# Flight

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2003

ISSUE 114





DUCKS LINE IMITED NEW ZEAL AND INC.

# World Wetlands Day 2 February 2003

This will be the fourth time the day has been marked in New Zealand. Last year 28 events and activities were held around the country. This has grown from our first World Wetlands Day in 2000 when there were 15 events.

The Day marks the signing of the international RAMSAR Wetlands Convention in the city of Ramsar, Iran, in 1972.

This year an official event will be held in Whangarei on Sunday 2 February, when the Minister for Conservation, the Hon. Chris Carter, will officially open the Flaxmill Wetlands.

World Wetlands Day celebrations in New Zealand are led by Fish and Game New Zealand which works with the National Wetlands Trust, Forest and Bird, DOC, Iwi, Ducks Unlimited and other interested bodies in hosting activities like wetlands tours, tree 'plantathons' and talks to mark World Wetlands Day.

'Until the 1980s, the Government was still giving farmers subsidies for 'swamp' drainage, says Fish and Game spokesperson Graham Ford. 'There was little if any recognition by officialdom that swamps, drainage ditches etc are in fact very important freshwater ecosystems.' It is a continued battle to try and create awareness among New Zealanders, he says, that over 90% of this precious ecological resource has been sacrificed solely to the needs of the agricultural sector.

'Our wetlands are in a state of crisis,' Graham Ford says, 'we must act immediately to save what is left and raise awareness among the public, media and politicians. World Wetlands Day is one of the few times when we can focus some attention on this problem.'



Wetland Care New Zealand's mission is 'To harness community, business and government resources to restore and develop lost wetland areas within New Zealand.'



The QE II National Trust celebrated 25 years of landscape restoration and protection in November 2002. British ecologist Professor David Bellamy made a swift tour of covenanted properties and spoke at the trust's Jubilee dinner in Wellington. As he said in a National Radio interview with Kim Hill, the government that first approved the trust's establishment and aims was far-sighted and courageous. New Zealand is still the only country in the world to be working in partnership with private landowners at this level of commitment.

Open space covenants can be placed over private land to provide legal protection in perpetuity.

The trust supports Covenanters by regularly inspecting protected land and offering management advice and assistance.

The QE Il Trust owns Tupare and Hollard Gardens in Taranaki, which are open to the public, and a number of properties with natural values, including Taupo Swamp just north of Wellington on SHL.

As at June 2002, the trust has 4200 members, 1620 registered Open Space Covenants totalling 56,600 hectares, and 128 new covenants approved for potential registration.

Funding

Funding for projects comes mainly from the Waterfowl and Wetlands Trust, which was established 12 years ago and has underwritten wetland development projects to a significant level. Extra resources have come through fundraising and corporate sponsorships like that from Banrock Station Wines. Wetland Care New Zealand actively seeks funding from private and public sources for its work.

Partnerships

Central to Wetland Care New Zealand's mission is forming partnerships with people and organisations with similar aims. Alliances are being established with conservation groups like DOC, NZ Fish and Game, Forest and Bird and regional councils.

For further information, please contact: William Abel - Director, Wetland Care New Zealand (04) 478 4335

#### The Poem

Ozymandias

I met a traveller from an antique land
Who said: Two vast and trunkless legs of stone
Stand in the desert... Near them, on the sand,
Half sunk, a shattered visage lies, whose frown,
And wrinkled lip, and sneer of cold command
Tell that its sculptor well those passions read
Which yet survive, stamped on these lifeless things,
The hand that mocked them, and the heart that fed:
And on the pedestal these words appear:
'My name is Ozymandias, king of kings.
Look on my works, ye Mighty, and despair!'
Nothing beside remains. Round the decay
of that colossal wreck, boundless and bare,
The lone and level sands stretch far away.

- Percy Bysshe Shelley 1792-1822

Do you want to give permanent protection to a natural feature on your land, but want to retain ownership, manage it yourself, and have control over public access? An open space covenant might be the answer. Call freephone 0508 732 878



#### INSIGHT

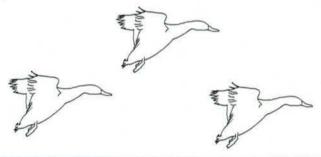
Neil Candy President

Early November I was wandering around the farm digging thistles which caused me to mutter ungraciously about the folly of our forebears in bringing in these and all other 'weeds'. For those of you that haven't had the pleasure of this pastime, you don't need a lot of forward planning or intellectual skills, but it is a great way to get rid of any frustrations and a chance to think about all sorts of things. As I decapitated another 'scotchie' I wondered what the countryside would look like if New Zealand had 15 or even 20% of our original wetlands and habitat, and how we as an organisation go about achieving that figure. I haven't come up with any instant recipe for achieving this other than to urge all members at every opportunity to push the DU message to anyone who will stand still long enough to listen. I guess I will have to keep digging.

Recently we heard that whio had been added to the Red List as an endangered species. As we already knew that the wild population was declining rapidly, this came as no surprise. Placing the remaining birds on a list is all very well, but without a significant monetary injection from the government, the future of whio is debatable. It will be interesting to see what future plans they arrive at and how much money is allocated to whio, a bird that until now hasn't reached the icon status of the kiwi. DU will need to keep pressure on the government and its agency the Department of Conservation to make sure whio get their fair share of the pie.

I hope that all members have enjoyed a safe and restful holiday season and are ready for the challenge of getting New Zealand wetlands to that 20% figure. Wouldn't that be magical!

Regards, Neil



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#### **OUR MISSION**

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

- wetland restoration and development;

- conservation 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.

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# OUR People



#### Andrew Mitchell

Born in Palmerston North and educated at Huntly Preparatory and Wanganui Collegiate, Andrew now lives just out of Masterton with his wife Rachael and their family of two chocolate labradors. A member for about 10 years, Andrew has been involved in the computer software industry for 16 years, the last four working for an American firm.

His interests include farming deer on their 100ha property, fishing and clay target shooting, in which he was a NZ representative for five years.

He has given voluntary assistance with planting, predator control and fencing to various wetland habitat developments in the Rangitikei and Wairarapa.

The Mitchells created this wetland on their Wairarapa deer farm in March last year, using Gary Thomson's digger and 'dozer with assistance from Jim Campbell and William Abel. They converted a swampy area fed by a creek and springs, which was very silty and wallowed out by deer, and was of little use to stock or waterfowl. They built a shallow pond (the deepest part is just under 1m) of about .75ha with three islands, fenced with 1.8m netting on three sides and planted with flaxes and some low growing willows. More planting was done last winter.

The area has already attracted a pair of breeding paradise and up to 150 mallards, and they have a predator control programme using Fenn traps.

