

Winchester

NEW ZEALAND LTD

*is proud to support Ducks Unlimited New Zealand Inc
in their efforts to propagate and preserve
New Zealand's rare waterfowl.*



Recent work on Diane Pritts farm at Ohakune.



WINCHESTER®

MORE THAN A NAME. A LEGEND.

Distributed in New Zealand By: Winchester New Zealand

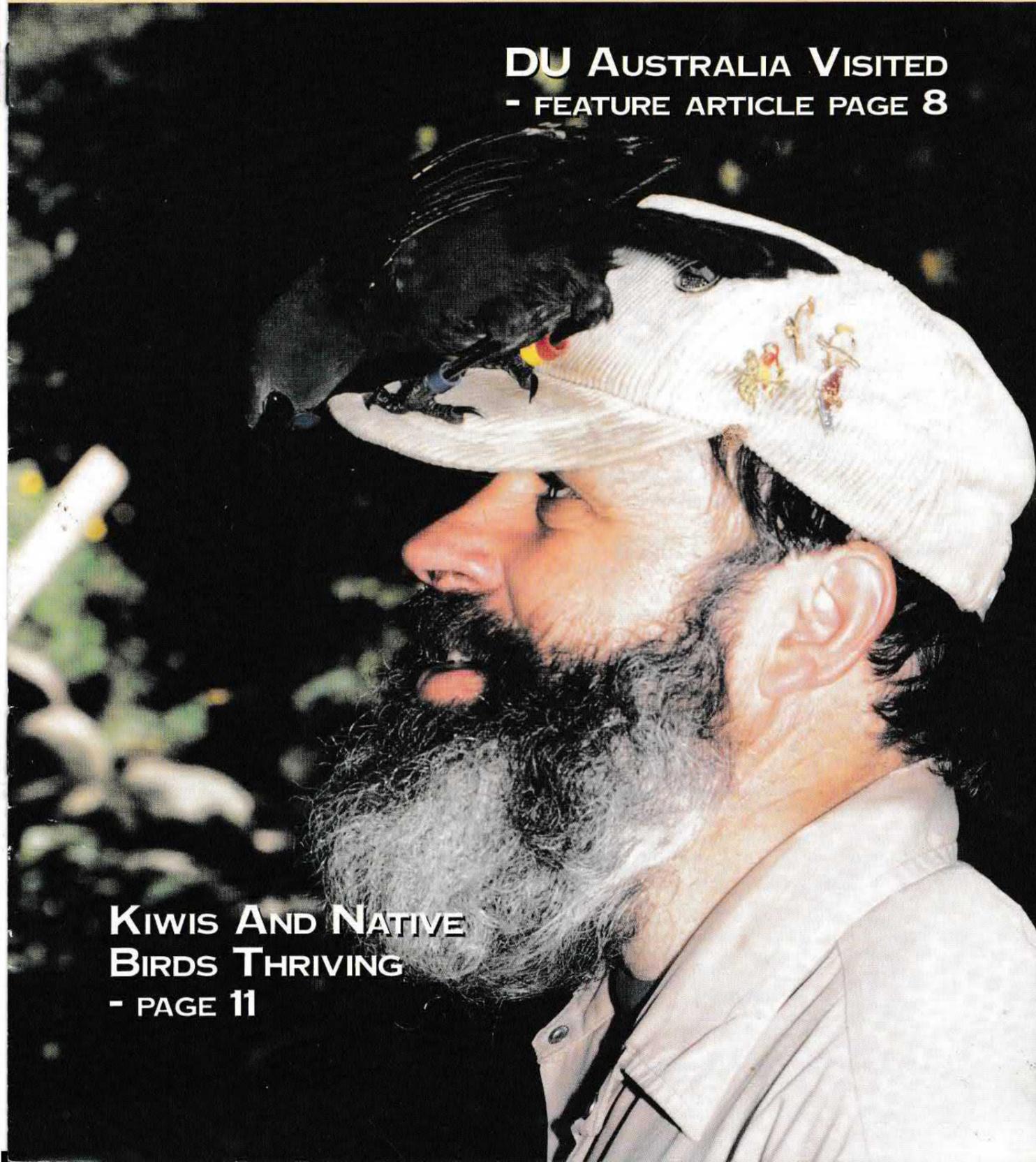
APRIL 1994
ISSUE 79

FLIGHT



DUCKS UNLIMITED NEW ZEALAND INC. in association with Ducks Unlimited Canada, USA, Australia and Mexico

DU AUSTRALIA VISITED
- FEATURE ARTICLE PAGE 8



**KIWIS AND NATIVE
BIRDS THRIVING**
- PAGE 11

DUCKS UNLIMITED NEW ZEALAND INC.,

PO BOX 9795 AUCKLAND, NEW ZEALAND

OUR MISSION

We are a voluntary membership based society dedicated to the conservation of New Zealand wetlands through:

- wetland restoration and development
- breeding programmes for threatened waterfowl
- advocacy and education of wetland values

By these means we seek to ensure the ethical and sustainable use of wetland resources by all existing and future users.

BOARD OF DIRECTORS

CO-PATRONS:	Lady Isaac QSM, Christchurch, Norman Marsh, Reporoa
PRESIDENT:	David Smith, LLB, Auckland - (<i>"Whio" Supervisor - Blue Duck</i>) - Night 0-9-292 8873
CHAIRMAN:	David Rice, LLB, Auckland - (<i>Gretel Supervisor - Grey Teal</i>) - Day 0-9-299 8330
VICE PRESIDENT:	Alan Wilks, Greytown - (<i>"Pateke" Supervisor Brown Teal - Pearce Wetlands Supervisor</i>) - Night 0-6-304 9729
EXECUTIVE DIRECTOR:	Dr Grant Dumbell Ph.D, Auckland - Day 0-9-625 9002
SECRETARY:	Graham Gurr, Auckland - (<i>Art Committee, National Raffle</i>) - Night 0-9-489 5337
TREASURER:	Glenys Hansen, Eketahuna - Night 0-6-375 8474
	Diane Pritt, Ohakune - (<i>National Sales, Conference Organiser</i>)
	Ken Cook, Palmerston North - (<i>National Shoot Co-ord</i>)
	Jim Campbell, Masterton - (<i>Wetlands Supervisor</i>)
	Dave Johnston, Reporoa - (<i>"Royal Swan" Supervisor - Mute Swan</i>)
	Ian Lyver ACA, Hastings
	Carolyn Hooson, Wellington - (<i>Flight Editor</i>)
SINCLAIR WETLANDS MANAGER:	Horrie Sinclair, MBE, Outram
CONSERVATION ADVISOR:	Professor John Craig Ph.D, Auckland
FLIGHT PRINTER:	Brendan Coe, Lithographic Services Limited, Wellington

