

Flight

J
U
L
Y

1998

ISSUE 96



DUCKS UNLIMITED NEW ZEALAND INC.

For Wetlands and Waterfowl.



An Opportunity to Help With Native Afforestation On Motutapu

Planting native forest on Motutapu Island in the Hauraki Gulf has been going ahead for several years under the aegis of the Motutapu Island Restoration Trust. Over the past two years, planting days have been held, allowing volunteers, schools, clubs and others to help in the project. With the assistance of sponsors such as the NZ Lottery Grants Board, DOC, and business and service organisations, planting of native seedlings has been augmented with weed control and new fencing protecting bush remnants, wetlands and historic trees. For the 1998 planting season, 33,000 native seedlings have been grown in the WWF-NZ Motutapu Native Plant Nursery.

Planting days for the remainder of this year will be on July 5 and 12, and August 9 and 23. Special discount fares are available from Fullers, with ferries departing from the Auckland Downtown Ferry Building at 9.30 am, and Devonport at 9.40 am, returning around 5.30 pm on the days. Those keen to help conservation in New Zealand and have a great day on an island in the Hauraki Gulf Maritime Park should bring lunch, warm clothing, and sturdy footwear. Spades, trees, a hot drink and sausage sizzle will be provided by the organisers.

Planting trips for schools, clubs and special groups are available. For further details, phone Conservation Officers John or Sandra on (09)372 5560.



Keeping Tabs on North Island Blue Duck

Earlier this year annual surveys of blue duck were completed on the Whakapapa, Mangatepopo and Tongariro rivers. Good breeding has been reported on the Mangatepopo and moderate breeding on the Whakapapa, although a large flood on December 1 (1997) is likely to be responsible for the smaller broods encountered there. Unfortunately, the Tongariro River continues to suffer from the ash/sediment loads which have resulted from the Ruapehu eruptions over the past few years. Fine sand fills most pools and runs in the upper river following the sluicing of the Rangipo Dam late last year. This is suspected to have an impact on aquatic invertebrate life and, together with two good spring floods, perhaps explains why no production was recorded again this year.

A study of blue duck juvenile dispersal in the Northern Ruahine area is continuing. Four adults and one juvenile had transmitters fitted last year. Two were re-caught and new transmitters were fitted because the batteries were running out. All appear to have adjusted well to their appendages and no problems have been experienced with the harnesses. One of the adult females was located incubating eggs in early December and it was hoped that progeny would result to allow the study to continue.

Adapted from Rare Bits - The Newsletter About Threatened Species Work. Number 28, January 1998. Department of Conservation.

After several years' association with southern North Island DU members, we would like to offer a special rate to all DU members for the

1998 June to end of August Season

Taxodium Distichum (swamp cypress) -
average size 1-2m. Bundle of 20 trees (North Island), 15 trees (South Island)

freight and GST inclusive for

\$50.00.

We also grow flaxes, poplar, willows, metasequoia (dawn redwood), pin oak, etc.

***Send now for our price list of
timber, shelter and ornamental
trees.***

Murray's Nurseries Ltd.

Box 44 Woodville

Ph. (06)376 5212



**WE
SUPPORT
WATERFOWL
AND
WETLANDS**

**SPORTWAYS
GUNSHED LTD**

49 NORMANBY ROAD
MT EDEN
AUCKLAND

Phone 09 631 5275, 09 638 7279

INSIGHT

Graham Gurr

President

In this issue of Flight you will find reports from the various project co-ordinators on the activities of Ducks Unlimited for the past year. It can only mean one thing - it's Annual General Meeting time again.

I don't know what it is about a DU AGM that makes it so enjoyable. I've been to quite a few now and a lot of the time it's the same people, the regulars, who attend every year. But more than that it's members who might only attend once every few years. They are the familiar faces (the name has often been forgotten). Then there's the new member who is attending their first, who I hope feels welcome, and is made welcome among people who share the same interests.

