# Flight

2001

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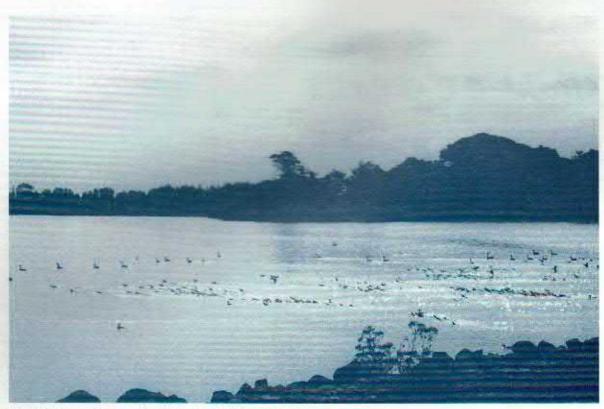
DUCKS UNLIMITED NEW ZEALAND INC.

For Wetlands and Waterfowl.





Marketed in the North Island by Kilwell Sports Ltd and S&R Marston in the South Island.



Waterfowl on oxidation ponds, Christchurch. Photo: John Truscott.

Proud to support Ducks Unlimited

New Zealand Inc.

in their efforts to conserve

New Zealand's wetlands and waterfowl

# 27th Annual Conference



## Copthorne Resort Solway Park, Masterton, 20-22 July 2001

Rooms have yet to be booked for the Friday and Saturday nights so it would be helpful if members would show an expression of interest as soon as possible so we can advise the hotel.

Full Registration \_

Includes AGM attendance, morning teas, wetland tour, lunch and wine tasting, trip to the National Wildlife Centre to see the kaka fed, Saturday night dinner and auction (excluding \$5 per head bus and Mt. Bruce entrance fee): \$75 per person.

Saturday night dinner and auction only: \$35 per person.

Wetland tour: \$5 per person. Room deposit: \$50

Send your registration to:

P.O. Box 9795, Newmarket, Auckland. Conference inquiries: Ross Cottle (06)378 7408

#### 2001 Annual Conference

#### Programme

Friday 20 July:

Evening get-together, after arrival, the Palliser Room from 7pm.

Saturday 21 July:

9am: Registration and AGM

10.30am: Wetland tour departs, returning to the Copthorne approximately 4.30pm.

7pm: Pre-dinner drinks

8pm: Dinner, followed by auction.

Sunday 22 July:

Showing of the Banrock Station video.

Need a Ride to This Year's Annual Conference?

Craig Worth is planning to drive a coach from Hamilton to the AGM to use for the field trip if enough members are interested in contributing to the cost of the journey.

For further information contact Craig Worth, Bus. (07)846 8719, a/h (07)854 0494.

#### Auction Items

The auction that is a highlight of every Annual Conference features, along with donated items, a special selection of merchandise from the DU Canada catalogue that will appeal to members.

Deluxe Barbecue Set (18-piece stainless steel set with carry case)

Fleece Pullovers (with DU logo, soft polyester fleece, encased toggle-adjustable clastic)

DU Canada Stamp and Print (by Andrew Kiss, DU Canada 1994 Artist of the Year, a matching print and stamp featuring a mallard drake)

DU Inc. Stamp and Medallion set (framed block of four 2001 DU stamps with matchinggold-plated stamp medallion)

Grohmann Belt Knife (collector's and sporting knife, high-carbon stainless blade with gold

#### Deep Ecology:

#### Why Regenerate Our Natural Environment?

Within our lifetime, we will double the amount of woodland in the UK. The Black Country will become the Green Country. We might tell ourselves we're doing this to create a more sustainable environment - reforestation will help control climate change and increase hiodiversity - but the real reason will be what it does for us.

"As the forests rise again, as the fingers of nature re-enter our cities to cradle our homes, more of tomorrow's children will have the joy of playing on trees, amid the birds and creatures of the wood. Schools and parents will value green fingers. Young minds will grow more freely, discovering their place in the garden. Today's children - tomorrow's parents - will be calmer, happier people.

"We will become more mentally resilient, more spiritually sated, learning afresh how nature works - efficiently, economically, without waste, and with diversity. Politics and welfare, houses, neighbourhoods and workplaces will be run with an eye to the whole. Ecology will move into us, and arise from deep within us: a deep ecology."

[From: Things to Come: A Future for the Land, by Brendan Hill, Published in EcoCity Magazine.com]

inlay duck on wooden handle, with gold foil DU stamp on leather sheath)

King of Ducks canvasback decoy exclusive to DU

Bluebill Decoy (crafted by John Gewerth and stained in the bird's natural colours)

Big Game Field Set (impact resistant carry case containing boning knife, skinning knife, hunters' bone saw and a dozen pairs of field dressing gloves)

Tough Tool and Binocular set (stainless steel multi-tool with DU embossed carry pouch plus a pair of 8x21 binoculars)

Collector's Plate (the second in a series of fine porcelain in a strictly limited numbered edition featuring an illustration by DU Canada's 2000 Artist of the Year, Darren Haley)

Stoneware Platter (a fine serving piece painted in fine detail by Art LaMay)

**Ducks Crossing Sign** 

David Mans print (Fruits of Your Labour) 24" x 16"

"Breaking Calm Water" (superb 30" x 19" print by DU Canada Artist of the Year, Jean Dunn Also up for auction will be a painted paddle and a sponsor's decoy of a ruddy duck. Auctioneer for the evening will be the famous raconteur, and superb money-raiser, Bob Wood who will have your sides aching with laughter as he squeezes the last cent out of every item. He's worth the cost of the night, even if you don't eat anything.



# **FOR SALE**

Mandarin Pairs and Hens \$125 per bird.

Contact:

DU member Mike Connole, 122 West Street, Greytown 5953. Ph.(06)304 9754

## INSIGHT

## Craig Worth

#### President

Members will have noticed that the fines for shooting protected species, including grey teal, have been significantly increased in recent months - up to \$100,000. I am not unduly concerned by the increase in the maximum fine. What does annoy me is that the increase was implemented without any consultation, that DU is aware of.

For some 24 years DU's volunteers have been building, erecting and maintaining nest boxes for grey teal throughout the country. In some locations they have been very successful. In the Waikato, for instance, it has been reported that grey teal are the second most populous species.

It seems anomalous that grey teal receive the same measure of protection as brown teal. Last year, Fish and Game's magazine promoted grey teal as the next game bird. Had grey teal been introduced to the licence it would have been an indication of how successful our programme of encouraging recovery of the species has been. It appears that the Minister may have received some poor advice on this matter.

The Board has had preliminary discussion with the Auckland/Waikato Fish & Game over the Lake Waikare resource consent submission with a view to DU joining forces with them and making a joint submission to the Environment Court. This would have many advantages to both our organisations and significantly increase the impact of our submission. At this stage we are heading for a November hearing in the Environment Court and it is likely that we will have to bring Ron Coley from Canada to appear as our expert witness. The Board has conditionally approved additional resources for this campaign and has expressed the intention of trying to settle the matter without having to proceed to a hearing.

At this late stage, I would urge members not to forget the AGM in Masterion. The details are on the inside front cover of this issue of Flight and Ross Cottle and his team have arranged a great field trip. A preview of some of the auction items appears on the same page, and Ross has arranged some never-before-seen items as well. This year the silent auction should be spectacular, with a wider range of items with varying close-off times. Further donated items for the silent auction will be gratefully received. Preparations are all heading for it to be a great weekend. I look forward to catching up with you then.



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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.

Cover Photo: Royal swan, Stoney Oaks Wildlife Park. Photo: Gail Simons.