HONORARY MEMBERS

Keith Barnett, Tokaanu	Bill Wilkinson, Wellington	Ralph Adams, Blenheim	Laurie Piper, Christchurch
Horrie Sinclair, MBE, Outram	Adrienne Longuet, Wellington	Lady Isaac QSM, Christchurch	Stephen Loach, Dunedin
		Tony Flexman, Pokeno	Sir Peter Elworthy, Timaru

NEW ZEALAND LIFE MEMBERS

Norman Cameron, Carterton	Mrs M. Davison, Wyndham	Kerry Butler, Waipawa	Dave Robinson, Rotorua
Ian Pirani, Katikati	Glenys Hansen, Eketahuna	Alastair Nicholson, Wellington	Equine Nursery, Te Puke
Mr J. H. D. Ward, Huntly	Brent McDonald, Outram	Mr T. G. L. Pearce, Wairarapa	Otamaiti Trust, Hunterville
Michael Bourke, Kimbolton	Chris Hooson, Wellington	Mr S. B. L. Pearce, Wairarapa	Craig Worth, Hamilton
Isaac Wildlife Trust, Christchurch	Leigh McKinnon, Katikati	Mr B. M. L. Pearce, Wairarapa	Ame Nielson, Masterton
Fred Bailey, Auckland	Alan Fielding, Palmerston North	Mr B. M. L. Pearce, Wairarapa	Mathew Paku, Masterton
Norman Marsh, Reporoa	Peter McLeod, Christchurch	Dave Johnston, Reporoa	Graham Henry, Wellington
Jim Campbell, Masterton	Euan Bidwell, Taupo	Mrs L. Tapp, Northland	Mr H. Honegger, Otaki
Cheryl Pirani, Auckland	Andre Terpstra, Murupara	Mr M. Tapp, Northland	Brent Fotheringham, Wellington
Michael Hucks, Taupo	Mrs Dulcie Barnett, Tokaanu	Colleen Hansen, Eketahuna	David Mitchell, Christchurch
Myles White, Dunedin	Les Cleveland, Dunedin	Miss O.D. Pearce, Wairarapa	Dawn Pirani, Katikati
Andy Gurney, Featherston	Ross Meads, Turangi	Craig Ewing, Carterton	Don McCulloch, Wellington
Mark Grace, Hunterville	Mark Newcomb, Auckland	Mark Pearce, Wairarapa	John Sax, Auckland
		Marie McEntee, Auckland	Alan Gibbs, Auckland

INTERNATIONAL LIFE MEMBERS

William Barrett, Australia	Richard Trethewey, Canada	Eugene Engrav, USA	Edwin Roberts Jnr., USA
Tony Reiger, USA	Robert Eberhardt, USA	Basil George, Wales	Robert Strahs, USA
Ken Lowry, Australia	Tom Arvin, USA	James Hulbert, USA	Charles Thomas, USA
William D. Wright, USA	Elton Ball, NSW Australia	Garth Jackson, Canada	John Walker, USA
Mr & Mrs Pat Nolan, USA	Mr K. Ball, Papua New Guinea	Donald Kaatz, USA	Ebe Walter, USA
Hazard Campbell, USA	Mrs K. Ball, Papua New Guinea	Bud Kapilla, USA	Tom Williams, USA
Duncan Sinclair, Canada	John Belz, USA	Marc Karnes, USA	Stephen Lund, USA
Mrs Gina Campbell, USA	Beatty Burke, USA	James Konkel, USA	Don & Barb Rollins, USA
Herb Moulding, Canada	Robert Corrigan Jnr., USA	Omer Long, USA	Robert Middleton, USA
Paul Roman, USA	Bill de Journett, USA	Jean Luxford, USA	Duncan Campbell, Canada
Barry Morrison, Canada	Mr & Mrs William Dean, USA	Mr & Mrs Nugent, USA	Tom Pearman, USA
Mrs Pat Hall, USA	John Egger, USA	John Pittenger, USA	Gary Harrigan, USA
Mr & Mrs Clark Springer, USA	Robert Ehrlich, USA	Peter Pund, USA	AI Cromb, Canada
		Sis & Ward Reilly, USA	Keri Cromb, Canada

COVER PHOTO: Eric Fox, Curator of Otorhanga Kiwi House and Native Bird Park, with a resident Kokako.

NEW PRESIDENT TAKES OVER THE REINS

It is with trepidation and pleasure that I take up the reins as President from the 1st of April this year. My elevation to the Presidency means that David Rice now becomes Chairman for the first time in a long time Jim Campbell will be a Board member without holding office. Many of you will be aware of Jim taking up the reins as President following Neil Hayes' resignation due to ill health. Jim has been on the Board since 1981 and has been either a Vice President, President or Chairman for ten of those years. That is a sterling effort. At all times Jim has approached his task with enthusiasm even when it has meant personal sacrifice Jim, we all owe you thanks.

Such thanks would be incomplete without thanks also to Jim's wife Raana who has willingly supported Jim and the Board, even though she may have been formally part of the decision making process.

Finally but not least, thanks must also go to David and Trina Rice for their efforts over the past two years of David's Presidency. A

David Smith, President

lot has been accomplished over the last two years in terms of defining who we are, where we are going and how we intend to achieve that. It would not have been achieved so easily without David's assistance and encouragement.

I am conscious that to many of you there would appear outwardly, to have been little progress made over the last few years. In fact those years have been invaluable in creating the structure necessary for us to move forward into the next decade or so. We now have full and proper job descriptions for each member of the Board, Project Chairman, Area Chairman and the like. We have improved communication within the Chapters and to the Board. We are now in a position to put aside those housekeeping matters, which I now believe to be complete, and put our efforts out there into Wetlands and their inhabitants.

Through the organisation now in place we can assist with advice on engineering, legal matters (as to resource consents etc.)

and plain downright practical common sense which has come from years of experience. Whether the contribution be by way of money or advice Ducks Unlimited must be to the forefront of assisting with the retention and creation of our wetlands.

At the end of my two year term as President, I want to be able to point to the projects which have been completed by or through Ducks Unlimited during that two year period. Clearly, the more the better.

I am conscious also that I take up the presidency in our 20th year. This year's AGM is to be a special one. Not only will we be in new facilities in Palmerston North, we will also be hosts to a number of international guests who have been our benefactors in the past. We expect visitors from DU Inc, DU Canada and possibly DU Australia. Now is the time for you to ensure that you will be there. We have already received bookings for approximately one third of the hotel rooms and if you wish to come we ask that you take steps to ensure that now. This is one not to be missed! I look forward to meeting you there.



DIANE PRITT - OHAKUNE

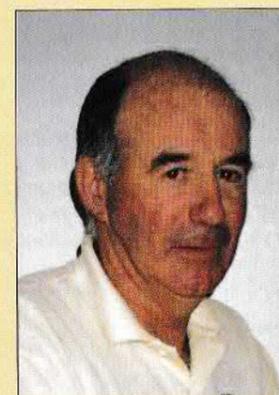
Diane has been a member of Ducks Unlimited for 18 years and a board member for 16 years.