A highlight for me will be the "Wetland Tour" - a chance to get out and look at DU in action. Here we can see where the money we raise ends up - in habitat. With Ken Cook, the director responsible for "Operation Wetlands", resident in Palmerston North, I'm anticipating something special. Auckland set the standard last year with a wetlands and winery tour. Now watch Manawatu try to better that.

There are a number of issues we have to address over the next year. These include proposed changes to legislation which will impact on wetlands and waterfowl. The AGM is your chance to make the board aware of your views. We also have a vacancy on the board, so if you feel keen to make a contribution at this level of the organisation, talk now to one of the present board members about standing for election. Being a board member takes a commitment of time, but it is worth the effort.

The AGM is a chance to renew old friendships, meet new people, talk ducks and have some fun. This year we return to Palmerston North for the 24th AGM. The last time we were there was for our 20th. The Manawatu Chapter pulled out the stops to make everyone feel at home. We can return knowing that once again the local Chapter will have under control all the detail that goes into organising a successful AGM. All we have to do is relax and enjoy it.

I'll be there. I hope you will be, too.



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: The Te Awatotara Creek, Chatham Islands. Grant Dumbell.

Flight is published by:

Ducks Unlimited New Zealand Inc. ISSN 1173-2776

P.O.Box 9795, Newmarket, Auckland, New Zealand.

Editorial Services: Gallery Books & Crafts, Box 99, Carterton

Printer: Lamb-Peters Print, 106A Main Street, Greytown

SPECIAL FEATURES

Murderous Mustelids

page 4

1998 Annual Conference Programme

page 6

Annual Reports 97 - 98

page 6

1997-98 Annual Accounts

page 9

Wetland Development at Shandon Golf Course

by William Abel

page 10

Let's Keep Ducks

by Bill Clinton-Baker

page 11

Can Teal Return to The Chathams?

page 12

REGULAR FEATURES

Our People

page 4

DU News

page 5

Drawing: The Australasian Bittern

page 13

In Flight Shopping

page 14

Flight Eco-File

page 15

BOARD OF DIRECTORS

Co-patrons	Lady Isaac, QSM, Christchurch	
	Norman Marsh, Reporoa	
President	Graham Gurr, Auckland,	(09) 489 5337
Chairman	Alan Wilks, Greytown,	(06) 304 9729
Vice-president/Treasurer	Craig Worth,	
	Box 5095, Hamilton,	(07) 846 8719
		a/h. (07) 847 7537
Directors	William Abel, Wellington,	(04) 586 2752
	Ken Cook, Palmerston North,	(06) 357 5484
	David Johnston, Reporoa,	(07) 333 8453
	Glenys Hansen, Masterton,	(06) 378 9967
	David Smith, LLB, Auckland,	(09) 298 4719
	Dale Stevens, Cambridge	

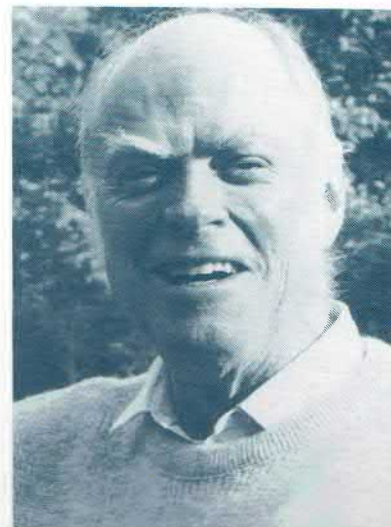
OUR People



Peter Russell

A long association since boyhood with cage birds and waterfowl characterises Peter Russell's curriculum vitae. He has been Secretary of the New Zealand Zebra Finch Society for 25 years, has looked after the birds at the Palmerston North Esplanade Aviaries for the past 20 years, and is President of the Palmerston North Cage Bird Club. He worked on a breeding poultry farm for 13 years, and is a judge of cage birds as well as showing them.

Since joining DU five years ago, Peter has been a member of the Manawatu Chapter Committee, and is Captive Co-ordinator for blue duck. He looks after waterfowl on the Centennial Lagoon. As well as his interest in waterfowl, he breeds and shows German Shepherd dogs. Peter is married to Anne and they have six children.



