Selective in pairing behaviour and a monogamous relationship.
- The murderous nature of adult pairs in captivity, where it is impossible to hold more than one pair of teal in an aviary, and towards their fledged progeny; but birds of the year will live quite happily together until pairing commences – after which a pair must be removed very quickly to their own aviary.
- The murderous nature of pairs in the wild – towards other pairs and their progeny, particularly the male, towards his fledged offspring.
- Long-term parental attention provided to their progeny by both parents, at least until the progeny are fully fledged.
- An incredibly long lifespan in captivity.
- Great climbing ability.
- Incredible vulnerability to predation.
- Incredible vulnerability to being shot during duck season – in spite of total protection since 1921.
- Preference for estuarine habitat since Pateke began its retreat from predators.
- Colour, body shape, size, weight, courtship, displays, and vocal sounds.
- Pre and post-copulatory behaviour - invariably there isn't any!
- Feeding patterns.
- What they eat.
- Small clutch size – 5-6 eggs.
- Egg shape, size and weight – huge eggs for size of female.
- Colour, size and weight of progeny.
- Specialised bill, with very prominent lamellae.
- Flocking behaviour – teal become very gregarious after breeding season and head to favourite flock site.
- Unique habitat requirements.
- Preference for walking instead of flying.
- Failure to adapt to environmental changes.

In spite of these known characteristics much still needs to be learnt about Pateke.

*Continued next page*





## Re-establishing Pateke in the wild

Efforts to re-establish and save Pateke from extinction started in 1968 when the NZ Wildlife Service released 10 pairs onto Kapiti Island. These were a mix of captive reared and wild caught birds and 30-years later there was still a small population on the Island, but in 1996 the Department of Conservation poisoned Kapiti Island in an effort to eradicate rats and Pateke were removed from the Island prior to the poisoning. However, in spite of a subsequent release of Pateke on Kapiti it is believed none now survive there.

By 1977 sufficient birds were being reared to commence release into the wild and between 1973 - 1985, 320 Pateke reared by DU members were released into five wetlands north of Wellington along the lower west coast of the North Island at:

- 1969-1974 - Lake Omanuka, Manawatu. - 11 releases.
- 1974-1982 - Lake Koputara, Foxton - Six releases.
- 1975-1983 - Puke Puke Lagoon, Foxton - Nine releases.
- 1983 - Lake Kaikokapu, Manawatu - One release.
- 1983 - Nga Manu Sanctuary, Waikanae - Four releases.

The releases at Puke Puke and Nga Manu were organised by DUNZ members and whilst a number of birds released at Puke Puke reared young, very few of the birds survived for long periods, simply because the reasons for Pateke heading for extinction had not been addressed; the main reason being PREDATORS, accompanied by duck shooting.

Other releases in the Manawatu were undertaken by the NZ Wildlife Service, as was a single release at the Kaihoka Lakes, Nelson in 1978.

In addition and knowing that Pateke have done well on off-shore islands three DU organised three releases of Pateke on Matakana Island, Tauranga, between 1980 - 1981.

Sadly, all the releases between 1969 and 1983, including those on Matakana Island failed to re-establish and in 1984 it was decided to concentrate the release programme in Northland, along the east coast that was still quality Pateke habitat – and where approximately 1200 Pateke were still surviving.

## Release programme in Northland

By 1984 large numbers were reared each season and the Northland release programme commenced in August 1984.

From 1984 to 1991 all Northland releases were organised by DUNZ, with considerable support from Dr Murray Williams of the NZ Wildlife Service.

Jim Campbell, Allan Elliott and I spend seven years carrying Pateke from Masterton to Northland, mainly in Jim's Chevy Ute.

The August releases took place at the 350-hectare Government owned Mimiwhangata Farm Park on the east coast just north of Whangarei, where considerable Pateke habitat had been created and the farm was just south of the famous Helena Bay Pateke roost site: it regularly supported 50-70 Pateke and was only a stone throw from the large holiday camping grounds.

Two large lagoons were created by the Wildlife Service, together with lots of small breeding ponds and there was a small estuary on the farm. On the same day another Northland release took place at the upper reaches of the Matapouri Estuary – a little south of Mimiwhangata and only 20 minutes drive from Whangarei.