Her roles within the board are National Sales and she is the driving force behind organising the Conference Weekend.

Diane is a farmer by occupation managing the 147 hectare farm with her mother, Audrey, and various enlisted help during the busy periods. The farm boasts an impressive number of ponds and wetland areas, 37 in total, all maintained very protectively by Di.

Diane is a local identity when it comes to matters relating to waterfowl in the Waimarino area.

She also manages the local wine shop - Waimarino Wines. Wine is Diane's passion and there is not a lot you could teach Diane about the subject. She travels regularly visiting winemakers and taking wine back for the shop, and many winemakers visit the shop to host tastings.



JIM CAMPBELL

Jim first joined Ducks Unlimited in 1976 and became a board member shortly after. During his extensive time on the Board he has spent 5 years as President and 2 years as Chairman. He also represents DU on the Trust Board of the National Wildlife Centre at Mt. Bruce.

Jim and his wife Raana farm sheep and beef on a 500 hectare property at Mt. Bruce, Wairarapa.

Ducks and Wetlands are in Jim's blood. His interests are waterfowl breeding, advising on ponding and plumbing in an effort to enhance NZ's landscape and habitat. His hobbies are jumping on a digger and making holes in the ground for waterfowl! A keen member of TreeCorps Association Jim "can't plant enough trees in ones allotted lifetime".



Or you could get really serious with your brushweeds and use

Proudly supporting
Ducks Unlimited



**20TH ANNIVERSARY CONFERENCE
COACHMAN HOTEL, PALMERSTON NORTH
15-17 JULY 1994**

PROGRAMME

Friday 15 July

5.00pm Conference room, registration desk and bar opens
7.00pm Happy Hour until 8.00pm
12.00pm Conference and bar closes

Saturday 16 July

9.30am Morning tea in conference room
9.30am Drive to Makerua and walk. Return 11.30am
12.00am Buffet lunch (not included in registration price)
1.45pm Annual General Meeting opens
5.00pm Annual General Meeting closes
7.00pm President's shout till 7.15pm
7.30pm Annual Conference Dinner
8.30pm Presentation of breeder awards, decoy carving competition, Chapter Challenge, Bill Barrett Trophy.
9.00pm Auction begins

Sunday 17 July

9.00am Workshop - Predator Control
9.30am Morning tea and trade displays in Conference room
10.00am Workshop - Stu Morrison, DU Canada

**JIM
CAMPBELL
Carving
Competition**

Categories:

Working Decoys;
must float level
Decorative Decoys;
any size

**Entries will be judged
at the AGM at
Palmerston North
15th to 17th July 1994**

Ansett New Zealand.
Making the differences that matter.

Proud to be Ducks Unlimited New Zealand Inc's official carrier

For a 50% discount on air travel for the 20th Annual Conference, please quote TA 54034 when booking your flight. Booking can only be made through an Ansett office

ACT NOW - Registration for accomodation must be in by 25th May



**DUCKS UNLIMITED NEW ZEALAND INC.
20th Annual Conference 15-17 July 1994
at the Coachman Hotel, Palmerston North**

Conference Registration

Please Register people for the Ducks Unlimited Conference

Name

Address

Phone

I/We will require accommodation for the nights of

Number in party

Conference Registration: \$55 each x People = \$

Coachman Motel Room (\$85 deposit): \$85 per room x rooms = \$

Coachman Hotel Room (\$112.50 deposit): \$112.50 per room x rooms = \$

Please charge my VISA/BANKCARD No. Expiry Date / /

Signature My cheque for \$ is enclosed

Please send your registration to: **DIANE PRITT, Smiths Road, Ohakune
Phone: 0-6-385 8016 a/h or 0-6-385 8244 Wk**

Rongopai Wines

*Like ducks to water you'll enjoy
Rongopai wine at the
20th Annual Conference dinner*

Rongopai Wines are pleased to support
Ducks Unlimited New Zealand Inc in its efforts to restore
and enhance New Zealand's wetlands and waterfowl.

*Like fine wine, this does not happen overnight!
Keep up the good work*

SOLVING PARASITE PROBLEMS

THE MIGHTY MITE

When guests overstay their welcome it's usually possible to make some excuse to get rid of them. With parasites more drastic action needs to be taken.

I was chatting the other day to a waterfowl breeder who told me she had lost a whole clutch of Scaup because of mites that she wasn't aware of until too late. The eggs had been hatched by a Bantam and one by one the apparently healthy ducklings keeled over and died. It wasn't until only one was left that she noticed that the head

of the duckling was absolutely covered in mites, no doubt attracted by the warmth of the lamp in the breeder-box, and this one died soon after.

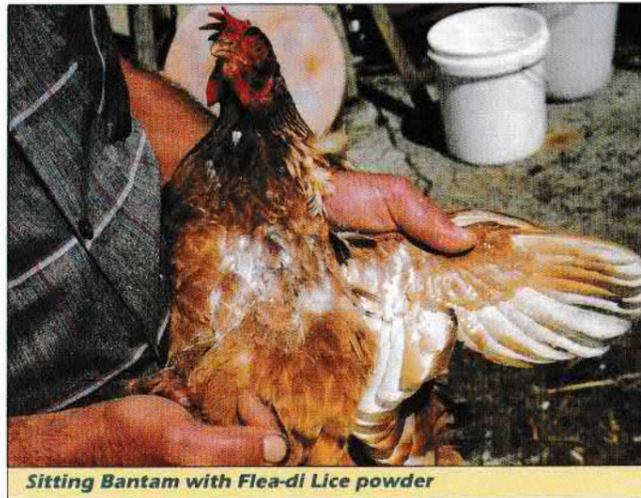
I prevent this problem very simply. Before I set the broody Bantam on the nest with a few golf balls to keep her sitting, I dust the nest and the Bantam with Flea-di Lice Powder which controls any infestation. This is readily available from vets. An old-fashioned remedy is to use pine needles or pine chainsaw-ripping shavings as nesting material, rather than straw which, being hollow, provides protection for both mites and their eggs.

Melvin Pike



Mite dung build up on the legs of poultry

I also take the precaution of dusting all nesting sites of my captive waterfowl and all nest boxes in the wild when I change the nesting material. First dust the bottom of



Sitting Bantam with Flea-di Lice powder

the box, put in the new material and then dust again. I always de-worm and de-louse all waterfowl before release.

Here's a tip for any reader who keeps poultry. Spray the interior of your fowlhouse with diesel to control lice. Sometimes a bird can be seen with swollen legs and feet as a result of a build-up of mite dung. I just dip the feet and legs into a tin of used engine oil which seems to clear the problem.