Tony Reiger

Dr Tony Reiger is one of DUNZ's earliest life members. This American's love for the wetlands he has visited throughout the length of New Zealand has inspired him to contribute volunteer work for DU, even though he lives in Juneau, Alaska.

Foremost are his efforts to champion and fund the MacMaster Award to encourage New Zealand schools to adopt or develop a wetland or plant trees on behalf of their community and their future. Tony presented the shield and provides an annual grant.

Although retired from public education, Tony feels that DU has a priceless message for New Zealanders, especially the young, and has worked to that end since joining 20 years ago. While here in May, he visited schools in Cannons Creek (Porirua), Masterton and Galatea that so far have received the MacMaster Award.

Murderous Mustelids

In April, Carterton waterfowl breeder and DU supporter Melvin Pike suffered a dose of the ferrets. When he had a domestic duck killed and several mauled, he stepped up his predator control programme and trapped mum and four young, and shot the sixth. The pictures show the tell-tale marks of ferret attack and the perpetrators. Advice to members: watch out for increased predator activity. *Photos courtesy Melvin Pike.*





DUNZ ON THE INTERNET

Wellington City Council advises that DU can be found within the Wellington World Wide Web site known as W4. The development of this site is supported by the council and gives a complete listing of What's On in Wellington.

To look at the information on DU, the address is: <http://www.wellington.net.nz>. When W4 page comes up, click on Community Information, then search the Community Directory and Accommodation. Click on the category Information and Ducks, then click in the Submit button and you should be there.

A COMPLIMENT AND AN APOLOGY

After the April issue of Flight was published, it was discovered that the cover photograph of the mute swan, which also accompanied the article on this subject, was in fact a photograph of a painting by well-known Wairarapa artist Paul Martinson. We apologise, Paul, that we did not seek your permission to use the picture and give you a credit, and we compliment you on the lifelike image which we believed was a photograph of a live swan. We are sure none of our readers was able to tell that the image was not a photograph. Congratulations.

WELLINGTON CHAPTER

On April 26 the Chapter ran a simulated field shoot in excellent conditions at the Hutt Valley Gun Club where 118 shooters were faced with 100 targets each, and there had to be a shoot-off for top gun. Chris Parkinson and Chris Scully took out 97 clays each - a remarkable achievement - with Chris Parkinson finishing the winner.

DU is grateful to Tisdalls Sports Centre for their generous sponsorship. The event raised well over \$800 for wetlands and waterfowl.

MANAWATU CHAPTER

Chapter Chairman Neil Candy with the support of his wife Julie provided morning and afternoon teas for the Whio Workshop held at the Leisure Centre, Palmerston North, on April 23 - 24 (see Operation Whio Report on page 7). Their efforts were greatly appreciated by those attending.

The Manawatu Chapter dinner and auction will be held on October 17 at the Coachman, Palmerston North. Contact Neil Candy for further details.

FENN TRAPS TO LEND

Dr Tony Reiger, Life Member and sponsor of the MacMaster Trophy, was staying in Palmerston North in May as part of his New Zealand tour and has generously donated a supply of Fenn traps to the Manawatu Chapter. These are to be loaned on returnable deposit to members in the chapter area with a predator problem. Contact Ken Cook on Ph. (06)357 5484.

This is an initiative which other chapters could consider. DU is grateful to Tony Reiger for this gesture.

DU AT MYSTERY CREEK

DU was generously invited by the Taupo Native Plant Nursery to share their stand at the field days at nominal cost. Directors set up a photographic display, manned the stand and had DU's attractive coloured membership pamphlets to hand out. Look for an update in the next issue.

SALE AND EXCHANGE

Mike Connole, Ph. (06)304 9754, has several mandarin pairs for sale, coloured up and ready to breed, \$300 a pair.

Nga Manu Trust, Ph. (04)293 4131, wishes to swap shoveler females for males.

THE DUCKS ARE BACK AT ASHHURST DOMAIN

Coinciding with the opening of the duck season, the completion of the DU excavations and raupo clearance of this extensive Manawatu oxbow was warmly received by the local ducks and other waterfowl.