Recalling that in England pre-release aviaries are always used for holding captive reared birds for several weeks before the aviary door is opened. So for the first Northland release of captive reared DU Pateke the Wildlife Service erected large aviary at both Mimiwhangata and Matapouri - to hold the birds while they became adjusted to their new surroundings.

At the Nga Manu Sanctuary a pre-release aviary was also used.

The aviaries worked well at Nga Manu and Mimiwhangata, but at Matapouri several Pateke escaped before a hole was plugged!

In total 42 Pateke were released at Mimiwhangata and 54 at Matapouri on August 4, 1984 and because Pateke were uplifted from various breeders

on the way to Northland they had to be banded prior to being placed in the pre-release. These two sites were the only Northland site where pre-release aviaries were used.

Between 1984 and 1991 a total of just under 600 captive reared brown teal were released by DU onto five different wetlands in Northland - Mimiwhangata, Matapouri, Takou Bay, Purerua and Urupukapuka Island - with all releases carried out by DU personnel.

One of the most remarkable things about all DU releases of Pateke between 1975-1991 is that only one bird of over 1000 released by DU had died in transit.

Two of the preferred Northland sites were Mimiwhangata and Purerua – with 295 Pateke being released at Mimiwhangata and 320 at the Purerua.

The DU Pateke Recovery Team believed the 7-hectare created lake on the Purerua Peninsula, just north of Kerikeri was an excellent site and Pateke were known to breed there and in adjacent wetland.

Sadly the Dept of Conservation controlled Pateke Recovery group ignored the Purerua site for over 10-years.



**Penned in:** Jim Campbell's Pateke enclosure.

**Photo:** Neil Hayes

## Survival in Northland

Survival at Mimiwhangata, Purerua and Matapouri was extremely good – in spite of predator control only taking place at Mimiwhangata: and for only a short time.

A photo taken in early December 1987 showed 45 Pateke clearly identified from a release of 64 three and a half months earlier. Over 60 Pateke were present and it is believed all 64 were still alive.

The survival rate at Mimiwhangata was largely due to Pateke being fed a supplementary diet every morning and an extensive predator control programme.

The survival at the Purerua site was also good, but they needed the supplementary food and predator control. There were numerous reports of Pateke being seen at many sites in the district.

Matapouri survival was also encouraging and 18-months after the first release I counted 22 Pateke in the estuary.

## Modern era (1991-2014) recovery programme

Unfortunately when DOC took over the recovery programme in 1991 they categorically stated that no more than 40 Pateke would be required each season. The result was numerous Pateke breeders threw in the towel and DU had a period of loss of interest.

By 1993 Pateke numbers in the wild were plummeting. I discussed this in an article published in NZ Outdoor magazine, entitled "The rapidly approaching demise of the New Zealand Brown Teal."

The Department took note and held an informal recovery group meeting at the Mimiwhangata Farm Park. The meeting decided to concentrate Pateke recovery in Northland with expanded predator control and over the next two years Northland Pateke numbers increased steadily.

With Pateke also present on a number of small offshore islands; including

Kapiti, Urupukapuka, Tiritiri Matangi and Little Barrier the total number in the wild in 1987 was 3000. But, by 2000 Pateke in Northland had declined to 350, on Great Barrier Island to 500 and on the Coromandel Peninsula to less than 20 birds.

Two years after the involvement DOC again lost interest in Northland and commenced a release programme into totally unsuitable areas; such as Travis Wetland in Christchurch, Tawharunui (Warkworth), Cape Kidnappers (Hawke's Bay), Warrenheip (Waikato) and more recently Fiordland.

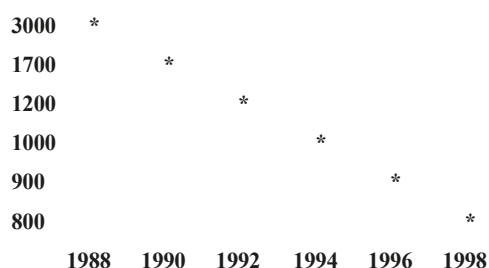
Though these sites had predator control programmes they all failed because:

1. There are no wild populations of Pateke in the area.
2. Habitat was not suitable.
3. No suitable flock-sites.
4. No suitable Pateke habitat adjacent to these sites.
5. No suitably protected adjacent wetland for population expansion.