The Mitchell wetland, late spring. Photo: Alan Wilks.





#### **Gary Croad**

Born in Pahiatua and raised at Ballance and in the Otaki-Te Horo area, Gary is a long-time member, having joined in 1975 just a year after DU started.

He was educated at the Feilding Agricultural High School and entered dairyfarming, buying his own farm near Levin in 1969, where he created two large farm ponds and also established wetland habitat.

Gary and his wife Nancy have three daughters and two grandchildren.

After giving up dairyfarming in 1986 Gary worked as a farm real estate salesman for six years before becoming a motelier in Queenstown.

His interests are hunting, fishing, scuba diving, skiing and working as a Southern Lakes trout fishing guide. He has been a wildlife and fisheries ranger since 1970 and served on the executive of the Wellington Acclimatisation Society for 17 years.

It was great that Gary made the effort to travel all the way from Queenstown to attend the Annual Conference in Hamilton last year.





# DU News

# DU Reports

#### Whio

A slow start for blue duck with only four ducklings so far this season, one at Peacock Springs and two hatched at Jim Campbell's which are now with Melvin Pike and Staglands.

We have quite a few pairs sitting at the moment and hope to get a few more, as we want to release them on to Egmont National Park again.

Blue duck are now on the Endangered List [see Ecofile item, page 10] and according to reports from the Recovery Group Meeting are on the way out at a great rate of knots.

We need support from as many members as possible to put pressure on the Government to do something about it. I can see that if funding for blue duck is not forthcoming, the chance of seeing them in the wild in future will be very remote.

Blue duck can't be put on an island to be saved like other bird species. They need our **HELP!** 

- Peter Russell

#### Pateke

Wild birds appear to be having an average to good breeding season at Okiwi, Great Barrier and Mimiwhangata, Northland.

Emma Neil reports that Mimiwhangata is fairly dry and pateke seem to be flocking up early in the season, with over 100 birds seen at the Teal Bay site.

I have no overall indication from captive breeders on how the season is going, however contact with Messers McCarthy, Munro and Langdon indicates an average season.

The Warrenheip release continues to be good news, with one female bird found dead outside the release site and two other females established outside the release site. All the others have paired up and become secretive. There were no surplus drakes for the three that found their way 'over the fence'. There is no sign of ducklings yet. Some transmitters are beginning to fail so tracking will now be more difficult.

Tiri Tiri Matangi reports mixed results. This release has been plagued with faulty transmitters. Four birds have been found dead, killed by harrier hawks, it appears.

#### Gretel

Waikato Chapter received a \$3000 grant from the WEL Energy Trust for Project Gretel. The Chapter immediately went into action with volunteers making up the nest boxes and buying 100 x 4.2m H5 tanalised posts.

- Jack Worth



The well-earned cuppa: LtoR Malcom Dench, Murray Dench, Clare Worth, Jack Worth, Noel Singer. Photo: Ray Hayward.

Two drakes from the recent release have paired up with resident females and one of the new release females may have paired up with a resident male. Two pairs have attempted to nest and failed. It is assumed that the recent heavy rain washed the nests out. Fiona Oliphant, DOC Auckland Conservancy Community Relations Officer, has completed an excellent sign for Tiri.

Karori Wildlife Sanctuary has a brood out, at this stage no further information.

Kapiti reports two fledglings, at Rangitira and the mouth of the Waiorua stream. Unfortunately a dead male has also been recovered.

Recovery Group leader Shaun O'Connor, Recovery Group consulting ecologist Ray Pearce, Alison Davis and I met with John Staniland of Waitakere (West Auckland) Forest and Bird to evaluate the Makatu Wetland as a future release site. This assessment continues.

Planning for the large-scale release at South Okarito, Westland, in late February 2003 is well in hand. The timing depends on stoat numbers and pest control, as it is a heavy mast year with a parallel increase in predators. If any DU members would like to attend the South Okarito release, please let me know - you would be most welcome.

The Recovery Group is operating effectively with the pateke monitoring guidelines and pateke release strategy finalised and signed off. Ray Pearce was the author of both of these.

The Recovery Group Meeting minutes have been published and critiqued by Neil Hayes, who has provided valuable comment and information to Shaun O'Connor and myself on various issues.

All the above documents are available on request.

#### - Ossie Latham

Contact Ossie by phone 09 415 7583 (a/h) or email to carpetcourt@xtra.co.nz



#### Manawatu Chapter

The Chapter's annual dinner and auction was held at the newly named Rydges Hotel on President's Day (happy birthday Neil!). We were fortunate to have John Dermer, a member of both DU and the Farm Forestry Association, speak about developing a wetland and appropriate plantings. John also pointed out the need to know the requirements of the Resource Management Act when doing a development.

This year we ordered a vast selection of items from the Canadian catalogue, and supplemented them with generous donations from Hunting and Fishing, Moose's Sports, Carter's, and various individuals. We had 82 people there and after partaking of a sumptuous menu we got down to business. Bob Wood was his usual entertaining self, extracting consecutive bids from husbands and wives and taking bids where none existed, but all was for a good cause. One interesting item was a day's pig hunting in the Wairarapa. A DU director from Auckland snapped this up. Hope you had fun, Ossie! There were several first time 'punters' who enjoyed the evening and vowed to return.

Manawatu Shoot - the 2003 date is booked for 30 March. Venue yet to be decided, but hopefully in the Foxton sand country somewhere.

Wairarapa Chapter.

A successful fundraising dinner was held in Masterton on 21 September at the Copthorne, attended by 61 members and friends. The main auction raised over \$2000 and the silent \$1200. With the raffle and donations the total raised for the evening was well over \$3500.

The chapter thanks donors for the many excellent auction items and acknowledges the contribution of auctioneer David King.

#### DU Sporting Clay Shoot 2002

Held at Pistol Club Grounds, Gladstone; 68 shooters attended.

Winners:

High Gun Overall - Joe Bannister, 89%

Ladies: Carolyn Hoosen, 70%

Junior: R Murray 71%

Profit for the day \$1550. Special thanks to the Pistol Club for use of grounds and Peter Harvey for use of automatic traps, to everyone who helped with setting up the field and cleaning up afterwards, and to Shona Broughton who did a great job with the barbecue lunch. A highly successful day all around.

#### Waikato Chapter

The annual Chapter dinner will start at 6.30pm on Saturday 29 March at the Glenview Club, Hamilton. Donations of silent auction items on the night would be greatly appreciated. For more details phone Ray Hayward, 07 855 2205.

In the afternoon we are hosting a shoot at the Waikato Gun Club, If you are interested, phone Jack Worth, 07 846 3808.