THE WILY WORM

Because I had someone who was prepared to listen, I started talking about worms. All waterfowl host worms at a naturally manageable level until they become stressed, in the

case of captive birds through handling and transportation. Very quickly the worm numbers increase and the bird loses condition.

Whenever I have birds which have been subjected to any form of stress, usually by being transported some distance, I keep them away from water for a few hours and then give them a bowl of water containing a few drops of Nilverm. Invariably I will find casts full of dead worms next morning. Another remedy for worms in waterfowl is provided by a small sliver of garlic popped down the bill, but the simple answer lies, not in the seaweed, son, but the Nilverm.

WHAT'S IN A NAME?

Graham Gurr

A couple of years ago (through DU) I was fortunate enough to fall in with some like-minded people who wanted to own their own wetland. Individually none of us had the money so collectively we purchased 125 acres of raupo, teatree, willows, lakes, flax, more willows, peat and mud - simply described as a swamp.

There are two lakes on the property. One is known locally as the Black lake, due to, I suspect, it's colour which is always a very dark shade of brown/black. The other lake has no name that we have been able to discover, and is small enough to be hidden from the surrounding hills due to the aforementioned raupo, teatree and willows.

From the safest place to leave the car (the most solid) we can walk to the main lake in about 20-30 minutes. There is some easy walking on the small areas of pasture that surround the swamp, but most of the walk is spent negotiating the track out to the lake. In summer it can be done in gumboots, taking care to avoid the holes. In winter when there's water in the swamp, thigh boots are a must, and the problem of stepping into a hole takes on a whole new meaning.

The holes I'm talking about are peat holes. Most are only a couple of feet deep before you strike roots or other vegetation preventing your leg descending any further - others we have yet to determine how deep they are as we haven't found the bottom, even with rather long poles.

The lakes are the jewels in a sea of raupo, teatree and the ever present willows. They are home to the mallard, grey duck, grey teal, swan, Canada geese, visiting shoveler, scaup, Australasian coot and a lot

of other birds besides. The lakes are deep. One metre out from the banks you are in four or five metres of water, so it pays to be careful where you put your feet. But don't misunderstand - it's a little bit of paradise, which I escape to whenever I can. The only fly in the ointment is its name. It doesn't have one, but between ourselves it's referred to as 'The Swamp.'

After we became the owners everyone was asking "What are you going to call it?" It would appear that people expect some sort of name to be attached to a private wetland project. Broadlands, Windemere, Mitredale, Home of the Duck, Pateke Lagoon are names of wetlands that instantly spring to mind. Pateke Lagoon is owned by Brendan Coe. He has been one of the most insistent that our swamp should have a name benefitting its status. Clarification of what its status might be is somewhat of a problem so we will leave it aside for now. But we have been forced reluctantly to agree that a name needs to be found.

But what name? If we follow the grandeur theory, a name like Broadlands suggests a sweeping vista of manicured elegance, and those who have visited Broadlands in Reporoa, will know what I mean. Our property doesn't fit into that category.

The politically correct theory of using a Maori word with a European, such as Pateke Lagoon, is currently holding a lot of favour. First to find your Maori name. Let's start with the birdlife down home on the swamp. Mallards don't have common Maori name so they are out. Grey Teal, 'tete'? OK but what do you put with it?

Tete Lagoon just doesn't sound right. Grey Duck presents more possibilities, 'parera.' Parera Ponds, Parera Lagoon perhaps.

One frequent visitor to the swamp is the pied stilt, 'poaka.' 'Poaka Puddles' has a nice sound to it I think, however not the right sound I'm told. Keep trying. Kingfishers are always around, 'kotare.' 'Kotare Lakes'? Another visitor are the shags, 'kawaupaka,' a good word to wrap your tongue around but what can you put with it? Hang on, we are drifting away from our main reason for buying the whole thing in the first place - the waterfowl.

Swan are always present. During the shooting season I've counted over one hundred black swan on the main lake. They don't have a Maori name but like all things avian they do have a Latin name 'Cygnus atratus.' 'Cygnus Downs.' Sounds quite posh doesn't it? Hardly in keeping with the character of the property. Most of our other ducks have the Latin 'anas' as part of their name, for example Mallard is 'anas platyrhynchos.' I suppose something could be done with that, but then think of all the people who would mis-spell anas. It would only take a 'u'!

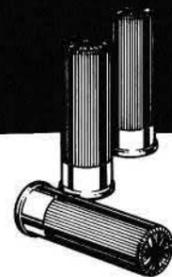
The permutations are of course, endless. The real problem is that it has to be a name that everyone feels comfortable with, and accuracy reflects the character of the property - and one that can be used in polite company.

By now I hope you understand the magnitude of the problem. There's more in a name than you might at first think. Any suggestions (on the back of an envelope, sent care of Flight) will be gratefully received and until we can agree on a name we will continue to refer to it as 'The Swamp'.

RELOADERS SUPPLIES LTD

NO. 1 IN N.Z. FOR ALL YOUR SPORTING SUPPLIES

WRITE TO PO BOX 13-010 ONEHUNGA OR TEL (09) 665-407 FOR FREE PRICE LIST



DUCKS UNLIMITED NATIONAL CLAY TARGET SHOOT

Sunday August 7th, start 10.00am, Wairarapa Gun Club grounds, Norfolk Road, Masterton

Trophies, Sash and medals will be awarded.

SWEEPS

Lunch and bar on-site.

Continuous morning and afternoon teas.

Accommodation can be arranged.

Further details from shoot secretary
Glenys Hansen - Phone (06) 375-8474 a/h.

PROGRAMME

25 skeet
20 single barrel
10 pair double rise
20 single rise
20 sparrow
Optional ball trap

DUCKS UNLIMITED ACROSS THE DITCH

During late October last year, I was fortunate enough to accompany Norman Marsh, our DUNZ Patron, on a thirteen-day visit to Ducks Unlimited, Australia. Norman and I linked up at Auckland Airport, before our flight to Adelaide, then stepped off the plane to a hot, spring day under a cloudless South Australian sky.

After a long incubation, DU Australia was hatched just 18 months before our visit, and since then has rapidly begun the job of extending its influence into all the states of the largest, driest island on earth. During our visit we were to see their inaugural wetland restoration project, meet their key people, and consolidate a new wetland dimension to the long standing ANZAC tradition. However, the first requirement was lunch.

We were met by Mick and Shirley Olsen, Bob Brown, and Euan and Molly Roberts. Mick has served as DU Australia's inaugural Chairman and along with Bob and Euan, has brooded DU Australia in Adelaide. Our lunchtime perch was in a high-rise revolving restaurant from where you can see the Adelaide Hills to the east and south, and the vast flat expanse of South Australia stretching away to the north.