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	Alan Wilks, Greytown	(06) 304 9729
	Jim Law, Pirinoa	(06) 307 7855
	David Wilks, Wellington	(04) 476 2242
		Wilder Company



# OUR People



#### Malcolm Dench

Waikato Chapter member Malcolm Dench has been a member of DU almost since its formation. A lifetime dairy farmer, a love of the outdoors has dominated his interests since his youth. He was made a life member of the Te Awamutu Branch of the New Zealand Deerstalkers Association and has had a 30 year involvement with the New Zealand Mountain Safety Council. For most of this time he has been a firearms safety instructor and still does firearms licence testing.

He says he has missed only one duck shooting season opening day (when he was doing his compulsory military service). Malcolm's continuing support for DU stems from his belief in the value of preserving and creating quality wetland habitat. He has been active in programmes like Project Gretet.

Makcolm has been married to Barbara for 42 years and they have three adult children and six grandchildren.



#### Miles Anderson

Blanking people like Ross Cottle and Jim Campbell for his involvement with DU for the past four years. Miles Anderson has always been keen on the outdoors and hanting. Describing himself as a Field Agronomist, he runs has own agrosomy business serving the rural communities of Wairarapa, Hawkes Bay and Manawatu. Miles and partner Jaqui, who live at Riversdale on the Wairarapa coast, have three school age and four adult children.

Employed for some 12 years by stock and station business Hodder and Tolley from soon after leaving school, Miles also studied at Massey University and at Melbourne's Sefton University where he took papers in advanced agribusiness management.

Over time he has helped others with dam and wetland developments which, from a professional point of view, he sees as a sensible part of farm management and enhancement of the environment. His current studies in organics are proving to be of special interest to him, particularly the aspects covering planting to maintain habitat.

#### Correspondence

Belief in the essential democratic principle of "no taxation without representation" is strong and forcefully expressed among DU members as they renew their membership, as some of the following correspondence amply illustrates...

#### Wildfowl at a Fair Price

Dear Craig,

Enclosed is my membership fee for DU for the next financial year.

I have some reservations about paying the fee as I have always understood that the organisation was about promoting conservation of wetlands and the establishment of waterfowl over a wider area of New Zealand.

Over the past ten years or so I have personally been developing a wetland area on my property, and am now in the process of attempting to establish a number of native species on the pond, i.e., scaup, showeler and grey teal. I have found that these are available from other members of the organisation at a price, the price being in excess of \$250.00 per pair. It is understood that we live in a free market society, however I can't help feeling that these prices are excessive, particularly for native birds, and also from other so-called like-minded conservationists.

My question is: is there any way that ducks can be obtained at a reasonable price by members for the establishment of ponds such as mine?

I look forward to hearing from you in the near future.

Yours faithfully

Terry Hynes (Dannevirke)

[Any offers? (The President has replied) -F.d. [

#### Saga of a Misplaced Cheque

Dear Mr Worth.

Please find enclosed a cheque for \$35.00 being my membership fee for DU.

If you manage to lose this one, I will take considerable pleasure in removing... (certain distinguishing parts of the male anatomy) and publicly displaying it on the wharf at Whitianga.

With sincere regards I remain

Yours truly

(signature indecipherable)

#### DU's Treasurer replies:

I am holding the cheque in the expectation of being able to sell tickets to the event.

Correspondence from readers on any topic in Flight or relating to wetland and wildfowl conservation is always sought and welcomed.

Further Correspondence is published on page 11.



# D U News

#### Nominations for the Board

The Board of Ducks Unlimited has reluctantly accepted the resignation of director Tom van Dam, who has served for three years and worked hard during that time, overseeing the membership system and making a generous contribution of the Rongopai Wines product to annual conferences and other DU functions.

There is only one nomination (Stephen Rice) to date and DU needs more Board members with energy and commitment to share the workload.

Members who know of another member who would be interested in standing for a Director's position should approach them and send in a nomination. Members wishing to stand for election should forward their name and background information to DU, P.O. Box 9795, Newmarket, Auckland, and a Director will make a nomination.

The DU Board moots quarterly in the centre of the North Island during February. May, August and November and travel to meetings can be subsidised. The meetings are friendly and informal and input is welcomed. There is no requirement to attend the AGM to be elected. Women are especially encouraged to seek election to the Board to redress a gender imbalance.

For further information, contact Alan Wilks, (06)304 9729.

#### Waikato Chapter

#### Tiritiri Matangi Island Trip

Waikato Chapter members (pictured below - Photo: Ray Hayward) left Hamilton early on 14 March and met up with the Auckland contingent on the Auckland wharves before boarding the Quick Cat. At Gulf Harbour the rest of the contingent were picked up before we headed for Tiritiri Matangi Island. The maximum number of visitors allowed at once is 150 and of the total contingent 26 were DU members who

had travelled from as far as Reporoa in the south and Whangarei in the north to be there.

The island really has to be seen to be appreciated. Not only is it alive with bird life but the birds are used to people wandering around and



A rure shot of a takahe on Tiritiri Matangi Island. Photo: Jack Worth

are very up close and friendly. It's suitable for the very young to the very old and really is worth the effort getting there.

While I have seen plenty of kokako in the wild, and they are a bit hohum to me, one of the two highlights of the day was watching a pair





lying on the ground (yes - lying on the ground, eyes shut and all) sunning themselves like farmyard chooks only five metres from 14 coughing, sneezing, wheezing human intruders. Magic!

The other highlight was the takahe. They love a little neck scratch. As they wander around your ankles and check out your lunch box, they make little chirps to tell you how much they love you.

We checked out all the brown teal areas, and I personally was not very impressed. While I would never claim to be an expert on brown teal habitat, when I recall the wet marshy area our captive birds used to prefer in the aviary, and compare that to the habitat conditions on Tiritiri Matangi, it is perhaps no great surprise that the population is not flourishing.

The Tiritiri Matangi Island Supporters Group is very keen to release some more brown teal on the island. This would be an ideal opportunity for our two groups to work together to create suitable habitat and establish a breeding population under the gaze of thousands of conservation-inclined visitors. The brown teal would benefit and so would the profile of DU.

The most common question asked on the way home was "When is the next trip?" Watch this space.

- Murray Dench

#### Manawatu Chapter

## Foxton Clay Shoot

The Foxton sandhills and pines were stalked by 125 keen shooters on 25 March. They were searching for elusive clays as part of Manawatu Chapter's clay shoot, held in conjunction with Hunting & Fishing (Manawaru) with support from Remington, Beretta and Coca Cola.

Some very good scores were posted for the day but, as is our custom, the gun was drawn from registration numbers. This year it was won by local DU member Martin Waayer (hopefully it will shoot better than his old one). A huge array of prizes was on offer sponsored by Hunting & Fishing and few went home without a prize. As in past years, Alpine Hunting donated the venison for the BBQ (two sika hinds) and Craig Merritt did the butchering. By the end of the day there was not a lot left.

The event raised around \$2000 and I thank everyone who helped with setting up on Saturday, running the operation and cleaning up on Sunday. These events take a huge amount of time and effort to stage so I would ask all DU members to get involved and offer their help in some way.

- Neil Candy

#### Board Business . . .

The last DU Board meeting was held at Hatepe on 26 May with 10 Directors attending the meeting chaired by Graham Gurr. Apologies were received from minutes secretary Flona Stanaway (minutes were taken by Craig) and Ossie Latham. David Wilks was welcomed to his first Board meeting.

Major agenda items discussed included reports from project conveners, planning for the AGM, membership, financial matters, and issues like Lake Waikare and the Chatham Islands brown teal release. Several of the items of correspondence received are published in this issue of Flight.

The Treasurer's report was accompanied by a draft budget for the current financial year. It appears that if DU has to meet litigation costs incurred by our action over Lake Waikare, there will be a trading deficit for the year that will have to be met out of the cash reserve.