#### Members in the news

DU member Russell Langdon of Ashburton has won an Environment Canterbury award. Russell is a captive breeder of pateke and whio (among other species). He would extend a warm welcome to any DU members wishing to call by. Congratulations from DU, Russell. (More on these awards in Clippings)

#### New Book

A new 48,000 word reference manual entitled 'Natural History, Captive Management & Survival of the NZ Brown Teal' has been published by the Brown Teal Conservation Trust. It has been researched and written by well-known brown teal breeder, advocate and DU member Neil Hayes, a trustee of the recently incorporated Trust. Neil has been involved with brown teal for over thirty years, has personally reared over two hundred brown teal in captivity and assisted in the release of over 1,000 captive reared brown teal into the wild.

For more information contact Neil, phone 06 379 6692 or email haltd@actrix.co.nz

#### **Notices**

#### Results of DU Raffle 2002:

- 1. E&J Cooke, Greytown
- 2. Anida Deveichy, Te Puke
- 3. Kevin Ogles, Auckland
- 4. A Bourne, Auckland
- 5. Janice Taplin, Masterton
- 6. Tim Tatham, Masterton
- 7. Lamb Peters Print, Greytown
- 8. Paul Clarke, Upper Hutt
- 9. J&K M Ceriean, Foxton
- 10. R Scott, Greytown

Congratulations to the winners. Our thanks to Philips NZ and Hunting & Fishing NZ for their generous support. to Raana Campbell for organising the returns, and to Joyce Brooks, who sold a total of 48 raffle books!

The 2003 AGM and Conference will be held in Rotorua, in July. The venue and dates are still to be confirmed. More details in the next issue.

#### SPECIAL AUCTION

On 29 March 2003 the Waikato Chapter will auction three copies of the unique book, 'Waterfowl of the World' by Jean Delacour and Peter Scott. The book was first published in 1956. Both Scott and Delacour were experts in their field. Further information and postal bids can be made by contacting Jack Worth, phone 07 846 3808, 151 Newcastle Road, Hamilton.

#### Free Replacement DU Decals

If you've sold your car and need another decal send SAE to - Decal, Ducks Unlimited NZ Inc., PO Box 9795, Newmarket, Auckland.

#### From the Editor

I hope your 2003 year has started well. It is hard to believe that this is my fifth editorial adventure with Flight. I am enjoying putting it together each time and welcome comments and ideas.

A certain respected wetland and waterfowl organisation will have a well-merited 30th anniversary next year. How about using that as a spur to gather up your photos, press clippings, reminiscences (write them down if they're still in your head), journal or diary entries, wetland or bird records. There has to be a fascinating and important record of New Zealand wetland restoration lurking in all your mental and physical attics. DU deserves to be proud of it, and others need to know about it.

For your calendar, here are the deadlines for Flight copy and images. I need the material about six weeks before you see this splendid publication in your mailbox, in order to sort out the word-scramble. Proofing, printing, packing and posting then take about three weeks.

Please make a note of these deadline dates (see page 3 in each issue from now on). It would be great to see your contributions flowing in, including press clippings from your area, either DU-related or of general wetland interest. Before you clip, please add the date and name of the publication or I won't be able to use it. To those who do send regular material, I think you should be cloned, immediately.

April (Flight 115) - 15 February deadline

July (Flight 116) - 15 May

October (Flight 117) - 15 August

January 2004 (Flight 118) - 15 November

Regards

Julit



# Bird Talk

# Peacock Springs helps the black stilt

With little fanfare, the Isaac Wildlife Refuge in Christchurch is helping to rescue New Zealand's rarest bird, the kaki or black stilt. The refuge has been breeding kaki for DOC for six years and is the only body outside DOC to breed them for release into the wild.

Kaki numbers had fallen to about 25 adults by 1981, but have recovered to 84 adults with the breeding programme. They are released at three or nine months old.

On 10 September last year DOC scientist Richard Maloney made the trek from Twizel to collect seven of the gangly youths for release in the Ohau River delta, along with 32 DOC-raised kaki. This was the biggest release so far.

Refuge curator Anne Richardson was relieved to see them go. 'These guys give me grey hairs,' she said. 'They are so prone to injury. We lost a couple of birds through trauma from broken bones...they are just so nervous.'

The refuge plans to more than double its aviary space so that it can increase its breeding pairs from two to four and care for more juveniles. Lack of aviary space is the breeding programme's main obstacle, and Mr Maloney said DOC could raise numbers released from 70 to 120 birds a year once this is overcome. The refuge's plan is great, he said.

The challenge now is to improve kaki survival rates in their braided river habitat, under threat from weeds, predators and people driving off-road vehicles. 'This is the only critically endangered New Zealand bird easily accessible to the public. You can go into the McKenzie Basin and see kaki on your back doorstep. To me that's really neat but it makes it more challenging,' Mr Maloney said. 'If we can't win with kaki in the wild then it's a sad day for birds in general on the mainland.'

From a report by Tara Ross in The Press, 11 September 2002



Peacock Springs curator Anne Richardson with a young kaki. Photo John Kirk-Anderson, The Press, Christchurch, 11 September 2002.

Ednote - William Abel sent this article and made enthusiastic comments about Anne Richardson's generous and knowledgeable help. DU thanks you, Anne.

### Daisy dies after saving species

Daisy, the Campbell Island teal duck credited with saving the species from extinction, has died.

During her 12 years of captivity, Daisy reared 24 ducklings, which in turn produced 39 more ducks.

This record marked a significant step in the captive breeding programme and has essentially secured the future of the species, Mount Bruce DOC spokeswoman Karen Barlow said.

Only about 30 of the ducks, the world's rarest, are left in the wild. About 80 more are in captivity.

Once thought to be extinct, in 1975 Daisy was among a tiny population of Campbell Island teal rediscovered on Dent Island, a 23ha rock stack near Campbell Island in the sub-Antacrctic. The former NZ Wildlife Service and Conservation Department staff made two expeditions to transfer birds to a captive breeding programme at Mt Bruce National Wildlife Centre. The Dent Island population had declined to just three birds in a 1997 census.

Daisy had been in the Mount Bruce flock for ten years before she eventually paired up with Donald, her mate, to produce the first nest and two ducklings. She was the only one of four wild-origin females to breed in captivity.

A DOC project began last year to re-introduce the ducks to Campbell Island once rats have been eradicated.

From The New Zealand Herald, 7 November, and Wairarapa News, 13 November 2002.

#### Whio gaining weight

DOC staff are delighted that several female blue duck released into Egmont National Park have put on weight, increasing their survival chances. While unfortunately two others were killed by stoats and the signal from a third has been lost, the remaining whio are adapting well to their new environment and the weight gain is an excellent sign, DOC officer Nic Peet said. Another seven captive-bred blue duck were transferred to Mt Taranaki from Christchurch last spring.