THE RIVERLAND

However, we weren't to be confined to the city, and in the late afternoon began the 200km drive north-east, through the Baroosa Valley, to the Riverland on the Murray River, with Peter Arnold. Peter has been a Member of the South Australian Parliament for over 20 years, and through his family's long connection with the Murray River, which go back to the days of the riverboats, he has developed a deep understanding of how to balance the conflicting uses of water in such an arid environment. This understanding has been translated into legislation which guarantees South Australia a minimum annual flow of water in the Murray River, in order to keep the whole river system alive, to support the valuable horticultural industry, and to begin repairing some of the damage which has been done in the past.

Dr Grant Dumbell, DUNZ Executive Director

The Murray is one of the largest systems on earth and drains around one seventh of all Australia. Its tendrill headwaters stretch east and north and drain everything between Victoria and southern Queensland. Included in this is the vast bulk of New South Wales as well. However, because Australia is so flat, the river has a fall as low as one inch in every mile and a flood in Queensland can take six months to reach South Australia. This is exactly what was happening last October. The river had been rising for around three weeks and was tipped to rise for another three weeks before taking a similar length of time to go back down. What looked like the flow of the Waikato River in flood was actually about ten times normal flow and there hadn't been significant rain in the Riverland for weeks.

Our first full day was spent with Tim Fraser, a National Parks ranger who looks after many of the reserves along the South Australian section of the river. Tim took us onto the river in a dinghy and because it was so high we were able to take the boat away from the main channel and through the mighty river Red Gums which were standing in several feet of water. As the river rises it literally spills out across its floodplain to form huge sheets of water in shallow lagoons. This is the signal for the waterfowl to start breeding. As the river drops again it leaves the lagoons.

This is the signal for the waterfowl to start breeding. As the river drops again it leaves the lagoons behind and as they slowly dry up the birds race against the sun to see whether the broods can be raised before the water disappears.

Because the river level was higher than the surrounding creeks, the flow had reversed in all the minor channels, so to get back to the river you had to remember to go 'upstream.' These interconnecting channels, which leave the river and rejoin it

further downstream, are called anabranche creeks and they off temporary islands on which kangaroos, monitor lizards and livestock can be stranded for the duration of the flood. Throughout the day we saw kestrels and kites, correlas and cockatoos, grey teal and chestnut teal, and wood ducks and honeyeaters. However, the highlight was a very close encounter with a square-tailed kite, of which there are several pairs known to be in South Australia.

From being on the river, we then went above the river to gain an aerial view of the whole Riverland. In order to tame the river a series of locks were built along the entire course of the Murray earlier this century. This has meant the river is now a series of three metre stairs with each lock holding back a long pool of water. While this sounded good in theory, the reality is something different. Because the interior of Australia was once a vast inland sea, the underlying deep groundwater is incredibly salty, more so than seawater. While activities on the surface of the land don't generally bring this salt to the surface, mucking around with water is a very risky business. What has happened is the weight of the water held back behind the locks has literally squeezed the salty groundwater to the surface in the same way mud squeezes between your toes. This has led to the death of scores of Black Box trees along the river, while the higher water levels behind the locks had drowned the Red Gums.

We were accompanied on our flight over the area by Jack Seekamp, known locally as "Salty" Jack because of his years of struggle to get water users to understand the problems of the salt. Jack pointed out old irrigation evaporation basins in which the salt has become so concentrated that nothing can grow there. Even the over use of irrigation can lead to excess water moving through the ground and taking the dreaded salt with it. Once this water reaches the river again it has the effect of very gradually raising the salinity of the river which in turn affects downstream users. The only way to avoid the problem is not to let

the salt out of its underground jail. This has led to the development of computer controlled microjet and drip irrigation where the plants only receive the water they require. There is no waste, therefore no runoff, therefore the salt doesn't move. And while this will hopefully prevent the problem getting worse, it has also allowed the process of repairing the damage to begin as over time the natural movement of rainwater will slowly flush the already released salt through the system.

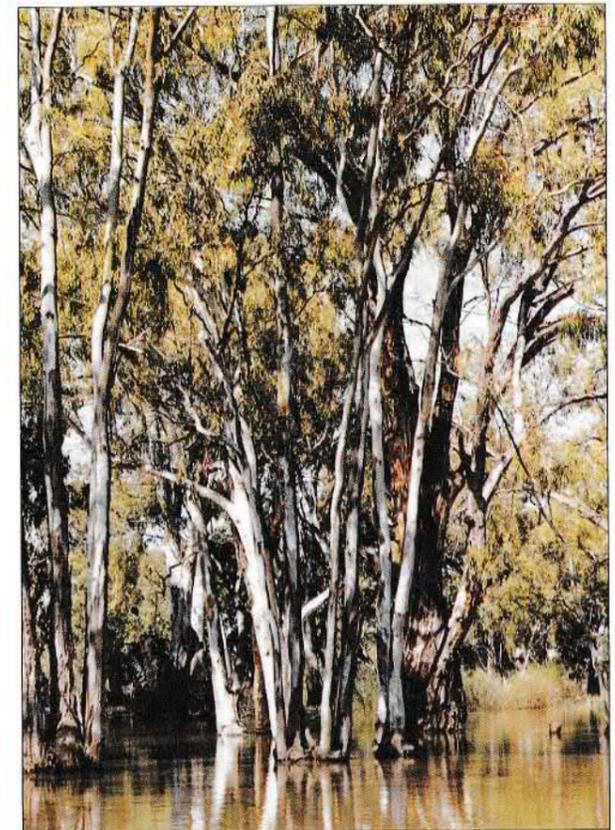
BANROCK SWAMP

The restoration of Banrock Swamp is Ducks Unlimited Australia's first project and Norman and I were given a guided tour of the project by one of DU Australia's founders, Peter Schramm. Banrock Swamp lies on the banks of the Murray River and receives water from the river during flood events. This swamp has been an important local feature for a very long time, as witnessed by the number of canoe trees and shield trees that can be found around the edge of the swamp. These are gum trees from which aborigines have long ago cut curved sections of bark to make canoes and other implements, leaving behind a very distinctive scar which gradually heals over.

However, drainage works have meant the area doesn't hold water like it used to and now that introduced weed-eating carp are part of the Murray River, these fish have entered the swamp and severely modified the aquatic vegetation growing there. As a result, the project includes water control structures which not only let the water in and keep it in, they also keep the fish out. These structures were designed by DU

Canada, built by DU Australia, and have been supported by trans-tasman DU New Zealand members, giving a very good example of the international co-operation which exists within the international DU family. The problem now is getting the fish that are already in the swamp, out.

Mick Olsen is not only a DU Australian Director, he is also a retired fisheries scientist and is working on ways to rid Banrock of the unwanted carp. From his work, Mick knows that throughout Asia, fish-farming is carried out in managed ponds and that certain substances can be used to stun fish while leaving insects, crustacea and other animals unaffected. This substance most often is called 'sappanin' and can be found in a wide range of plants, including the seeds of tea plants. By simply crushing a known amount of tea seeds and adding this to the swamp it should be possible to temporarily stun the fish allowing them to be taken out using nets. The beauty of this method is that it is a natural substance that is being used, it is very specific, and its



Flooded Red Gums on the Murray River

effects are only short lived. Should carp re-enter the swamp the treatment can be repeated at a later date. I have since learned that the flood on the river completely submerged all the control substances and that all of them re-emerged without damage, once the waters receded.