The result - by 1999 nation-wide Pateke numbers had again dramatically plummeted – **from close to 3000 in 1987** (Including Pateke on offshore island) **to less than 800 in 1999** - and our graph showed that Pateke would be extinct on the mainland by 2004 and totally extinct by 2015.

Bearing in mind the 3000 recorded in 1987 was likely a conservation figure the dramatic race towards extinction is the most disastrous ever recorded for a rare and endangered waterfowl species.

#### The Race Towards Extinction – 1988 to 1998



In September 1999 two Pateke pragmatists featured on TV ONE News and in no uncertain terms pointed out that brown teal were in grave danger of premature extinction, and severely criticising the Department's performance in the Pateke recovery programme.

The TV ONE presenter was undoubtedly the 'star' of the news item – standing in front of a Pateke aviary, she said **“The whole recovery programme is a simple one, you give brown teal a protected environment like this and they live to be 24 years and 3 months.”**

The outcome from this news item was that the Department carried out an audit of the programme, interviewing 39 people who were known to have had some involvement with brown teal and in 2000 the findings, recommendations and objectives of how to save Pateke from extinction were published.

A two-day seminar/workshop was held in Kerikeri to determine how best the Audit recommendations could be implemented.

The workshop recommended the implementation of major predator control programmes and the race of Pateke towards extinction has being retarded. The Pateke population is steadily increasing, but only in the three areas of the country now recognised as vital to long-term Pateke survival; Northland, Great Barrier Island and Coromandel Peninsula; all three areas were where Pateke began their escape from the massive nation-wide increase in predators - feral cats, ferrets, stoats, weasels, rats, hedgehogs, harriers, pukeko, etc, believed to have been during the late early 1900s.

The rapid decline in Northland and the Coromandel can be attributed to the spread of predators, but on Great Barrier Island where there are no mustelids, hedgehogs or duck hunting, but large populations of feral cats, two species of rat, feral dogs (lost by pig hunters), Pukeko and the harrier hawk, the race towards extinction can be clearly attributed to an explosion of predators in all three areas; along with an almost total lack of endangered species management. Domestic dogs are also known to eliminate Pateke in these critically important areas.

#### Success on the Coromandel Peninsula

Little is known about the retreat of Pateke to Northland, the Coromandel and Great Barrier Island; though Great Barrier Island once had the largest national population of Pateke. However, in the early 1900s there was no record of Pateke being present on Great Barrier Island, and in 1868 Hutton, a highly regarded ornithologist, failed to record them in his extensive Great Barrier Island bird survey, but by 1987 there was 1500 Pateke on Great Barrier Island and 1200 on the east coast of Northland, but less than 20 on the Coromandel.

Pateke were widespread on the Coromandel in the early 1900s but with the spread of predators less than 20 were surviving in the Port Charles area near the top of the Coromandel.

Thanks to the 2000 Audit the release of captive reared Pateke commenced on the Coromandel in 2003 and ended in 2007 with 250 Pateke released.

This release was supported by the existing and extensive predator control programme in the Moehau Ranges in operation since 1999 and by 2013 there are several hundred Kiwi surviving in the ranges. An extensive predator control programme for Pateke at Port Charles and environs was launched in 2001, with a high level of survival of both released and wild teal.



**Peaceful:** Pateke at Miniwhangata.

**Photo:** Neil Hayes

And from 20 to 750 Pateke on the Coromandel is an incredible success story and clearly confirmed precisely what the TV Presenter stated in 1999 – “Provide brown teal with a predator free environment and they will live for 24-years”!

The level of survival of released birds, their adaptability and their breeding success, coupled with major predator control programmes, no duck hunting and outstanding support from the local Port Charles community, including farmers, is an outstanding example of what can be achieved in a short space of time. Brown teal are now being observed in an increasing number in many areas of the Peninsula with one flock of 180 being counted in 2012 at Waikawau Bay.