From The Dominion Post, 25 November 2002.



# South Island school recognised

Andrew Dixon MacMaster Trophy and Grant



Matthew Wilson and Annie Turnbull with the MacMaster Trophy. Photo: Southland Times.

uring 2001 DU received an excellent application from Gay Munro, wife of member and captive breeder Ron. Gay is the QE II National Trust Southland representative and has been working closely with Limehills School, about 35km north of Invercargill.

At the time her application was received, the board had agreed to give the award to Tararua College. This presentation was made in November 2001. Readers will be aware that their project collapsed (see Flight 112, July 02) and the trophy and grant returned, so the board was delighted to accept the Limehills School proposal.

In a supporting letter to DU from the NZ Wetland Trust, chairman David Lawrie made a comment worth repeating: '...there is now clearly a greater awareness of school teachers into the value of wetlands and the types of projects that can be made meaningful and educational to [primary] students. Hopefully this awareness will grow in the future until we have major selection problems.'

#### And from Gay Munro's application:

I would like to commend the Limehills School for consideration for the work they have undertaken to enhance the Kowhai Reach section of the Winton Stream. The stretch of the Winton Stream protected by six QE II National Trust Open Space Covenants is the last natural meander remaining on the fertile Southland Plains.

In the late 1960s the Southland Catchment Board had a policy of straightening streams and rivers, to better allow flood waters to drain away. (This has since been considered a detrimental step.) A landowner at Kauana was concerned at this practice, took steps to stop this from happening on his land, and the Kowhai Reach meander was saved.

In the late 1980s landowners along this stretch of the Winton Stream all agreed to covenant, including the Southland District Council which was responsible for an esplanade reserve on the east bank. To start with the stream was fenced off and 300 kowhai seedlings were planted to ensure continuity of the mature kowhais on the stream's bank, however these struggled to survive the competition from existing exotic grasses.

A meeting of landowners, Southland District Council, Environment Southland, DOC staff and Gay herself in February 2001 concluded that without intervention the natural cover along the banks of the Winton Stream was not assured. The Limehills School was approached to see if they might be interested in adopting the area and undertaking a revegetation project.

They have entered into this with enthusiasm, starting the project with an Arbor Day planting project in June 2002. Their policy is to plant fast-growing native species like koromiko, pittosporum, wineberry, broadleaf and cabbage trees. They hope that as the area is shaded the exotic grasses will die out and kowhai will regenerate naturally.



In the spring they had a potting up session, and within an hour, with help from parents and covenantors, they had potted up 200 native seedlings. These have been cared for at the school and a number will be ready for this year's plantings.

In February, another landowner meeting was held to review the work to date, and some pupil representatives came along to see how the plantings had done. The survival rate was almost 100% and some of the plants were up to 1m high - a good start to the programme.

Without the involvement of the school this project would not have got off the ground. The pupils have learnt an appreciation for this wetland system and now look upon Kowhai Reach as their special area.

To date the emphasis has been on plantings more than aquatic life, however the children now understand the value of this wetland system and how it supports a valuable fish and waterfowl population.

I am indebted to Limehills School for their help and ask that they be given recognition for the work they have undertaken and their ongoing commitment to this wetland project.

#### Gay's application included this excellent letter:

Dear Mrs Munro,

We are sending you a short description of our school's involvement in the Kowhai Reach Project.

The Kowhai Reach is an area where native trees grow and will be safe for years to come. Through the middle of the Kowhai Reach is a meandering stream that is home to ducks and trout. The kowhai trees help protect the stream habitat by giving shade and breeding places for the animal life there.

Our school helps because we are the closest school to the Kowhai Reach and it is in our community. We pot up seedlings at school and then plant the new native trees every year on Arbor Day. This is called underplanting. Sacks are also laid around the new trees so it will keep the grass down and help the young kowhai grow. We are trying to keep the new trees safe and we hope our school will carry on looking after this area even after we leave to go to High School.

Four children from our school have been to a meeting with people from the QE II National Trust and the Southland District Council. We listened to everyone talk about future plans for the area and our school has been invited to come back and plant more new natives again this year.

It has been exciting to watch the growth of the kowhai trees and they seem to be healthy. The yellow flowers look spectacular and we hope they will be around for many years to come.



Kowhai Reach, Kauana, saved from being straightened in the 1960s. Photo: Gay Munro

Yours sincerely, Joanna Hegan and Annie Turnbull.

Gay advised the board that the school would use the \$1000 award in the construction of a shade house and potting shed, and added that they plan a car park and interpretation panel at the beginning of the stretch, explaining the importance of the ecosystem and the wildlife it supports.

On behalf of DU, Gay presented the trophy and cheque to Limehills School at a ceremony last September. We congratulate them as worthy recipients.

Limehills School has a lot to be proud of - just before they received the MacMaster award, their Room Six class was runner-up in the national Cleanup New Zealand competition!



The MacMaster Trophy and Grant was established by Dr Tony Reiger, joined later by Dr Steve Messerschmidt. They have now decided not to continue sponsoring the award.



Form 1 and 2 pupils study growth on the threatened plant melicytus flexuosus. Photo: Gay Munro



# In Flight



DOC ranger Bob Stone with the dead native wood pigeons. Photo: Phil Reid, The Dominion Post, 18 September 2002.

## **PREDATORS**

#### Human predators kill again

On 18 September 2002, reports confirmed that 12 native wood pigeons had been shot during the previous week at Kaitoke Regional Park, a popular camping spot near Upper Hutt. The total population in the area had been about 50. A Regional Council spokesman said an air gun or .22 calibre rifle had probably been used. Regional Council and DOC staff notified the police and planned extra surveillance of the area.

Kereru hunting has been prohibited since 1922.

This is the letter Eric Pyle, Forest and Bird Conservation Manager, wrote in response to the news:

\*Forest and Bird shares local iwi outrage over the recent illegal poaching of kereru. These beautiful birds are not only important to us for cultural reasons, but they are also the last surviving bird capable of distributing the large seeds of many native trees (such as tawa, miro, nikau, matai and karaka) since huia, moa and adzebill became extinct.

'Kereru are incredibly slow breeders, producing only one egg each year. Faced with abundant predators (rats, possums and stoats), they are simply not able to replace themselves in most areas. During the past few years, Ngati Hine and Landcare Research have studied nesting kereru in Motatau Forest near Whangarei. Without predator control, no kereru eggs lasted longer than 10 days without being attacked and eaten by rats and possums. This is common throughout New Zealand.