THE SOUTH EAST

Having spent three days in the Riverland, Norman, Peter Schramm and I headed for the south-eastern corner of South Australia to visit the property of Tim Brinkworth. Our trip took us through the Mallee country, named for the distinctive vegetation that originally grew there. Mallee is a form of gumtree which grows in the arid parts of Australia and forms an enormous root in the ground, like a gigantic turnip. This is the secret to the plant's success as it allows the tree to store water and to recover from damage caused by fire or attempts at clearance. It is estimated that some Mallee are over 5000 years old.

The landscape of the south east is dominated by series of extremely long, very old sand dunes which are anything up to six kilometres apart. These dunes act as huge water channels as water cannot drain directly to the sea. Instead it must weave its way parallel to the sea along the channels between the dunes looking to find a way



The mighty Murray River makes its way through the Australian outback

around the end. Consequently the area was originally dominated by a long series of parallel wetlands, until humans started digging drains through the sand dunes. The net effect is that farmers in the drained areas are now much more susceptible to drought.

Tom's landholding is one of the largest in that part of the state and over a number of years he has gradually begun to reflow the old wetlands by blocking up the drains and returning diverted water to its original course. The outcome is a recreated wetland of immense proportion formed by a series of shallow lakes, swamps and marshes joined by series of channels. Overall the system is something like 60 km long and acts as a huge water store for his farming operations, while providing one of the most valuable and diverse wetland complexes anywhere in the southern part of Australia. The scale of the area defies

explanation and it almost defies exploration. After a full day with Jack Clarke, who manages the wetlands for Tom, we had managed to drive along something over half of one side of the whole complex. Along the way, lunch was a fair dinkum Aussie bushman's barbie as we camped by a billabong.

While we were in the south east we also visited the property of Vern Wilson. Vern has not only retained wetlands on his farm, he had also retained 1000 acres of the original scrubland vegetation.

A visit to this area is a fascinating glimpse of what the south east must have been like 200 years ago, complete with wedge-tailed edges and mallee fowl nests which are over forty years old. The mallee fowl is unique among birds in that it doesn't incubate its eggs by sitting on them, it incubates them by burying them in a carefully constructed and constantly maintained pile of compost. The temperature within the mound is monitored by the birds inserting their bills into the pile and throughout the day compost is either added to or removed from the mound depending on the heat of the day. A large nest is four feet high and over ten feet in diameter and when the young hatch, their first job in life is to dig themselves out of the heap.

Our last stop, before returning to Adelaide, was a brief visit to Bool Lagoon.

another large recreated wetland in the south east which is also part of the national park system. Our drive northward took us along The Coorong. This is a ninety-mile long barrier sand dune which is open to the sea at its northern end and is the latest dune to form in the series of parallel dunes we saw on Tom's property. Also at the northern end, The Coorong joins Lake Alexandrina into which the Murray River flows. This inflow of fresh water means the salinity of The Coorong constantly varies, making it a teeming breeding ground for fish and birds which feed on them. When the flow of the Murray is very low, the sand which is constantly adding to the dunes can completely seal the mouth of the Murray leading to flooding in the low lying areas upstream. In the river boat days, low river flows meant the boats would be unable to move, but once the rains came the boats could sail from the mouth of the Murray



Dead Gums at Banrock caused by upsurge of salty underground

right up into Queensland. Our return to the Riverland revealed that the floodwaters were still rising.

THE RIVERINA

In addition to visiting wetlands, I also attended the Annual General Meeting of DU Australia, which was held in Deniliquin in New South Wales. Assembling the DU Australian board is a logistical headache and clearly illustrates the problems of working in such a vast country. Described as the "tyranny of distance" people assembled by using chartered aircraft, which picked up people along the way, or by facing a twelve to fifteen hour round trip by car. I could only imagine how hard it will be in the future once DU Australia has directors based in all corners of the country. Thankfully I was able to hitch an airlift to the meeting.

Deniliquin is in the Riverina, which is also

part of the Murray River catchment. Here the rivers were also in flood, indicating that the water which was creating the rising flood in the Riverland had fallen as rain in Victoria and southern New Wales. However, river levels were dropping at Deniliquin so the flood peak had moved further downstream on its irrepressible march towards South Australia. The problems really start when there are floods in New South Wales and in Queensland as this means South Australia has to cope with a combination of the two. In the past this has led to floods where the river has been so wide that a river boat was left high and dry, miles from the usual course of the river. The Riverina is also Australia's rice bowl and is where irrigation places a very large demand on the available water. The rice paddies are so large that farmers sow them by topdressing the seed rice from aircraft.

My final stop was to visit Garry and Lou Duncan back in the Riverland. Garry is a full-time artist and part-time grain grower and has been DU Australia's inaugural artist. His artwork graces everything from Royal Australian Air Force bases and corporate head offices to the cover of the South Australian phonebook. He paints with vivid colour that capture the beauty of the harsh Australian environment and the diversity and uniqueness of the plants

and animals within it. Garry and Lou live on the banks of the Murray, and on the edge of the true Australian outback. If you went directly north from their house you would reach the Gulf of Carpentaria after about 2,500 miles and would have only crossed two roads. I can't think of a better illustration of the sheer size and emptiness of the interior of Australia. During my stay with them, Garry finished a commission for a New Zealand customer and gave me the job of delivering it here.

My homeward trip took me back to Adelaide where it was pouring with rain and as I left, Australia was bracing itself for the Melbourne Cup that afternoon. After a fortnight of the contrast of hot, dry days with rivers in flood the idea of getting rained on was quite appealing, as at last I had found something familiar.

OTOROHANGA KIWI HOUSE & NATIVE BIRD PARK

What do Blue Duck, Brown Teal and Auckland Island Flightless Teal all have in common? Besides being rare and endangered waterfowl, these species can be all found sharing their home with no fewer than fifty-one other species of birds and reptiles. Where may you ask is this avian paradise to be found?