There is ample scope for more work in this area and DU may be further involved in the ongoing development in association with other groups like Forest & Bird.

EKETAHUNA CHAPTER

The annual Chapter dinner and auction will be held on September 12 at Copthorne Resort, Solway Park, Masterton. Contact Ross Cottle, Ph. (06)378 7408.



BEAUTIFY
YOUR WETLANDS
WITH

TREES

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

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

**Nick NELSON
PARKER**

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

1998

ANNUAL CONFERENCE

PROGRAMME

In 1994 The Coachman proved to be a very popular venue for the 20th Ducks Unlimited Conference and again the Manawatu Chapter and Conference Convenor Ken Cook have arranged a full weekend's programme.

Friday July 3

6.30 pm - registrations open and happy hour. A chance for members to catch up with old friends and make new ones. Members will need to make their own dinner arrangements, although the Coachman is recommended.

Saturday July 4

9.30 am - Annual General Meeting.

10.30 am - bus departs for Mystery Wetland Tour, including barbecue lunch. These outings are most enjoyable, but bring your gumboots. There will be a small charge for the trip. The bus will return to The Coachman at approximately 4 pm.

The alternative activity for the day: the sights and shops of Palmerston North.

6.30 pm - members gather for drinks at The Coachman.

7.30 pm - a sumptuous Coachman dinner followed by presentation of the Bill Barrett Trophy.

Then "The Auction" in the capable hands of Levin auctioneer Bob Wood. Bob has conducted a number of DU auctions and his performance is worth the registration fee alone.

Sunday July 5

10.00 am - Predator Control Workshop conducted by Sean Boswell of Pest Management Services Ltd. of Waikanae. This subject is always of interest to members, so come along with your ideas. Coffee will be available during the morning.

12.00 noon - conference closes.

1998 ANNUAL CONFERENCE 24th	The Coachman Palmerston North
	Conference Registration \$45 per person. Accommodation \$88 per room per night for two. \$13 per night per extra person. (\$50 deposit, balance on checking out.) Bus organised from Auckland/Hamilton Friday evening to pick up members at points along State Highway 1. Returning Sunday afternoon.
3 - 5 July 1998	Send your registration to Ken Cook 53 Waterloo Cresc., Palmerston North. Ph (06) 357-5484

1997-98 ANNUAL REPORTS

PRESIDENT'S REPORT

Alan Wilks

It gives me great pleasure to present my report for the year ending March 31, 1998. My last report did not make pleasant reading. A year ago, Ducks Unlimited NZ Inc. was in a parlous state. Although asset rich by nature of the ownership of the Pearce and Sinclair wetlands, we were cash poor.

The year began with all our projected income committed to our budgeted expenditure by way of rates on the Pearce Wetlands, operating costs on the Sinclair Wetlands, severance pay owing to our Executive Director and debt servicing, leaving very little for conservation.

Then the situation began to improve. In May we entered into an agreement to sell the Pearce Wetlands with settlement October 31. This meant we could plan to substantially reduce our debt and servicing costs, but we were still carrying debt to the Waterfowl and Wetlands Trust and had obligations to meet by way of WWT money we had received for wetland development, brown teal and blue duck, and the Lottery Board grant for brown teal research on the Chathams.

Another interesting development arose in June when we received an approach from "a substantial but undisclosed purchaser" for the Sinclair Wetlands. Delicate negotiations took place over several months and, in December, we settled,

meeting our obligations to Horrie Sinclair. I must acknowledge the time and effort that past president David Smith put in to achieve this outcome. This meant that by the end of 1997 DU was completely debt free and was in a position to meet all its obligations.

At its February meeting your board agreed to invest the surplus capital in the Waterfowl and Wetlands Trust whose invested funds now stand at approximately \$265,000 which will produce a regular income for DU for all time.

With our strong financial position at the beginning of this year we were able to advertise in Flight seeking applications from members for subsidies for wetland development. We were inundated with these and it has taken some time to decide how to spend the Operation Wetlands

funds that we had (some \$12,000) to the best advantage. For those members who did not receive funding, their applications are still valid.