Unless active steps are taken to halt the decline, this magnificent bird is expected to disappear from most forests on the mainland within 10-15 years. Predator control such as 1080 is essential to control the introduced mammals that are decimating kereru populations. The odds of their survival are made even more marginal by illegal hunting.'

- Eric Pyle

The Dominion Post, 19 September 2002

# flight Ecofile

# Whio at risk of extinction

Just imagine the echoing whistles in our mountain valleys....if we poured as much money and energy into whio protection as we do for our kiwi.

New Zealand's unique, river-dwelling duck is in serious trouble says the World Conservation Union in its latest extinction ratings. According to this year's Red List of threatened species published by the union, the blue duck (whio) has jumped from threatened to endangered. There are thought to be about 400 pairs left, with a very high proportion of males - a gender skew that leaves the birds vulnerable to extinction.

Whio populations are severely fragmented, the union said, and they have disappeared from former habitats in the Tararua Ranges, Pirongia, Mamaku Plateau, Central Otago, Kaikoura and the Richmond and Kaimai Ranges.

'We are losing the battle to save whio and other bird species,' said New Zealand Forest and Bird Conservation Manager Eric Pyle. 'Unless there is concerted action in the next few years to save whio, the remaining populations will disappear.' [See report on Blue Duck Conservation Trust, Flight 113 page 10]

Whio are one of New Zealand's ancient native birds, and share their river-dwelling lifestyle with just three of the world's waterfowl species. They have a distinctive blue-grey plumage and dark, speckled chestnut chest. The males' characteristic whistling sound means they are sometimes dubbed the whistling duck. While other duck species leave raising the young to the female, the blue duck male helps to guard the ducklings. Whio are thought to mate for life.

This year the union lists 11,167 plants and animals as threatened with extinction, an increase of 121 since 2000. The nomadic Saiga antelope, the wild Bactrian camel and the Ethiopian water mouse are on the brink

of disappearing for good.

The Red List is produced by a network of 7000 experts working in almost every country in the world. They have found that 811 species have disappeared over the past 500 years, some entirely, and others survive only in captivity. Five species have been added to the union's extinct list over the past two years. The organisation has examined some 18,000 species and subspecies around the globe. However, scientists admit that even a study of this magnitude only scratches the surface.

Earth is home to an estimated 14 million species, but only 1.75 million have been documented.

Many may become extinct before they are even identified, much less studied by scientists.

Source: The New Zealand Herald, 10 October 2002.



#### An update from Dr Bruce Waldman on the Archey's frog study and a comment on the Atrazine issue:

We lost three Archev's frogs, as you may have read, but the remaining 46 frogs are now doing fine. We were Department following Conservation captive husbandry protocols. which specified temperatures that perhaps were a bit too cold for the frogs. We had discussed possible problems with the temperature regimen before the frogs died (the small frogs were acting strangely), but we were advised to continue as the protocols specified.



# Archey's frogs update

A couple of students in my laboratory are working on endocrine disruptors such as Atrazine. I have a long connection with this work, as Tyrone Hayes, the American professor whose discovery made the headlines, was my very first research student. More recently, I spent a year working in his laboratory during 1998-1999.

## Ingrid Andres is one of Bruce Waldman's research students. She writes:

The NZ Agrichemical Manual (available at all agri-outlets) gives the guidelines for applying Atrazine. It is used on broadleaf weeds amongst forestry and food crops. The manual states that Atrazine has a halflife of 35-50 days in soil. Now, this is something that I have found to be important: where atrazine is applied to soil it is degraded by the bacteria in the top layer of soil, thus giving it that 'short' halflife (I consider it to be quite long still). Where the Atrazine is sprayed onto another substrate, eg gravel, and it can percolate into the soil underneath, it can be very persistent, due to the lack of bacteria (I have read up to 1800 days), and of course it can then travel into the groundwater. The manual actually goes on to say that residues in the soil can be bad for crops, eg tomatoes, lettuce etc. Some weeds can also become resistant to Atrazine. Application of Atrazine should be considered carefully, as it is damaging to other plants, and be careful not to apply it to ditches and drains unless they will be dry for the following two months. This is of course impossible to ensure, and I am sure a lot of Atrazine is washed off into the rivers through unexpected rainfall.

Two studies released in March 2002 have shown that Atrazine has adverse effects on the development of gonads in a frog species (Xenopus), at concentrations considered safe by the World Health Organisation for drinking water (2 micrograms/litre or less). This is what I am working on for my project. There have been some reports that those studies weren't carried out well and were thus not valid. I think generally it is close to impossible to control the spray drift when applying any pesticide. Some will always get into neighbouring plants or into the waterways. It is just quite unnerving to learn that the concentrations we find in our rivers are below safety limits, thus of no concern to the councils, but are shown to have quite serious effects on animals.

#### In New Zealand...

Crop and Food Lincoln spokesman Howard Bezar said GE maize was grown in the United States because farmers there faced restrictions on the use of herbicides sprayed widely in New Zealand.

Atrazine, a herbicide from the Triazine family, which is restricted in the United States, is regularly sprayed on New Zealand maize crops.

Mr Bezar said Americans had to rely on more environmentally friendly herbicides such as Roundup and Liberty, which broke down much more quickly than Atrazine.

'We would never need to grow Roundup Ready maize or LibertyLink Maize in New Zealand because we are allowed to use Atrazine,' Mr Bezar said. 'If farmers follow the recommended practices and only spray a certain number of days out from harvest there shouldn't be any problems in the food products but in this case there is a problem with residue in the soil. Roundup doesn't have residue problems but as long as we stick with the older technology we won't be able to use more environmentally friendly technologies.

'Australia is in a similar situation with canola. They are not allowed to use Roundup Ready Canola and they are having to deal with quite serious soil residue problems because of the Triazine herbicides they use,' Mr Bezar said.

From the Christchurch Press, undated clipping, October 2002

#### Pesticides and frogs

Raising new questions about the environmental risks of some widely used farm chemicals, in July 2002 scientists reported the first evidence linking agricultural runoff to hind-limb deformities in frogs.

Researchers said frogs appear to be made more vulnerable to a common parasite when exposed to the pesticides Atrazine and Malathion. The parasite, a burrowing trematode worm, tends to infect the hindquarters of developing tadpoles.

Atrazine is part of a family of chemicals that rank among the world's most widely used weed killers. Malathion is commonly applied to control mosquitoes and other insects, and pharmaceutical grades are approved for killing head lice. Both products are controversial but considered safe for commercial use in the United States.

Now, effects of these and other chemicals on the environment are coming under new scrutiny. Research is driven partly by keen public and scientific interest in the declining health of amphibian populations, often portrayed as a sentinel for environmental decline and a possible early warning of health problems affecting humans [see What's killing the frogs? page 12 Flight 113].