Waterfowl and Wetlands Trust Chair David Smith presented an update on the Trust investment, Although the first quarter of the year had shown a negative return, the investment had increased by \$13,000 since 31 March and, after the withdrawal of \$9,000 for Wetland Care developments, the portfolio value at 23 May stood at a little over \$303,000. It was agreed that the investment managed by Spicers was showing a better return than 90-day bank bills.

Publicity and membership matters included plans to follow up members who are unfinancial or who have resigned recently. An effort will be made to establish the reasons for their lost support so these issues can be addressed. Staffing of the stand (shared with Taupo Native Plant Nursery) at the National Field Days at Hamilton was finalised. A report on this worthwhile publicity effort will be published in Flight.

Reports on our programmes related to specific species and Wetland Care were received. Two new projects were approved for funding amounting to \$4.520. New funding criteria were adopted and this is to be made available to members on request. Production of a Wetland Care promotional pamphlet costing \$3,000 was approved. A considerable amount of time was devoted to discussing the Chatham Islands brown teal release and Lake Waikare...

The MacMaster Trophy is to be awarded to Tararua College in Pahiatua to assist development of a wetland on the college's property. Advice has been received from Tony Reiger that he will no longer fund the MacMaster and Golden Plover awards. DU has funding for the MacMaster award for this year, but the Golden Plover award is to be put on hold until a sponsor can be identified.

Ross Cottle reported on planning for the AGM and national raffle. Publicity for the AGM will include advertising in the Dominion and a feature article on DU, the cost to be met from Wairarapa Chapter funds. Possible venues for the 2002 AGM planned for Hamilton were canvassed. Changes to the Board taking effect at the AGM in Masterton include the retirement of Tom van Dam. The present Directors who need to be re-elected will stand again. One nomination for Stephen Ricc had been received to date, and Ross Cottle accepted the position of Vice-President-elect for the year to 2002.

(Board Business has been introduced as a new section of DU News to keep members informed about the work of the DU Board.)

# 2000/2001 ANNUAL REPORTS

#### President's Report

It gives me great pleasure to present this report, my first as President, on this organisation's activities.

President, on this organisation's activities.
We started the year with a great AGM held in Taupo, Last-minute

registrations gave us a better than expected turnout, making for a superb weekend. Having registrations come in late does not help with the planning and a few weeks out we were starting to get a bit nervous about the lack of response. However, it all turned out well in the end but it would truly be appreciated if members could do their best to register as much in advance as possible.

At the AGM the membership endorsed the

Board's work in regard to Lake Waikare and this year the Board met in Hamilton and visited the lake firsthand. Directors were encouraged to remove their shoes and wade into the lake up to their ankles and try to see their toes. Since then we have brought Ron Coley, the former Chief Engineer for DU Canada, out to view the lake and surrounding district and we have since started the process in the Environment Court. While here, Ron also managed to have a look at Lake Ngaroto near Te Awamutu and gave the Waipa District Council the benefit of his experience in other parts of the world.

The board launched Wotland Care New Zealand this year, a re-branding and a name change to our original project Operation Wellands. Wetland Care New Zealand will continue to spend our hard-carned money on very valuable wetlands projects throughout the

country and continue to do everything that it had done previously. The advantages of Wetland Care New Zealand are that it can now solicit sponsorship in its own name and this has already been achieved with a large grant from Banrock Station, an Australian wine manufacturer which has entered the New Zealand market. Things have worked very well and the Wetland Care New Zealand logo is now starting to appear on some Banrock wines. So keep your eye out for them and support our sponsors.

Making progress on our project to re-establish brown teal on the Chatham Islands has been relatively frustrating this year. DOC's decision to introduce disease screening has held us up significantly, and time for completing the project to our funders' satisfaction is running out. Hopefully this issue can be sorted out and addressed in the new year.



Finally, I must thank all our supporters, volunteers and helpers who have contributed so much to our activities this year. Your efforts are appreciated and I look forward to your continued support in the forthcoming year.

- Craig Worth

For the first time there has been a payment out to DUNZ with \$9,000 being paid early this year. Following that payment the balance held as at 31 March 2001 was \$290,511.77.

As at 23 May 2001 with the gains since the end of March the balance was \$303,072.71.

While the downside of the investment markets is clearly seen over this last year we are still confident the fund is operating better than having all funds on fixed deposit which is the only viable alternative.

- David Smith Chairman of Trustees

#### Blue Duck

The 2000-01 year has been another good year for blue duck (whio) with 10 young produced, five at Esplanade Aviary, three at Peacock Springs, and one



at Peacock Springs, and one at each of Hamilton Zoo and Staglands.

We were again looking at doing a release on to Mt. Taranaki but of the 10 young there was only one female. As females are needed more than males, we decided against a release.

It was good to see the young pair at Peacock Springs producing three in their first season of egg laying. They promise to be a good pair for the future.

There were eight losses (three males and five females, and not counting the birds released into the wild over the year), with two of our oldest males dying. One of these, 15 years old, was at Hamilton Zoo and produced young in the last season. The other male was at Jim



DU Wairarapa Chapter Chairperson Ross Cottle at a wetland development on the property of Andrew and Rachel Mitchell ut East Taratahi, Wairarapa. The development is being assisted by a \$3,000 grant from New Zealand Waterfowl & Wetlands Trust. Photo: William Abel.

## The New Zealand Waterfowl & Wetlands Trust



The last year has been a "steady as you go" approach by the trustees. Our funds have remained with Spicers.

The financial year for the Trust ends on the 31 December. As at 31 December 1999 the trust fund stood at \$298,712. As at 31 December 2000 the fund had risen to \$307,164, which was a return of 2.83% after tax and charges. This return is more a reflection of the ups and downs of the financial markets than a true indication as to how the fund is working.

The vagaries of the stock market have continued to have an impact. As at 31 March there had been a reduction in the value of the portfolio by \$5,835.68 due to the downturn in the USA and in deposit rates. Since then all of that decrease has been recovered and a gain of \$13,000 made,

Location	Eggs Laid	Eggs Fertile	Eggs Hatched	Young Fledged
Palmerston North	14	12	6	5
-lamilton Zoo	5	3	2	1
Staglands	7	2	2	ēt.
C. Ailison	.0	0	0	0
P. Langdon	11	٥	0	٥
Peacock Springs	27	8	7	3
luckland Zoo	8	1	0	o l
Willowbank	0	D	0	0
R. Munro	0	0.	0	O
Drane Park	٥	O	٥	0
Cowhel Park	٥	0	0	0
Otorohanga Kiwi	4	Ö	0	0
vga Menu	0	0	C	0
l Egan	0	Ø	0	0
Campbell	4	0	a	0
Broadlanda	5	5	G	0
Manawatu	O	O	0	0
OTAL	85	31	17	10

# Ducks Unlimited New Zealand Inc. INCOME AND EXPENDITURE ACCOUNT

For Year Ended 31 March 2001

Income		E	xpenses	
	Membership	\$18,309	Administration	\$7,543
	Donations & Fundraising	\$40,032	Conscrvation Projects	\$90,500
	Conservation Donations	\$46,892	Flight Magazine	\$13,840
	Other Income	\$2,348	Total Expenses	\$111,883
			Deficit	\$(4.303)
				- 4
			Bank Balance at 31 March 2001	\$43,822

Copies of a full set of audited accounts will be available at the Annual General Meeting or on request from the DU Treasurer, P.O. Box 9795, Newmarket, Auckland.



Campbell's. This bird, which had come from the wild, was more than 16 years old, and is the father, grandfather, and great grandfather of most of the birds we have in captivity.

The many transfers of birds planned for this year are awaiting transfer permits from DOC.

#### Blue Duck Releases

At the last count only two males were found out of the 11 released. The two females that had been seen up to that time were not found. They could have moved on to other streams on Mt. Taranaki which were not looked at. Here's hoping.