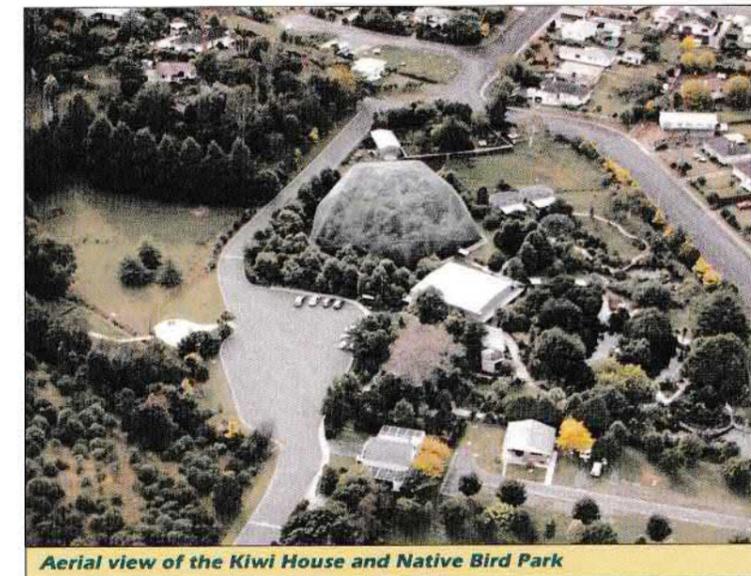
Just forty-five minutes drive south of Hamilton on State Highway 3, lies the township of Otorohanga, and here can be found the home of one of New Zealand's few but unique wildlife parks specialising in native fauna and flora. The Otorohanga Kiwi House and Native Bird Park, "The Kiwi House" as it is known locally, houses many of this country's rare and unique avian and reptile species. The park currently holds over fifty species of native birds and reptiles, making it the most comprehensive collection of native fauna on display outside a Department of Conservation establishment.

KIWI RESEARCH

Established in 1971, the park was the brain child of several of the towns residents, who were aware that New Zealand's national symbol, the Kiwi, was declining throughout much of its range, before much of its biology had been researched and without much publicity of the situation. From its conception, the park has continued to specialise in Kiwis and is fortunate to be the only establishment to hold and breed three of the four species of Kiwis.

During the early years, much research was undertaken by people like Barry Rowe, a local chemist and the park's first curator, visiting scientists and Wildlife Service staff. After several years of keeping and studying Kiwis, experimenting with diets and incubation techniques, the park was rewarded in 1977 when the first artificially

Eric Fox, Curator



Aerial view of the Kiwi House and Native Bird Park

incubated Kiwi egg hatched under the glare of the world's television cameras, an event that was televised around the world.

At various times, all three of the species held have been displayed to the public in the park's unique double nocturnal house exhibit. The majority of the park's thirty odd Kiwis are housed in large off-limits breeding pens, and all three species have been successfully bred over the years. Since the first successful hatching in 1975, the park has bred over 64 Kiwis, an average of 3.9 per year. Otorohanga bred Kiwis have been sent to other zoological parks both locally and internationally and U.S.A., Japan, Singapore and European zoos have been recipients.

NATIVE BIRD AVIARY

The most dominant structure within the park is the huge walk through dome shape aviary, completed in 1975. This aviary is 18 metres high, 45 metres across and encompasses some 1,579 square metres of ground area. Six thousand metres of galvanised piping was used in the construction of the aviary scaffolding, along with 54 rolls of imported galvanised welded mesh. This walk-through aviary, with its pathway and observation deck set amongst a native rainforest habitat, allows visitors an uninterrupted view of our native birds in a

confined situation without barriers. Amongst the forest species housed in this aviary are North Island Kiwis, New Zealand Pigeons, Tui, Silvereyes, Parakeets and the rare North Island Saddleback. The ponds within the aviary hold a number of waterfowl species such as Scaup, New Zealand Shoveler and Australian Coot.

Throughout the parks grounds, low lying areas have been developed into various wetland habitats. These ponds and swamps provide habitat features for a number of endemic waterfowl,

such as Blue Duck and Brown Teal. The Otorohanga Zoological Society, which operates the Kiwi House, is an active participant in Ducks Unlimited's "Operation Whio" and "Pateke," and on several occasions has been recipient of the "Breeder of the Year" awards. With the exception of the Campbell Island Flightless Teal, all species of New Zealand's waterfowl, along with Pied Shags, White-faced Herons and Royal Spoonbill can be found gracing the parks numerous ponds.

In 1990, the park received a grant from the Lottery Board for the development of a Blue Duck Aviary which encloses some 286 square metres of ground space. Complete with waterfall, a waterway cascading across a limestone rock formation and luxurious vegetation. This aviary is now home to the Blue Duck and the threatened Kokako, giving the viewing public a unique opportunity to see two of New Zealand's rare and endangered species at very close range.

Besides working with the Department of Conservation and Ducks Unlimited, the park is also involved with the Royal Forest and Bird Protection Society in "Project Weka," a project which aims to re-establish the North Island Weka in suitable habitat. The Weka, a large flightless rail, is displayed in a walk through enclosure, allowing visitors a close

encounter with this bold and inquisitive bird. Another member of the rail family "Mioweka" or Banded Rail, can also be viewed within the park.

BIRDS OF PREY

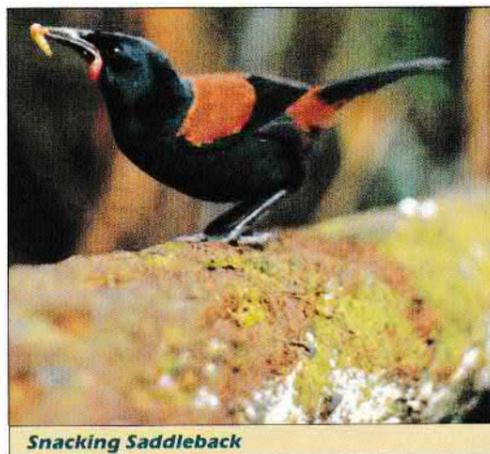
Unique amongst New Zealand's zoos, our Raptor Walk houses representatives of all New Zealand's nocturnal and diurnal birds of prey species. The native Morepork, Australian Barn Owls, and indigenous vagrant, Harrier Hawks and two of the three forms of the New Zealand Falcon, the larger Eastern Falcon from the South Island and its smaller but darker brother and the Bush Falcon of the North Island can all be viewed here. With the exception of the Harrier Hawks, all these species have been successfully bred at the park.

Another family of birds very much in evidence at the park are members of the parrot family including Keas, the Kaka and four species of parakeets, red-crowned and yellow-crowned parakeets inhabit the large walk through aviary, while orange-

fronted and Antipode Island parakeets are confined to aviaries within the park.

... AND REPTILES

In 1980, the first captive mainland population of Tuatara was established at the Kiwi House. Housed in a large 500 square metre aviary, this nucleus population of



Snacking Saddleback

Stephen Island Tuataras has grown in numbers to the point where we can now remove young born in the colony and place them on public displays within our Tuatarium. Amongst lizards, New Zealand

geckoes are very much regarded much neglected members of New Zealand's fauna, when it comes to public display. Here at the Kiwi House, we hold ten of the eighteen known species. With new vivariums being constructed in our alpine rock garden area, this will allow for better and more natural viewing of these rarely seen animals.