The latest study, by ecologist Joseph Kiesecker at Pennsylvania State University, appeared in Proceedings of the National Academy of Sciences, 9 July 2002. Kiesecker said his observations of the common wood frog rana sylvatica in the wild, followed by controlled studies in his laboratory, produced 'compelling' evidence that pesticides can weaken the immune system of exposed amphibians - even at very low concentrations - making the frogs more vulnerable to parasites.

Continued on page 14...

...It is said that every time a species dies, this one loss, of life, sound, leaf and seed, further damages the harmony and balance of the earth. A huia feather falls - a tiny frog yelps faintly; one whio whistles - while ignorant armies clash by night. - Ed.



#### Half the world's plant species under threat

A new study published in the journal Science shows that up to half the world's plants could become extinct this century.

Existing studies suggest about 13% of known plants are threatened, but that figure could be far higher. Researchers at Duke University in Durham North Carolina and the Missouri Botanical Garden in St Louis, have calculated that up to 47% of species should be on the Red List of threatened plants.

The figure of 13% is based on threatened species in temperate regions. When the richest and most vulnerable plant diversity of the tropics is taken into account, that figure is a 'serious underestimate', they say. 'Comprehensive Red Lists for plants are available for only a scattering of tropical countries, making it difficult to assess the true scale of the global conservation crisis for plants.'

From The Independent, in The Dominion Post, 2 November 2002.

#### The Rangitata Case

Fish and Game New Zealand says that Federated Farmers' negative reaction to a draft Water Conservation Order on the Rangitata River just proves that it sees New Zealand's natural resources as solely for exploitation by the agriculture sector.

Federated Farmers, which was considering an appeal against the draft Order, '...do not have a conservation bone in their corporate body,' said Bryce Johnson, Director of Fish and Game New Zealand, in response to the October announcement. 'They would suck the river dry if they had their way.'

Federated Farmers said the Order has 'not addressed the needs of the wider Canterbury region and has severely constrained water harvest and storage options.'

'The draft Order does in fact very fairly take into account the needs of different sectors of the Canterbury region,' Mr Johnson said. 'The farming community has withdrawn a third of the water from this river for 50 years for irrigation. This decision now takes into account the wider community's needs and puts a halt on an unending series of attempts to further abstract water from the river. We believe this draft Order is quite fair to farmers by providing a 60 percent increase in the amount of water that can be taken when the river is flowing at a high level.'

'This is consistent with the recently released Canterbury Strategic Water Study that concluded direct takes from rivers are a thing of the past, and irrigators have to look for more innovative ways to harvest water and use it more efficiently,' Mr Johnson said.

'Despite Fish and Game, Ngai Tahu, Forest and Bird and many other organisations proving to the satisfaction of the Ministerially appointed Special Tribunal that the Rangitata River possesses outstanding conservation, cultural and recreational values, Federated Farmers still refuses to accept that the whole community has a right to a balanced use of the river and it is not just there for commercial exploitation.

'They say that the Rangitata water will be needed to offset the impacts of climate change and the possibility of drought in Canterbury. But transferring their problem to a river that will already be under stress from the same cause is not an acceptable solution. The answer lies in more efficient use of the water already taken from the river and the off site storage of flood flows provided for in the draft Order.'

Bryce Johnson said, 'The Water Conservation Order gives the river the equivalent of National Park status. This is a victory for kayakers, rafters, iwi, swimmers, trampers, jet boaters, anglers, families - the whole community - who enjoy this very important waterway.

Thursday, 31 October 2002, from www.fishandgame.org.nz

# From the Far Side

#### **North America**

#### Pacific Northwest Initiative

After identifying several waterfowl 'hotspots' of global importance in the Pacific Northwest, DU Inc launched the Pacific Northwest Initiative in 1996. It has since become one of DU's major conservation efforts in the United States. More than 70,000 acres of wildlife habitat have been conserved on more than 100 projects. The areas include coastal Washington and Oregon, Puget Sound, Klamath Basin, potholes and marshes in eastern Washington, Oregon's Great Basin and the Willamette Valley.

One of the most ambitious projects has involved the restoration of the Chinook River estuary in Washington. In the late 1800s a settler bought the estuary with plans for a dairy farm. To drain the area he engineered massive steel tide gates to lock out the river. Without its tidal pulse the vegetation died off, and with it many species of waterfowl, fish and shellfish. A century later, the government made a deal with the current owner, offering a financial incentive in exchange for retiring the land under the voluntary Wetlands Reserve Program. In 2001 DU Inc and other partners bought the idle farmland, planning to open the tide

gates this year to inundate more than 1000 acres of fields. Levées will protect adjacent properties and the estuary will eventually support many species of migratory waterfowl and shorebirds and fish including salmon, for which estuaries provide vital nursery areas.

From an article by Tildy LaFarge in Ducks Unlimited, May/June 2001. (www.ducks.org)

#### Inmates Make Nest Boxes

In a joint effort with the local DU committee, inmates at a Correctional Facility in Iowa have produced 1500 duck nest boxes, cutting the wood and assembling them at the prison workshop. The boxes have all been distributed, with 200 set up along the Mississippi River by a Boy Scout troop. The Jones County Chapter consistently ranks among the tops in Iowa for membership and fundraising.

DU Leader, Summer 02

#### Australia

## Here's to Banrock Station - congratulations from New Zealand! Banrock Station receives Ramsar Award

The Ramsar Wetland Conservation Award was established in 1996 by the Convention on Wetlands, to recognise and honour, every three years, individuals, organisations, and government agencies that have made a significant contribution to wetland conservation and sustainable use in any part of the world. The Ramsar Award is complemented by the Evian Special Prize of US\$10,000 donated by the Danone Group (France), owner of Evian Mineral Waters, as part of a programme of support to the Ramsar Convention. The Wetland Conservation Award and Evian Special Prize for 2002 awards were presented at the Ramsar Conference in November 2002, in Valencia, Spain.

Banrock Station Wines was chosen as one of three winners for its innovative approach to supporting the sustainable use of wetland resources. Banrock management has undertaken 10 years of imaginative rehabilitation and management practices at their own complex of wetlands in the floodplain of the River Murray, in co-operation with Wetland Care Australia. Their marketing approach has created partnerships in eight other countries, with





a percentage of the revenue generated by wine sales being allocated to wetland conservation projects and activities in those countries. The initiative also provides an exemplary case of the application of wise use principles and practices in viticulture, including education and public awareness activities through its on-site Wine and Wetland Centre (managed by Tony Sharley). Banrock Station Wines has announced that the cash award will be devoted to wetland projects in developing countries, in consultation with the Ramsar Bureau.