One thing we did learn about the release is that some birds did not feed well and died of starvation There is a big need for a halfway house where ducklings can go to learn to feed on aquatic invertebrates and also learn to handle rough terrain. We are presently looking at two places where we can do this. Funding will need to be found to build a large aviary for pre-release. The aviary will not be on display to the public.

The above data shows that there are still a lot of infertile eggs. This seems to be a problem in captivity and it could be due to a number of

factors: type of aviary, diet, and other things. Slimbridge or WWT are having major problems with this. It is better than it used to be and I am working on some of the problems.

- Peter Russell

#### Royal Swan

This has been another successful breeding year with 19 cygnets raised to maturity and firm orders for 10 birds. The success



of the breeding scheme relies entirely on the devotion of some of our members. Ross Cottle generously supplies feed to keep the birds we have to hold over in good condition. Jim Campbell and Dave Johnston do a lot of the background work with the birds and Peacock Springs in Christchurch provides encouragement and support invaluable to the survival of the birds in New Zealand. All of the successful breeders of these magnificent hirds can feel proud of their efforts - it is not easy seeing them to maturity. One breeder needs to be singled out though: Trevor Hughs, on the Napier -Taupo road, has had unprecedented success over the last two years in rearing 14 birds. We are now back in a position of strength with our captive numbers of the birds and can rest a little easier. Thanks to everyone who supports the scheme.

- William Abel

#### Wetland Care



all the people who give generously of their time and expertise, pointing out where we have made mistakes in the past and where benefits can be found in the developments we are advising on.

resident guru in this field. In the last year we have contributed approximately \$17,000 of our own funding into members' wetland developments. This doesn't include the funding received for the Ashhurst Domain project, or the substantial finance placed towards the case of rehabilitating Lake Waikarc.

awaiting funding for the new financial year. Things are looking good for wetland restoration around the country.

- William Abel

In the last year we have supported and encouraged numerous people in the development of their wetlands. Thanks are due to

Jim Campbell needs special mention as our

At present we have five projects on file

# **SUPPORT** WATERFOWL AND WETLANDS

Checking grey teal nest boxes at the end of the season in Jim Law's part of Wairarapa

2000. This photo supplied by Jim shows the nest boxes high and dry.

appears to have been done without getting an our wet. Jim reports that rainfall in the area

for January to March 2001 was a mere 69 ml, compared to 253 ml for the same months in

# SPORTWAYS **GUNSHED LTD**

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## **Wanted to Buy**

Pairs of any of the following:

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Shoveler

Scaup

Grey or brown teal

Or any other native duck species

Phone Gail (06)756 7624 At Stoney Oaks Wildlife Park, Inglewood.



# **Lead Shot & Wetlands**

The effects on wildlife of lead introduced into the environment through shot and lead sinkers have long concerned wildlife and conservation organisations. Recent Government moves to encourage the use of non-toxic shot will affect those with an interest in game bird hunting and conservation, as outlined in recent correspondence from Mike Hucks, the Chairman of the Wildfowlers Association of New Zealand to Minister of Conservation Hon. Sandra Lee, The following summarises this correspondence:

"Your government has made the decision to introduce non-toxic shot commencing 2002 game bird season and a programme that will see such shot over wetlands compulsory by 2005.

"Research in NZ has clearly indicated that while lead shot is of little environmental hazard to indigenous or exotic species in our country, there is a small but significant percentage of waterfowl, ducks in particular, that are poisoned by its ingestion, sometimes leading to mortality...(This)... appears to be a hazard only in shallow water wetlands, and is directly related to feeding habits of these vulnerable species."

Mike Hucks says that the Wildfowlers Association (WANZ) supports the introduction of non-toxic shot for use in wetlands and the timetable for its introduction. However, he advised against "too hasty emotive regulations" which might lessen support and compliance by game bird hunters, if such regulations ignored scientific research and didn't reflect New Zealand's hunting

conditions and shooters' requirements

WANZ could not support a requirement for non-toxic shot for shooting species like shelduck or Canada goose over pasture, cropping land, forestry or deeper marine estuarine waters where ingestion of lead is of very low frequency.

The change to non-toxic shot would also have other implications, including technical and ballistic problems affecting shotgun safety and range, likely costs to hunters of non-toxic ammunition and the need for some to replace or adapt firearms. There was also the possibility that if fewer people went duck shooting, funds available to Fish & Game from licence sales could decline. As well as reducing funds available for Fish & Game conservation offorts generally, there was the possibility of younger hunters being excluded and wildfowling becoming the preserve of the wealthy. He warned of a possible political backlash from hunters or farmers who could be disenfranchised by the costs involved.

In his letter, Mike Hucks canvassed wider issues to do with conservation of wetlands and wetland species, and what WANZ sees as the Department of Conservation's failure to ensure that adequate funding and priority are allotted to national or regionally important wetlands. While introduction of non-toxic shot over wetlands was a positive move, it did not address the major needs of our wetlands and the plight of indigenous birds, fish and plants.

"WANZ together with our sister organisation, Ducks Unlimited, have a strong conservation ethic. We urge your government to lead the initiative on wetland restoration." A Timetable For Non-toxic Shot Introduction

The Minister of Conservation has approved the following transition timetable for New Zealand:

2001 Season: Pamphlet provided to all game bird hunters explaining the reasons for the transition, and the consequences for hunting methods and firearms.

2002 Season: Voluntary change promoted at pre-identified sites on Conservation and Fish & Game wetlands

2003 Season: Mandatory requirement for non-toxic shot to be used at sites identified at the remainder of Conservation and Fish & Game wetlands.

2004 Season: Mandatory requirement for non-toxic shot to be used on all Conservation and Fish & Game wetlands. Voluntary change promoted for wetlands on private land.

2005: Mandatory requirement for non-toxic shot to be used for all waterfowl hunting.

[Reference: FACT SHEET 1: THE ISSUES - THE NEED FOR CHANGE, Fish & Game New Zealand web site. The Fish & Game web site at www.fishandgame.org.nz has further fact sheets dealing with the lead shot issue and implications for shooters. There is clearly some variation between the views expressed by WANZ and the information provided in the Fish & Game Fact Sheets advise shotgun owners to consult a reputable gunsmith for advice on what adaptations to chokes will be suitable for particular guns.]

#### Predator File:

#### Ferrets

Ferrets have been in the news recently as the media mines the broader issue of biosecurity highlighted by foot and mouth, breaches of border controls by snakes, mosquitoes and other unwanted immigrants.

Ranged on one side of the ferret issue is a small lobby formed by those who keep and breed ferrets as domestic pets, in much the same way as people breed guinea pigs, rats and other animals. Several times on news and current affairs television, ferret owners and their admittedly appealing pets were given exposure. Among the arguments presented for continuing to allow the keeping of ferrets as pets were that the animals were domesticated, desexed, and unlikely to survive for long in the wild if they were to escape. Clips of the furry rascals on leashes, or cradled in their owners' arms, or gamboiling around the lounge were hardly evocative of the killers opponents of mustelids know.

The introduction of mustelids was first proposed in 1881 to control rabbits - despite concerns expressed at the time that mustelids could seriously endanger native fauna. While they reduced rabbit populations, mustelids were major players in the decline and loss of some of our native fauna. Ferrets are mostly ground dwelling and eat small mammals,

Mustelids have a huge impact on New Zealand's native species. Stoats kill 40 North Island brown Kiwi chicks per day on average which adds up to 15,000 per annum. That accounts for 60 per cent of North Island brown kiwi born. Another 35 per cent of the chicks are also the victims of other predators including ferrets, Of the north Island brown kiwi that hatch, only five per cent survive. Controlling mustelids will make a significant difference to survival chances of North Island brown kiwi whose population is halving every decade.