Historically, a peninsula has proven to be readily defensible against predators and with ongoing predator control on the Coromandel Peninsula a population of over 2000 Pateke could be achieved.

Besides well organised and intensive predator control on the Coromandel the support of the local farming community and residents has been an intrinsically important part of the success, with a number of land owners creating quality Pateke habitat and the locals carrying out much of the predator control work.

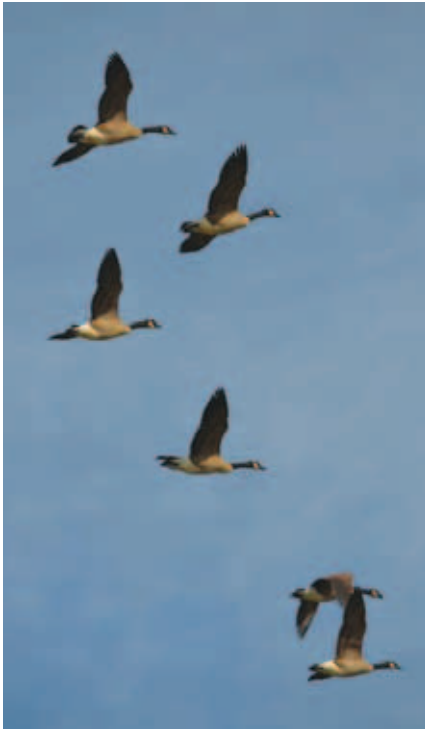
In addition financial contributions from The Moehau Environmental Group, Banrock Station Wines of Adelaide, Isaac Wildlife Trust, DUNZ, DOC, Brown Teal Conservation Trust and, critically important to the whole programme - the Pateke captive breeders - all helped ensure the success of the Coromandel re-establishment programme.

There is still much to be done before Pateke are anywhere near being saved from extinction and a future for the species is assured. DUNZ can be justly proud of its achievements with Pateke.

**Next issue of Flight - The Positives and negatives of Pateke recovery programme.**



# Water birds love Champion wetland



The JK Donald Reserve featured in the April issue of Flight, celebrating their becoming the National Rural Wetland Champion 2014.

Jane Donald's daughter Paula Gillett took these photos a week before duck shooting. They are taken in the JK Donald Reserve on the North Eastern side of Lake Wairarapa.

The Lake is a very popular shooting area where Fish & Game allocate Maimai sites on and around the Reserve.

**Photos:** Paula Gillett



## Trapping at Boggy/Wairio

Trapping at Boggy/Wairio in April by Steve Playle resulted in the following critters recorded - 4 cats, 1 ferret, 9 rats, 3 mice, 1 magpie and 17 hedgehogs.

The grand total came to 15 cats, 36 ferrets, 1 stoat, 9 weasels, 130 hedgehogs, 46 rats, 21 mice, 3 magpies, 1 harrier hawk and 1 rabbit.

Steve also saw a Bittern in Boggy Pond down where the culvert pipes are beside the Boggy stop bank. That photo is on the front cover.

Steve has since put in other trap sites along the new track to the viewing hide out by the spillway.

## Our wetlands

The international theme of World Wetlands Day this year (2014) is "Wetlands and Agriculture: Partners for Growth".

For millennia, wetlands have been used directly for agriculture and for supplying food, fuel and fibre to support lives and livelihoods. Wetlands continue to play an essential role in supporting modern agriculture. They provide water storage, flood buffering, nutrient removal, water purification and erosion control. Sustainable practices which support both agriculture and healthy wetlands are therefore coming to the fore.

Australia was one of the first countries to sign the Convention on Wetlands of International Importance (more commonly known as the Ramsar Convention), and in 1974 designated the world's first Ramsar site at Cobourg

Peninsula in the Northern Territory. They beat us by two years.

New Zealand became a party to the Ramsar Convention on Wetlands in December 1976 and has listed six sites covering almost 55,112 hectares in the List of Wetlands of International Importance.

They are:

- Whangamarino, Waikato
- Kopuatai Peat Dome, Waikato
- Firth of Thames, Waikato
- Manawatu River Estuary, Manawatu
- Farewell Spit, Nelson
- Awarua Wetland/Waituna Lagoon, Southland.

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