From www.ramsar.org

#### And that's not all . . .

The Banrock Station wetland was also designated as a Wetland of International Importance by Ramsar, at the convention in Spain. The award was presented by the Crown Prince of Spain.

It becomes one of a select few wetlands on privately owned land in Australia to receive such an honour.

Banrock Station Manager Tony Sharley said the accolade was the most significant the project had received in its distinguished seven year history. 'To receive such recognition from the world authority on wetlands conservation is an outstanding achievement not only for us as a company, but for Australia's conservation reputation,' Mr Sharley said. 'It highlights to the rest of the world just how serious Australians are about protecting their environment. The country is in the midst of one of its worst droughts on record, yet within this challenging environment we are sustaining our precious wetlands and ensuring a natural habitat for native species.'

From the Banrock Station media release, 17 November 2002

(You can contact Tony Sharley by email: Tony Sharley@brlhardy.com.au)

# Clippings

#### Riparian management

A series of 'train the trainers' workshops were hosted by regional councils late last year in Whangarei, Morrinsville, Palmerston North, Murchison, Timaru and Invercargill. Organised by the Ministry of the Environment, the workshops were designed for those promoting riparian managment on farms. The attendees were mainly regional council land management staff, Fish and Game, Landcare Trust and some environmental leaders and advisers.

The workshop material and final report of the workshop series are now on CD, and copies have been sent to participants. The information is in the form of power point presentations and workshop notes, and will be a useful resource for regional councils and others who wish to run workshops and fieldays on managing waterways on farms.

Your Regional Council will have more information.

## Lake Management handbook updated

While water quality in our large, deep lakes is generally good, many of the 700 or so shallow lakes in New Zealand are nutrient enriched with poor-quality water.

A widely-used Environment Ministry handbook produced in 1987 has now been updated, and takes into account increased knowledge about the physical and biological processes in and around lakes. The handbook includes four new sections with good case studies, on lake levels, landwater interactions, fish in New Zealand lakes, and alien invaders. Much of the technical information previously only available in unpublished reports is also included.

The four new publications cost \$15 each or \$30 for the set. Contact Fiona Montgomery, phone 04 917 7493, email publications@mfe.govt.nz or you can download them free from www.mfe.govt.nz

#### Clean Streams Project

In September last year Environment Waikato received a national award for its new Clean Streams Project, which aims to clean up the region's waterways with fencing and planting.

[See Flight 113 page 14]

The Resource Management Law Association's Award recognises excellence in statutory resource management. The award recognised the effort to turn resource management policies and plans into practical on-the-ground results.

Environment Waikato is investing \$10 million over the next decade in fencing and planting rivers, streams, lakes and wetlands to reduce the effects of farming on water quality. The project provides advice and support for farmers to exclude stock from waterways, meeting up to 35% of the costs to fence waterway margins. It is described as a significant contribution to the development of resource management practice.

Chief Executive Barry Harris said the award was recognition of the practical work Environment Waikato was doing to enhance and improve the environment.

'The Clean Streams Project is just one of many activities and projects the council is working on which involves working with the community in achieving real results in the environment. It is typical of the work we're involved in turning policies and documents into realistic achievements.'

From the useful Environment Waikato website at www.ew.govt.nz

#### New effluent system tested

Water use results, filed annually with regional councils, are a specific requirement of effluent disposal consents. Environment Southland is aware of the problems of effluent disposal on the Southland plains. Rural News reported last April that while there are commonly a number of dairy

farmers who drag their heels on supplying results and the council could prosecute the reluctant ones, ES is taking a wider view on water pollution by tackling the problem head-on. A new system designed by NIWA and financed by the dairy industry was being tested on one farm over the coming season. The Advanced Pond System (APS) was being trialled on Phillip Pullar's property at Pukerau, and involved input and support from NIWA, the Dairy Research Institute (now part of Fonterra) and ES.

The APS system involves a series of gravity-fed ponds, in which nitrates, nitrites and other contaminants are cleaned up by algae as the effluent flows from one to the next. The final ponds will have freshwater crayfish that could be fit for human consumption. There has been considerable interest in the project.

Advanced pond systems were originally developed in the USA, and have been successfully used to treat domestic, agricultural and industrial wastewater in many parts of the world. They provide improved performance and reliability over conventional oxidation pond systems. Rather than the two ponds of conventional oxidation pond systems, APS systems consist of at least four ponds in series. APS ponds incorporate many design improvements over conventional oxidation pond systems and do not require more land. Each pond is designed to optimise particular natural or microbiological treatment processes and they are arranged in the most favourable sequence for wastewater treatment.

For more information contact Russell Winter or Murray Harris at Environment Southland.

Email: service@envirosouth.govt.nz or go to www.envirosouth.govt.nz

The main contact for NIWA is Dr Rupert Craggs, email r.craggs@niwa.co.nz

The NIWA site has more information at www.niwa.co.nz/pubs/



#### Good work rewarded

Switching from mineral to vegetable print dyes, refining waste oil for further use and helping people reduce waste to landfill and a rethink of the meaning of 'rubbish' are just some of the achievements recognised at the Canterbury Resource Management Awards in Christchurch last October.

The awards aim to reward Canterbury businesses, organisations and individuals for operating in an environmentally sustainable way. They are jointly sponsored by Environment Canterbury and Landcare Research and are now in their eleventh year. Over 40 applications for the four award categories were received.

DU member Russell Langdon of Ashburton was highly commended in the individual category, for his work in setting up Riverbridge wetland education centre and preserving wetland areas, home to the Canterbury mudfish. Bird species like the eastern weka, brown teal and blue duck have also been re-introduced.

For further information: Chris Macann, Environment Canterbury Communications Officer, phone 03 353 9009, ext 7121.

#### Saturday 8 February - Mangarakau Wetland Reserve opening

The Minister of Conservation, Chris Carter, will open the NZ Native Forest Restoration Trust's first South Island reserve next month. Take a long Waitangi Weekend break and enjoy the sights of NW Nelson. Located northwest of Nelson over the Takaka Hill and beyond Collingwood. Just north of Pakawau turn left on the road to Whanganui Inlet and Mangarakau. It is an unsealed road for 25km so allow an hour from Collingwood. Watch for Trust signs at major intersections en route. Accommodation is available at the Trust House and Community Hall or at various facilities nearby.