(From Ferrets, Stoats and Weasels - Cute Killers, DOC Factsheet.)

birds, lizards and frogs. They often kill poultry during mid to late summer. Stoats are avid climbers, feeding on birds, rats, mice, and invertebrates. Weasels are less common, and eat birds, mice and lizards. During the early 1990s it was discovered that ferrets can carry bovine tuberculosis.

In May, Forest and Bird called on the Minister of Conservation to ban the keeping of ferrets as pets in New Zealand. This was in response to DOC's release of a public consultation document "What can we do about Ferrets?" in 1999, and received resounding support for a complete ban on ferrets as pets.

Over 1,000 submissions were made on the discussion document. About 77% of all submissions received from individuals requested a total ban on the keeping of ferrets by anyone in New Zealand, a view

supported by Forest and Bird. However, in a press release, Forest and Bird noted that the discussion document focuses on means of control rather than a complete han.

Forest and Bird's analysis of the submissions on terrets revealed overwhelming support for a complete ban on keeping ferrets by anyone. anywhere in New Zealand, (77% of submissions from individual respondents). There was a very high rate of response - particularly considering the closing date being the last day of the millennium! Conservationists, farmers, rural and environmental organisations, recreational hunters and regional councils were united in their support for a ban on keeping ferrets. There was a high level of public awareness about the threat to wildlife and biodiversity (36% of individuals commented on this) and awareness of the role of ferrets in transmitting tuberculosis to cattle,

The submission from Forest and Bird considered a number of options for ferret control, and concluded that the status quo was not an option. Forest and Bird proposed a nationwide ban on keeping ferrets, including a "sunset clause" of five years for existing pet ferrets.

The discussion document and analysis of submissions are available from the DOC web site:

http://www.doc.govt.nz/cons/pests/ fact53.htm



# The Basics of BIODIVERSITY

There are three kinds of biodiversity (short for biological diversity):

#### Habitat diversity

The variety of places where life exists - coral reefs, old-growth forests in the Pacific Northwest, tallgrass prairie, coastal wetlands, and many others. Each broad type of habitat is the home for numerous species, most of which are utterly dependent on that habitat. When a type of habitat disappears, a vast number of species disappear as well. Elimination of all but small patches is especially damaging because it not only eliminates many localised species but also threatens those species that are dependent on vast acreages for their survival.

Genetic diversity

The genetic diversity within a species (a collection of individuals that could, in principle, interbreed) is primarily the variety of populations that comprise it. Species reduced to a single population contain less genetic diversity than those consisting of many populations. The survival of populations, as well as species, is important because of the unique genetic information contained within populations.

A species' survival depends on the survival of its populations. Where only a few populations remain, the set of genetic instructions for how the species might adapt to threats is reduced.

Species diversity

This is the most common understanding of biodiversity. There are about one and a half million named species on earth, but the total number is probably between five and 15 million. The greatest species diversity is found in tropical rain forest - possibly as many as 90% of all species on earth.

The survival of each kind of biodiversity is linked to the health of the other two, and collectively they comprise the wealth of ecosystems.

#### Loss of Biodiversity

The loss of biological diversity may take many forms but at its most fundamental and irreversible it involves the extinction of species.

Over geological time, species have come and gone as part of a natural process. In historic times, human efforts have drastically speeded extinction of species - a trend which is continuing.

Species may be exterminated by man through hunting, collection and persecution, and habitat destruction and modification. Overhunting, in terms of overall loss of biodiversity, is far less important than habitat modification and loss. The genetic diversity represented by populations of crop plants or livestock is liable to reduction as a result of mass production techniques involved in modern agriculture.

Most sustained human activity modifies the natural environment. This affects the relative abundance of species and in extreme cases may lead to extinction. The habitat can be made unsuitable for the species (clear-felling, pollution of rivers), or become fragmented, dividing previously contiguous populations of species into small sub-populations at risk of extinction.

There is a high probability that large-scale changes in global climate and weather patterns will increase extinction rates, although their exact effects may be unclear.

#### The Value of Biodiversity

Understanding and studying the world's biodiversity and how to manage it and use it, can bring enormous benefits in scientific knowledge, in sustained environmental management and in new products - pharmaceuticals, crops, fibres, petroleum substitutes, restorative agents for water and soil.

The potential of pharmaceuticals and medical products from wild species is simply enormous. These species have had literally tens or hundreds of millions of years to evolve biochemicals that by natural selection protect them from viruses and hacteria and that enable them to digest a vast range of substances.

Concern for biodiversity is relatively recent. In the past, most conservation efforts were focused on saving a particular species from decline or extinction. Protecting an easily identified endangered species usually involved protecting that species' habitat and therefore all the other plants and animals in that habitat gained protection as well. However, areas protected for a single species are not necessarily those which maximise conservation of biodiversity.

As industrialisation and habitat destruction increase exponentially, so does the loss of biological diversity. Scientists predict that as more and more ecosystems are degraded, the rate of species extinction - already at an incredible one-half percent per year according to Harvard evolutionary biologist Edward Wilson - will accelerate.

["Guarantee the Right to a Safe Environment" by Rodger Schlickeisen, The Los Angeles Times, 21,10,96] As we work to reinforce connections in the environment, so we build connections of our own. As we care for natural communities, so we strengthen our own communities' sense of well-being. As we heal the living world around us, so the healing begins inside. All this, too, is part of biodiversity.

["Seeking Meanings", by Douglas H. Chadwick, from Defenders Magazine, Winter 1992/93.]

Today there is recognition that it is far more officient to conserve whole ecosystems which encompass biodiversity at all levels, rather than focus on a few highly visible and popular species in isolation.

## Can the World Tolerate Fewer Species?

Biodiversity increases ecosystem productivity. Each species, no matter how small, contributes to the sum of processes enabling the ecosystem to prevent and recover from a variety of disasters. Humanity benefits from as large a number of species of plants as possible, meaning more variety of crops and a larger number of species of animals ensure that the ecosystem is naturally sustained.

## What About Apparently Useless Species?

Every organism, no matter how small or unattractive, has its place in the ecosystem.

The view that a particular species has no practical use is more likely to indicate our ignorance of often crucial inter-relationships implied in biodiversity. Every organism has a functional role (or 'niche') in its habitat or ecosystem. Species contribute to valued ecosystem services (which we don't often appreciate) such as regulating the watershed, generating soil fertility, pollinating crops and contributing to the cycling of water, energy and nutrients. These ecosystem services are vital to human welfare.

"Because of the tremendous concentration of species in the tropics and their often narrow geographic ranges, biologists estimate that tropical deforestation will result in the loss of half or more of the existing species on earth during the next 75 years.

Apparently insignificant animals play a big role in the food chain. Invertebrates play crucial roles in the base of the food chain, in nutrient recycling, energy flow, and so on. Without them humans would not survive.

## The Permanence of Loss of Biodiversity

Humanity is now in the process of destroying roughly as many species during the next 50 to 100 years as were wiped out every 100 million years by natural causes. It takes only a few decades, as history shows, to drive a once-abundant species, like the passenger pigeon, to extinction. It is inconceivable that, during coming millennia, evolution could replace with new species those lost to deforestation and other human actions." (The Green Fuse: An Ecological Odyssey by John Harte.)

"The decline of indigenous biodiversity is New Zealand's most pervasive environmental problem, with nearly 1,000 indigenous species being threatened. Animal pests and weeds pose the greatest conservation threat on land and in freshwater, affecting landscapes, habitats and the survival of species. Unwanted pest introductions may make matters worse."

 Department of Conservation. Statement of Intent, 2001/2004, p. 13.



## Correspondence: Who's Working in the Best Interests of Brown Teal?

Dear Editor,

I refer to the recent advertisement (Whangarei Leader, 1.5.01, page 10) by the Department of Conservation concerning so-called "careless duck shooters" who "tragically shoot" brown teal, a protected species. I was extremely disappointed to see DOC attack game bird hunters in such an unbalanced way.