The dinosaurs of the insect world, Mahoenui Giant Wetas, can also be viewed within the park's interpretation area. Within this area, there is also a sixty person theatre which allows visitors to view some of New Zealand's magnificent scenery during a twelve minute audio-visual show.

As the Otorohanga Zoological Society is a non-profit making organisation, all income is turned back into the park. Funding comes from the Society's own resources, except for major projects, where funding is then solicited from various public trusts. Situated where it is, the Otorohanga Kiwi House and Native Bird Park Lies at the gateway to the world famous Waitomo Caves and the park annually draws some 45,000 visitors through its doors to view New Zealand's unique natural heritage.

NEW DUNZ DIRECTOR

At the last DUNZ board meeting, Carolyn Hooson was appointed as a non-permanent Director of Ducks Unlimited effective from 1st of April. Carolyn's appointment takes the number of our female directors to three.

Most recently, Carolyn has been heavily involved in the re-design of "Flight" and has also agreed to take on the responsibility of being the Editor of "Flight" for the coming year.

DUNZ THANKS BRENDAN COE

Over the past several years, Brendan Coe has had the arduous task of being "Flight" Editor. This is one of the hardest jobs in DUNZ and is one of the most important as "Flight" is our main form of communication with members. The board of directors sincerely appreciates the commitment that Brendan has made to "Flight" over a long period of time, and is thankful that Brendan will remain as "Flight" printer.

AUCKLAND CHAPTER NEWS

Auckland Chapter has been particularly busy over the past month and has mounted a display at the Kumeu A&P show and the Muriwai Mini Game Fair. These were then followed by the chapter's second sporting clay shoot, this year held on Gary Peter's property at Waiuku and the sixth annual Auckland Chapter dinner/auction.

LAKE WHANGAPAE

Following the successful completion of the Whangamerino weir, attention has now turned to the restoration of Lake Whangapae in the Waikato. This important

wetland has been severely degraded through a major reduction in water level which has apparently been brought about by illegal drainage activities that have affected the lakes outlet channel. Pressure for restoration of the water level is coming from lake users and Ducks Unlimited has joined the call for immediate action to repair the damage, as the dry summer in the Waikato has meant the lake level is very low and restoration work could be easily carried out before the wet weather arrives.

ERRATUM

In the October 1993 issue of "Flight" we printed an article by John Dyer entitled "Waging War on Vermin." In this article we omitted to change the name of the Auckland Acclimatisation Society to Auckland/Waikato Fish & Game Council, who have also notified us that they no longer sell Fenn Traps.

Should members wish to purchase the Mk VI Fenn Trap, they are available from Ducks Unlimited at \$36 each (see sales page).

DIRECTORS RETIRE

Directors Howard Egan (Wairarapa) and Chris Hooson (Wellington) have both retired from the Board. Howard, a director for three years, made a significant contribution to Operation Gretel (Grey Teal) and to the administrative side of the Board's activities. Howard will continue to assist in Operation Gretel. He retired in December 1993.

Chris, a director for eight years, retired effective 31 March 1994. Chris has held positions of Treasurer, Secretary, Operation Branta Supervisor (Canada Goose) and National Shoot Co-ordinator. He will continue to assist with the annual Canada

Goose banding activity. The board would like to express its gratitude to both Howard and Chris for their continued effort and work with Ducks Unlimited.

WELCOME TO NEW LIFE MEMBERS

Ducks Unlimited extends a warm welcome to our four newest Life Members. These include Al and Keri Cromb from Edmonton, Canada and John Sax and Alan Gibbs from Auckland. John has been a member for a number of years while Alan and his wife Jenny were visitors to our display at the Muriwai Mini-Game Fair. Thanks to you all for your outstanding support.

FOR SALE

Boxes for nesting Mallard ducks, \$30. Nesting boxes for Grey Teal, with smaller entry, \$30. Free delivery with Auckland area. Other areas add p&p N.I. \$7, S.I. \$12. Write with money order please, to: Chineka, R.D.2, Pukekohe.

EVENT CALENDAR 1994

- MAY 1** - Wellington Chapter Sporting Clay Shoot. Hutt Valley Gun Club. Contact: William Abel, phone (04) 566-9722.
- JULY 15-17** - 20th Ducks Unlimited Annual Conference. The Coachman, Palmerston North. Contact: Di Pritt, phone (06) 385-8016.
- AUGUST 7** - DU National Clay Target Champs. Wairarapa Gun Club, Masterton. Contact: Glenys Hansen, phone (06) 375-8474.

BEAUTIFY YOUR WETLANDS WITH **TREES**

- MANY VARIETIES
- TREES FOR BIRDS
- TREES FOR SWAMPS
- WHOLESALE PRICES

Freighted anywhere in N.Z. for your convenience
Send for your free price list from:

Nick NELSON PARKER

CHEDDAR VALLEY NURSERY
R.D.2, OPOTIKI
PH (07) 312-4639

WE SUPPORT WATERFOWL AND WETLANDS

SPORTWAYS GUNSHED LTD

49 NORMANBY ROAD
MT EDEN
AUCKLAND
Phone 09 631 5275, 09 638 7279

SAVE GAME BIRD HABITAT

BY COLLECTING NEW ZEALAND GAME BIRD HABITAT STAMPS AND PRINTS

A wide variety of stamps and prints are available, ranging from a \$10.00 mint stamp, \$26.00 poster with stamp, and \$95.00 regular edition print through to the Governor-General \$750.00 limited edition print. Stamps, sheetlets of 6 stamps, signed stamps, First Day Covers, and seven (\$95 - \$750) print editions are available.

Stamp products (but not prints) are available through the Auckland, Wellington and Christchurch Philatelic Centres and the Philatelic Bureau in Wanganui. To view the full product range visit your local Fish & Game office or forward a stamped, addressed envelope for a brochure on the 1994 game bird stamp products to: NZ Fish & Game Council, PO Box 13141 Wellington. 04 499 4767, fax 04 499 4768.

Shown is the first New Zealand Game Bird Habitat Stamp.

Size: 50 x 35mm
Face: \$10.00

GIMPEX
GRAIN DISPENSERS

The first grain FEEDER only feeding out when activated by YOUR birds! No loss of grain to rats and sparrows, low cost feeding in all conditions year round, great success on poultry and game farms in New Zealand. Will adapt to any bird numbers without alteration. GIMPEX GRAIN DISPENSERS are suitable for chicks from one week on and older, ducks, pheasants and partridge. GIMPEX "ready to use" FEEDERS have large 20 litre rainproof containers with strong handles. GIMPEX DISPENSERS are for self-mounting onto other systems.

GIMPEX COMPLETE FEEDER \$41.30 inc GST add \$6 P/P. GIMPEX DISPENSER "ONLY" \$27.00 inc GST add \$4 P/P.

For free information please write to GIMPEX NZ PO Box 2202 Rotorua LET GIMPEX HELP YOU TO THE LIMIT