Contact Joanne Vaughan 03 524 8072 or Geoff Davidson 09 813 0229 NZ Native Forests Restoration Trust www.nznfrt.org.nz



Male South Island tomtit feeding the family. Printed with the generous permission of artist Jane Seabrook (seabrookart@xtra.co.nz)

#### Pictips...

- 1. Contrast is a Good Thing. With colour prints, look for strong contrast of tone. Looking with almost-shut eyes to check this is a good trick with your subject and your prints. Remember too, that Flight is printed in monochrome.
- 2. Remember that landscape is often more lovely in reality than on film. We've all been disappointed with the results of our efforts in this tricky area. Try shooting in dodgy weather. Light for colour film is best in early morning and late afternoon. Try details, close-ups, a low angle (gumboots maybe, even waders?). Make sure there is something interesting in the foreground or near the middle and about a third of the way across (this is the mysterious 'Golden Section' so many great paintings are based on check it out, it works). Read a basic guide to photography from the library.
- 3. Label your prints; the best way is to number them on a back corner in soft pencil (biro and ink can bleed through to the front which is Not a Good Thing), and list captions or details on a separate sheet. Sticky labels (not Post-its) are OK too. We need to know when, where, what and so on. Your grandchildren will thank you too.
- 4. Protect your prints with paper between each one (they can stick together especially in heat) and fix some light card around them for posting. Write DO NOT BEND on the envelope. Colour photocopies can be OK as long as they are of good quality. Please refrain from folding these, just post them flat and well protected. Creased images are Definitely Not a Good Thing!
- 5. You do keep your wetland photo records safely away from light, updated and with detailed labels... don't you...?

## 3rd International Wildlife Management Conference

Christchurch, 1-5 December 2003

The Wildlife Society, based in the USA, co-hosts these conferences every few years. They are held in different parts of the world and run jointly with local partners. The first two were held in Costa Rica (1992) and Hungary (1999). The principal local co-hosts for this conference are Landcare Research NZ and the Australasian Wildlife Management Society, with Ngai Tahu and the Conservation Department.

The conference will interest many groups, from those with a strong theoretical approach to those involved in practical wildlife management and sustainability.

More information from The Conference Office, Centre for Continuing Education, University of Canterbury, Private Bag 4800, Christchurch, phone 03 364-2915, fax 03 364-2057,

email wildlife@cont.canterbury.ac.nz

#### DATES TO REMEMBER

World Wetlands Day - 2 February (see page 2)

Arbor Day - 5 June Conservation Week - first week of August

Continued from page 11...

He also looked at another pesticide, a synthetic chemical called esfenvalerate, but did not find the same links to growth anomalies as seen with malathion and atrazine. For the latter two chemicals, significant effects were seen even at concentrations considered safe for drinking water by the Environmental Protection Agency.

Even these very low levels of exposure could produce 'dramatic effects on the immune response' of the animals. And that, in turn, led to significantly more growth defects. Kiesecker stopped short of endorsing any effort to further restrict use of atrazine and malathion. But he said his results underscored the importance of studying toxic chemical effects in a context approaching the complexity found in natural ecosystems.

Some other scientists, backed by the farmchemical industry, challenged Kiesecker's results. Although they said the new study was intriguing, they suggested the details couldn't be trusted until corroborated independently.

Source: A July 2002 article by Carl T. Hall, San Francisco Chronicle Science Writer From Organic Consumers Association website 20 October 2002: www.organicconsumers.org

(The Listener ran an article about Archey's frog in the 30 November 2002 issue, page 24.)





## **Shopping**

#### NOSLOC FEEDERS

The Nosloc feeding system has been developed in New Zealand by Dennis Colson of Te Kuiti. The feeders are suitable for duck feeding and free range feeding. Of most interest to DU members will be the duck and pheasant feeders. Different nozzles are available for feeding grains such as wheat and barley or for feeding maize. Other sizes of nozzle are available for feeding pellets to ostrich and emu. The nozzles are made of galvanised steel and will not rust or break from use.

Each feeder requires a waratah and bucket (20 litre) which you supply. Larger drums can be used for the system but require additional brackets and waratahs.

The nozzle, either parallel for maize or spiral for wheat and barley, and a waratah mounting bracket are supplied.

Nozzles are \$26.95 each (please advise spiral or parallel) and waratah brackets \$26.95 each, post brackets \$21.95 each.

#### FENN TRAP MK 6

Deadly to ferrets, stoats, weasels and rats, these all-metal traps are easy to set and are the ultimate quick-kill tunnel trap.

\$35.00 each.

#### **GREY TEAL NEST BOX**

These grey teal nest boxes come in a prefabricated form ready to assemble and erect on your pond.

They come complete with mounts ready to fit to your own post. \$25.00

#### TIMMS TRAP

We now stock the well known and effective Timms Trap to complement the Fenn trap. The Timms Trap is perfect for larger animals, such as possums and cats.

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#### Fish, glorious fish

#### Baltic Pickled Fish

Make this well ahead of time and store it in the fridge, as it gets better every day.

In a wide covered pan bring to the boil ½ cup cider vinegar, ½ cup water, 2½ teaspoons salt, 3 bay leaves, 6 peppercorns, 2 cloves, 4 whole allspice, ½ teaspoon celery seed, ¼ teaspoon mustard seed and 2 finely-sliced red or brown onions. Add 1kg of snapper fillets or other firm fresh fish, cover the pan and simmer gently until the fish is barely cooked, 15-20 minutes. Let the fish cool in the stock, then remove it to a dish. Strain the stock and pour it over the fish, cover and refrigerate. Serve it chilled.

From Light Meals with Digby Law (Hodder and Stoughton 1988).

'Enjoy thy stream, O harmless fish

And when an angler for his dish,

Through gluttony's vile sin

Attempts - the wretch - to pull thee out,

God give thee strength, O gentle trout

To pull the rascal in.

- J Walcot (from Alex Gillett's Trout Cookbook, The Halcyon Press 2000.)



Norna's house, Shetland (see story in Flight 113, page 14)

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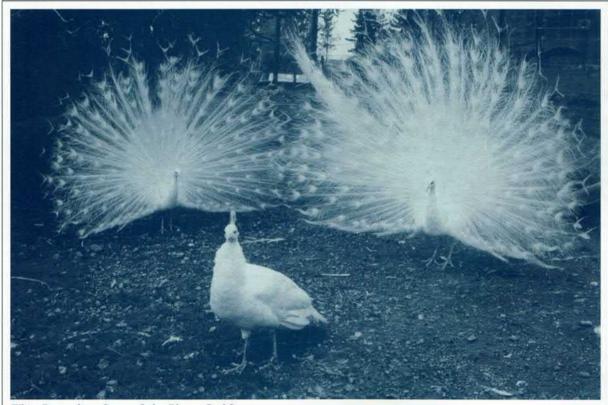




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White Peacocks at Stoney Oaks. Photo: Gail Simons.

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