The New Zealand organisation, Ducks Unlimited, the majority of whose members are game bird hunters, has bred for release no fewer than 1,600 brown teal. To put this in perspective, that's bird for bird the size of the entire wild population. In contrast, when I asked DOC for specifics about how many brown teal were actually shot, I was rudely informed they'd heard "rumours".

Since only a handful of hunters hunt in "rumoured" areas, the number of teal shot, if any, can only be very low. To put it another way, for every one supposedly shot, hunters have raised hundreds — for which DOC's advertisement gives them not the slightest credit.

As someone who has for 25 years devoted a great deal of effort and money to rearing and releasing rare waterfowl, huilding wetlands, trapping predators and planting trees, I find this to be a complete kick in the guts for all such wildfowl enthusiasts.

I was present when all the brown teal produced by New Zealand's private waterfowl breeders one year were assembled at a private residence awaiting release in Northland. However, DOC couldn't be bothered giving permission for the release. Brown teal are extremely aggressive and, as their breeding season approached, they began to kill each other in the pens. Every day the breeder concerned pleaded with DOC for the authorisation - a fax was all that was needed.

Dozens tragically died because of OOC's intransigence and every day more lifeless bodies were removed.

So my message to DOC is: you have killed more brown teal in the last decade than all the duck hunters in Northland combined. In fact, if it wasn't for all the hunters, there probably wouldn't be any wild teal left for you to have to complain about.

Surely an unreserved apology is called for. Yours sincerely,

John Dyer.

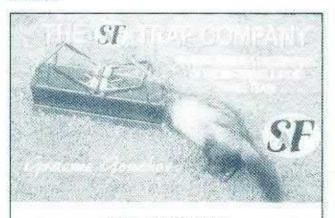
(This letter was copied to Hon. Sandra Lee, Minister for Conservation, the President of DU, and Mr Rudi Hoetjies, Manager, Northland Fish & Game Council. -Ed.)

# Wetlands Awards 2002

Entries for these annual awards administered by DOC are now open. Awards for five categories will be considered, including agency projects, private or community projects, educational effort, proven programmes and lifetime personal achievement. Projects submitted should represent examples of best practice in wetland management, research and education

The awards are open to all and nominations may be made by individuals or groups concerned in a project.

A nomination must be accompanied by a justification of its merits, in terms of the award categories described above. The documentation must, where relevant, include a description of the wetland and its values, an assessment (illustrated as appropriate) of its condition before and after the work and the objectives of the management, repair or creation. Documentation must also explain how the work was done, including the approach used, principal problems encountered and how they were overcome, and details of assistance received from other agencies or individuals.



P.O. BOX 558 TAUPO

PHONE/FAX: 07 378-0855

RES: 07 377-6361

DU members who may have placed orders and had them returned are asked to note the new SaF Trap Company P.O. Box number. The outcomes achieved need to be detailed and if the nomination is based on anticipated outcomes, describe the monitoring undertaken to assess the degree to which those outcomes are being achieved. The role of the nominee should be described and the names and phone numbers of two referees to whom inquiries can be made included.

#### Evaluation

Experts from the Department of Conservation and others appointed by the New Zealand Wetlands Committee will assess nominations and report their findings to the Committee.

#### **Assessment Guidelines**

Nominations will be assessed using the following guidelines, where they are appropriate.

#### Site-based Projects

To what extent does the project make a difference to the site (what is the scale of contribution to wetland conservation, relative to the resources available to the nominee, and is it practical to maintain the desired condition of the wetland?) and for the communities interested in the wetland? In terms of community interest, assessment will be made of the extent to which the significant wetland values are safeguarded by the project, or provided for elsewhere and the opportunities provided for public appreciation of wetland values. The opportunities provided for iwi or other cultural perspectives on wetland management to be promoted will be assessed.

For future projects, assessment will include the extent to which the project presents opportunities to develop new methods or approaches to wetland conservation and research.

Assessment of future programmes will include the extent to which the work provides opportunities to promote public awareness of the values and vulnerabilities of wetlands, and their need for wise use and conservation and how the project has encouraged other wetland conservation initiatives.

#### Research, Education, Public Awareness, Conservation Incentive and Other Wetland Programmes

Assessment of conservation outcomes will focus on what extent onthe-ground conservation outcomes can be demonstrated, what changed behaviours can be attributed to the programme and what recognition the programme has received for establishing new benchmarks in practice.

Nominations close on 30 September 2001. Requests for fuller details and submission of nominations should be directed to Brian Sheppard, External Relations Division, Department of Conservation, P.O. Hox 10-420, Wellington.



# Weed Control Without Chemicals

Creation, regeneration or rehabilitation of a wetland will often involve removal of weed species as well as encouragement of species which will enhance the habitat for wetland bird and animal life. Apart from the cost of chemicals, there is growing awareness of the harm some may do to species in the habitat.

There is a large body of research and experience relating to non-chemical weed control, much of it linked to organic agriculture but also of interest to those seeking effective means of controlling weeds in reforestation and landscaping and gardening.

A mix of approaches, including those as old as horticulture itself, may not completely replace chemicals but may substantially reduce the need for them.

Using a variety of control methods will lessen the chances of particular weed species dominating an area. Careful selection of species (i.e., shade, ground cover, annuals, etc.) for replanting will also influence what other species will flourish in the microhabitats you create. Be aware that some "weed" species, such as gorse, broom or jerusalem cherry, may be useful nursery species which will gradually be replaced by the native species germinating and growing beneath them.

Efficient composting or burning, rather than transporting and dumping weed material elsewhere, will lessen the chance of pest species' seed being spread.

#### Mulching

Mulching with a variety of materials, including clean straw, pea straw or hay, controls diseases and suppresses weeds. Perennial weeds may be better controlled with cover crops and fallow treatments. A cover crop can be allowed to grow on the area to be planted, then tilled under, destroying weeds before they go to seed.

Polyethylene mulch warms the soil (solarising), reduces fertiliser leaching, and helps in water conservation and weed control. Black mulches suppress many grass and broadleaf weeds. Paper will suppress some species.

Clear mulches will allow the soil to warm faster than opaque or black mulches. Weeds, however, will grow under the clear mulches. Clear mulches can be used for soil solarisation during the summer. Germinating weeds will be killed by the high heat under the mulch.

#### Use of Machinery

Preventing weeds seeding is the key to longterm weed control. Hand tools - hoes, slashers and pruners - can be effective over time. Mowing and cutting with weedcaters and line trimmers will stop tall weeds seeding and encourage shorter species. Mown weeds drying on the soil surface form a mulch which will reduce subsequent germination. Avoid deep cultivation of the soil which will bring weed seeds to the surface.

"Mechanical fallowing" is an old technique used in cropping. It involves cultivating the area to be planted and then tilling repeatedly at intervals as the weeds appear. This is similar to the "stale seedbed" technique used to clean up a field before planting a crop where planting is delayed until a flush of weeds emerges. The weeds are

destroyed, depleting the weed seed pool in the top inch of soil. This process may be repeated several times if your planting schedule permits.

#### Thermal Control

Weeds can be selectively killed by application of heat, either by using lpg burners or steam applicators and even boiling water (if a plentiful source is available). Some steam systems deliver steam to an applicator head through an insulated hose. The steam hits the weeds at temperature of between 95°C - 110°C, destroying them within seconds. Weeds and pathogens in the soil can be killed prior to new planting by solarising the soil (see above).

#### Non-chemical Sprays

Homeopathic sprays are worth investigating. Organic gardeners or farmers will be able to provide information on these. Vegetation control contractors in Auckland have controlled weeds along roads and footpaths throughout Auckland City with an organic fatty acid derived from coconut which is not harmful to humans.

#### Water Regime Control

The natural cycle of many wetlands involves alternate periods of flooding and drying and these are crucial to the growth cycles of wetland plant species. The article, "Water Regime", in Flight 107, page 9, summarises the importance of the wet-dry cycle for maintaining the balance of plant species in a given habitat. The best guide to what species are most appropriate to a wetland under restoration will be the species composition of undisturbed wetlands elsewhere in the region or locality.

# Small Space Conservation



Urban residents, local bodies and corporates can foster biodiversity and create seasonal habitats for local animals by providing food, water, cover and places for wildlife to breed. Even the smallest section can become a wildlife habitat and even the most raw subdivision can be transformed. Some forethought in planting or renovating a section or other small area can cater for the needs of a remarkably diverse population of birds, mammals, amphibians and insects. (See the photo on the back cover of this issue which shows what Christchurch City Council has achieved on its oxidation ponds.)

- Plant food-bearing vegetation plants and trees which produce berries, nuts and seeds. Plant wildflowers and leave the seed heads on them during autumn.
- \* Encourage native plants they will adapt to the soil and climate conditions and are the best way to provide habitat, requiring less water and fertiliser and are watershed-friendly landscaping choices as they contribute less pollution to rivers and streams.
- \* Feed the birds high-calorie foods like sunflower seed, fat or lard provide enough energy to help birds through winter cold. Place feeders out of the wind and keep them clean. Small ponds and fountains will provide water for many species.
- Provide cover native evergreens provide both cover and seed for small mammals and food for seed-eating birds.
- \* Install nesting boxes install roosting boxes in the winter so they will be weathered and available for early nesting birds. A brush pile in a corner will create cover for birds and small mammals and at the same time offer a hibernation place for some species of insects.
- \* Control predators uncontrolled and stray pets are predators. Bell cats, trap rats and possums, and kennel dogs.

[Adapted from: Backyards, too, are habitat for wildlife. By Marilyn Bauer. ENN Website, January 17, 2001.]



# Swan at Stoney Oaks

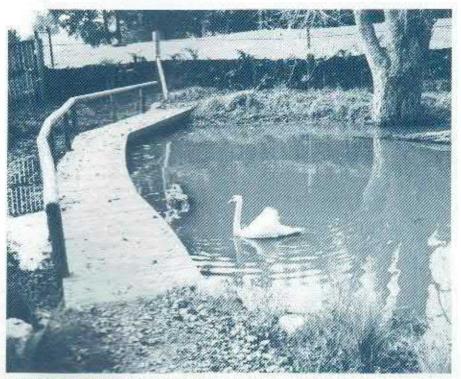
Flight 107 featured an article on the Stoney Oaks Wildlife Park operated by Trevor and Gail Simons at Inglewood. The park is expanding, as Gail Simons writes:

"We would like to thank Ducks Unlimited, and especially William Abel, for supplying a beautiful white swan for our wildlife park.

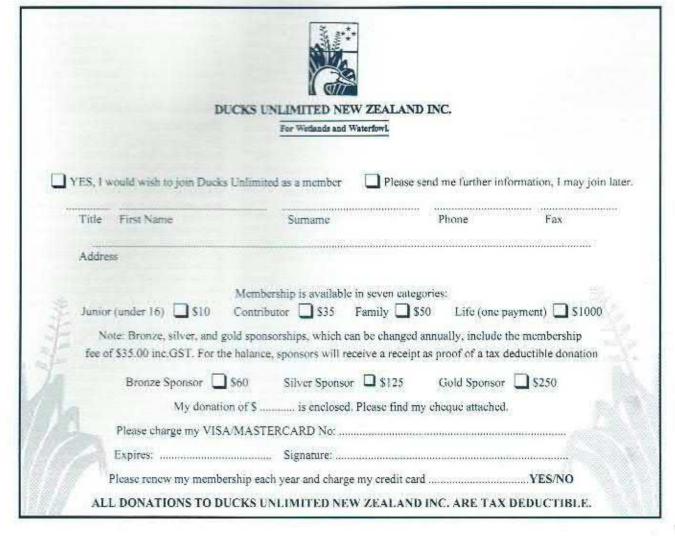
"We collected the cob from Otaki and he travelled extremely well and has settled into our new wetland area beautifully.

"The swan has been named 'Royal', which suits him - a noble-looking bird who will obviously be king of the lake. We are enjoying him and know that thousands of other people will, too, over the years.

"The wetland area opened on Mothers' Day. I'd love to call it 'Swan Lake' but we're still deciding."



Royal in residence at Stoney Oaks Wildlife Park's new wetland. Photo: Gail Simon.)





# &c.

#### Simply Follow Instructions...

Bird banding even has its own urban legend in the form of a 70-year-old misprint that has gained new credence, thanks to the Internet. Last year, several newspapers and wire services reported variations on the following tale, which was circulating widely on the Internet. The Government, they claimed, had changed the inscription on bird bands from "Wash. Biol. Surv." - an abbreviation for Washington Biological Survey - because on some bands "Biol." was misspelled as "Roil"

A camper (sometimes a hunter or a farmer) supposedly wrote to say he found a crow (or a coot or a vulture) wearing the band, followed the directions to wash, boil, and serve, but the bird still tasted horrible.

#### There May be Something in This...

A soaking wet individual in camouflage gear and waders entered the psychiatrist's office, deposited his shotgun in the corner and started to explain his problem. "Doctor, doctor..!" he started.

"No need to repeat yourself, mate," replied the doctor, "One 'doctor' is enough."

"Yeah, well, you see, I've got this problem," the man continued. "I keep hallucinating that I'm a dog. A large golden retriever, It's crazy. I don't know what to do!"

"A common canine complex," said the psychiatrist soothingly, "Move over here and lie down on the couch."

"Oh no, Doctor," the man said, "I'm not allowed on the furniture with wet paws."

#### Late Auction Item

The incentives for members to be there for the Annual Conference dinner and auction have been increased by the donation by Waikato member George Blair of a Canada goose hunting package for two valued at \$1,000. Gun, ammunition, accommodation and meals will be provided as required and the package can be uplifted at any time during the season, including the special moonlight hunting season. Further arrangements will need to be made by the successful bidder.

#### Thanks...

Flight continues to be a vehicle for publicising the work DU is doing for wetlands and wildfowl. With the gratifying help of the increasing numbers of members who contribute to the content, especially through correspondence to the editor, the production team of Alan and Di Wilks and Steve Oxenham has continued to be able to bring Flight out regularly at reasonable cost. The support of advertisers, which subsidises production costs, is valued but there is always room for more advertising which would be of interest to members.

Being printed on glossy stock makes Flight uniquely unsuitable for wrapping fish and chips, lighting the fire, or mulching around plants on wetland margins. Recycle your copy and help spread the DU message - donate it to your school or local library, smuggle it into your GP's waiting room or lend it to a potential member. - Ed.

# Conservation on the Net

The following web sites illustrate how wetlands can form the focus for teaching programmes in schools and elsewhere to support environment education for young people and the wider community. Most of the sites listed contain a range of resource material and programme outlines which can be simply adapted to New Zealand.

#### www.terrene.org

Established in 1990 as a not-for-profit, non advocacy organisation, the Terrene Institute works with business, government, academia and citizens to protect our environment and conserve our natural resources. Education and public outreach comprise the cornerstones of the Terrene Institute, which assembles the best minds and expertise to provide accurate information - and presents this information in attractive, understandable, usable formats. This web site contains extensive resources and suggested action for wetland education.

#### www.environment.gov.au/water/ wetlands

The web site of the Wetlands Section of the Environment Australia Marine and Water Division which administers the National Wetlands Program and implements international conventions on wetlands and agreements on migratory water birds in Australia, Areas covered on the site include the National Wetlands Programme, migratory water bird conservation, Ramsar Convention, the National Wetlands Research & Development Programme, and a directory of Important Wetlands In Australia.

#### www.tigerlink.org/escape.html

Education is the key to creating a generation armed with enough knowledge to successfully protect the environment. The E-SCAPE web site details a comprehensive environmental programme which integrates technology, the outdoors, and education through an environmentally based curriculum centred on conservation, preservation and endangered or threatened species. Established in the US and supported through the creation of a unique public-private sector consortium, E-SCAPE brings together the best of the best in education, technology, conservation and environmental science that delivers a high profile programme for all participating schools.

...And there's more. Using a search engine like Google, entering "Wetlands + education" will call up hundreds of sites, many American, which show the kinds of programmes and resources available. Many of the web sites listed in this section of Flight in previous issues also contain educational content, Examples include the Wildfowl and Wetlands Trust site (www.wwt.org.uk), the Department of Conservation (www.doc.govt.nz), plus web sites of institutions like the Mount Bruce National Wildlife Centre (www.mtbruce@doc.govt.nz).

## Funding for Environment Centres

Nine environment centres throughout New Zealand will receive funding of up to \$50,000 from the Ministry for the Environment. The Ministry received 21 applications for funding and of the initial \$300,000 available, the nine successful applicants will receive between \$10,000 and \$50,000.

"This funding recognises the Government's commitment to supporting environment centres providing environmental information and education to the community," Environment Minister Marian Hobbs said when making the announcement jointly with Green Party co-leader Rod Donald on 29 May,

Money was allocated to support both existing centres, and to establish several new centres. Centres to receive funding include the Fat North Environment Centre, the Christchurch Environment Centre, the Dunedin Environment Centre and the South Coast Environment Centre (Riverton). New centres will be established in Northland, Nelson, Tauranga, Raglan and Invercargill.

Ms Hobbs said grants made to the centres would be used to cover the basic costs, such as rent, power, phone and salaries.

"Being able to fund these basic administration costs means that the centres can spend more time providing information and education programmes to the community, and less time trying to fundraise. In some cases, it will ensure that the centre remains open."

Environment centres are places accessible to the general public that provide environmental information and education services for the community. The centres often act as a focus and meeting place for community action on environmental issues. The second funding round closes at the end of August.

## Budget Measures for Biodiversity

The Government's "Eco 2001" package, released on 9 May, announced new funding to enhance the protection and conservation of our unique animal and plant species under the New Zealand Biodiversity Strategy.

Aspects of the package relating to biodiversity included increased funding for biodiversity assessment and support by \$2 million to \$6 million extra. Spending on measures for protection of threatened species through post and weed control, and through measures such as kiwi sanctuaries, was to increase by \$5 million to \$13.5 million extra, and there was increased additional funding for biosecurity measures.

The additional funding was focused on achieving the goals of the New Zealand Biodiversity Strategy and was to be spread amongst the Department of the Conservation, Ministry for the Environment, Ministry of Agriculture and Forestry (Biosecurity) and Ministry of Fisheries. The Strategy's main goals are to restore and sustain a full range of New Zealand's dwindling species and their habitats, safeguard the important introduced species, and also safeguard tangata whenua interests in the protection of indigenous plants and animals. Funding would assist communities by improving information, and help landowners and others to improve the condition of biodiversity on private land.



# DRAWING: The Flounder

drawing technique for new wildlife artists. elqmis a gnioubottni etutaet teluget A . . .

**[59]** confused with pateke our endangered brown The Maori name for this flatfish is patiki, not to be

the bottom, eyes up. fiattening stage the flounder swims and lies on moves round to join the right eye. From this nght side up, and slowly flattens out. The left eye seabed or bottom of an estuary, always with the ordinary fish but in infancy comes to rest on the The flounder is hatched in the shape of an

packground flounder can change colour to match its that allows it to merge with the bottom. The and the top is a pink-spotted grey camouflage The underside of the flounder is whitish in colour

remove all the bones. and is an excellent food fish, easy to fillet and water, this fish is caught with set-nets or speared Commonly found where fresh water meets sait

Illustration republished courtesy of Alan Fleiding.

pointe election bonny to hins, tail hin out and of course THE YELL UP MON and how with the tail you must come to grips -gdil unoh tau year mouth mad

Environmental Tax Breaks

conserve native vegetation on their properties, says WWF Australia. that will reward and encourage farmers to Government must introduce tax reforms for Farmers

WWF Australia's Murray Darling Basin inancial resources," says Jamie Pittock, philanthropists is often limited by lack of landholders to act as environmental The ability of farmers and other rural

habitat on their properties. to preserve significant areas of wildlife blocks and in many cases, farmers who wish as tural tentees, people who own bush remnants. This rules out land owners such cncouraging commercial land use rather than conservation of bush or grassland "The existing tax system is geared toward Programme Leader.

conservation on their land but the tax farmers who are keen to contribute to There are a great many landholders and

managing land for conservation, tax deductions for costs associated with land, he said. These included access to tax conscruation reserve system on private serve as building blocks for a permanent ецесиле тах вшенфшента мріси мопта proposed a number of simple, cost-Federal Government, WWF Australia had on property purchase. In talks with the Landcare rebate and had to pay 10% GST control, were not eligible to receive costs of teneing, weeding and feral pest conservation measures could not claim Candholders who wished to introduce system is holding them back," he said.

[www. Ausbulia Press Release] conservation, conscituation covenant and OST exemptions on purchases of land for nature to protection of bush land through a deductions for any drop in land value due

> from The Stars EYE Spy: View Wildlife million in the 1950s to approximately three

> > FLIGHT ECOFILE

North Atlantic Canada geese, studies that can be monitored on the DU (Inc.) web property of mallards, proteins and available to gain knowledge about the (Inc.) is using the most high tech methods are successfully hatched and fledged. DU being monitored to see how many ducklings breeding grounds. Nesting hens are also шяке грейт еріс јошпеуѕ то тас потгаста biologists are using satellites and the Internet to monitor ducks and geese as they Ducks Unlimited (Inc.) waterfowl

will help us do just that." that are used by the birds. These studies resources on the most important habitats Unlimited. "It is critical that we focus our Dr. Bruce Batt, Chief Biologist at Ducks тоге тая 100,000 вется суету усат," said We continue to lose wetlands at a rate of

production in the Great Lakes. having important effects on waterfowl the coming years and clucidate factors will be integral to conservation planning in throughout the breeding season. The study grams, emit signals that biologists can track lipstick size transmitters, weighing 20 implanted with radio transmitters. The tiny, date, over 150 hens have been captured and mallard bens to determine factors that influence local mallard breeding populations in the Great Lakes region. To A three-year project will monitor 600

the bird's population has fallen from 10.3 common duck, after the mallard. However, Pintails were once the second most

via email every day, then downloaded and transmitted to biologists and location of the ducks. The information is information including activity levels, date, time space, relaying a broad spectrum of the tiny devices send signals to satellites in Valley of California and attached backpack, satellite transmitters, Weighing only 20 grams, and partners trapped 50 pintails in the Central million today. In December 2000, DU (Inc.)

important species. conservation programmes to benefit this find clues helpful to managers in designing over sress for pinesils migrating north from the Central Valley of California, it's hoped to By identifying the most important spring stop-

they breed is lacking. information about goose numbers and where toute. To date, even the most basic important areas of habitat along the migration to reveal more about migratory patterns and the east coast of the US. The study is expected their northern nesting grounds in Newfoundland and Labrador to locations on that the geese fly as far as 1,000 miles from three-year tracking study. Scientists estimate Eccae is also being closely monitored in a The North Atlantic population of Canada

tuite day. timed to provide a location of the geese every data to a receiver on Earth. The signals are satellites that circle the globe, which then relay transmitters, The transmitters send signals to four geese from Newfoundland received In August 2000, 20 geese from Labrador and

From DU (Inc.) Media Release, 10 May, 2001, J DU (Inc.) web site at www.ducks.org Links to the satellite data can be found on the