We also agreed to sponsor the blue duck workshop (see below) from our Whio reserves, and plan to assist DOC's Recovery Group this year.

In March we engaged Dr Grant Dumbell to undertake the brown teal study on the Chathams (see the article on page 12). Under the terms of the grant we had agreed to Dr Dumbell's time when he was Executive Director so his fee was also met from our reserves.

DU is now in a stronger position than it has been for many years, due entirely to the sale of the properties, and I make no apology for that.

I would like to acknowledge the effort and dedication of your directors who have worked hard to ensure that DU runs smoothly, and also the patience and faith of our members who supported DU through the difficult years. We can now look forward in the knowledge that every dollar we raise can be spent on waterfowl and wetlands.

I am confident that DU is secure in the new president's hands, and I wish him well.

OPERATION WHIO

Project Co-ordinator Peter Russell

In the latter part of 1997, Peter Russell took over as co-ordinator of the programme from David Smith.

The past seven months have been very busy. In December, I attended the Recovery Group meeting in Motueka where recovery plan objectives were discussed. These included having someone to look at the breeding programme as a whole, visiting breeders, looking at the stud book and making recommendations for a captive management plan and preparing a husbandry manual. Preparation of a strategic plan for blue duck captive management was discussed, as well as the need for a meeting of all breeders. For a captive release of blue duck in 2001, being able to breed birds and find a release site were identified as being necessary. In January, using a copy of Sparks, a stud programme, I began the long process of compiling all the data. This is continuing.

Twenty-five breeders attended the workshop in Palmerston North in April, with a good response from all five South Island breeders and all but one of the North Island breeders. The workshop was addressed by speakers with expertise in



The whio workshop at Palmerston North in April this year. Photo: Alan Wilks.

different aspects of breeding and animal health.

Wayne Hutchinson, the Blue Duck Recovery Leader, spoke on the Recovery Plan and Summary of Recommendations for the coming year. His recommendations included having a review of captive breeding by an outside person.

An overview of the blue duck studbook was given by myself, letting the breeders know where all the birds are and the ages and relationships of the birds.

Dr Murray Williams of the Department of Conservation was unable to attend, but spoke on tape about blue duck in the wild. He explained relationships on the rivers and how most of the ducks are closely related, most trying to breed not far from where they are born. When moved to another site, they have returned like homing pigeons. He also compared what is happening with Campbell Island teal, suggesting breeding approaches we might follow.

After lunch on the first day, we visited the Esplanade Aviaries, viewing the blue duck enclosure and aviary complex and the Centennial Lagoon to see the many duck species there.

Don Thomas, from Massey, spoke on nutrition and diet for blue duck. Don gave an analysis of the diet sheets which had been sent to all breeders to complete and return. Many breeders went away with ideas of changing their birds' diet.

Our most successful blue duck breeder, John Simister, from Staglands, spoke of his breeding programme, explaining how he had built his aviary and the success he had had with his brother and sister pair in producing 19 young over five years. We have only 39 birds in captivity. Some of these birds were hand reared, which is what we will have to do in future.

On the second day, Christine Reed, of DOC, spoke about what is happening inside the departments and some of the changes ahead. There is the prospect of greater ease in transferring birds between breeders.

Vet Elizabeth Lee, from Massey, spoke on health management and provided us with a checklist to be used when we examine our birds to ensure they look normal.

The final speaker was Wayne Boardman, a vet in wildlife medicine at Massey. He covered the disease implications of captive birds being returned to the wild. This discussion raised some of the problems which could arise when birds are released.

General enthusiastic discussion followed, and all breeders departed with their knowledge of blue duck increased and looking forward to the coming breeding season.

I would like to thank Ducks Unlimited for their generous sponsorship which allowed the workshop to take place, and also thank the Manawatu Chapter for the great job they did at the workshop.

In the last year we have lost four blue duck, two males and two females, of which three were over the age of 11 years and one female at two years. We have reared three young in the last year, with all these birds coming from our main breeding pair at Staglands. There are transfers of birds taking place throughout the country to make up new pairs.

OPERATION WETLANDS

Project Co-ordinator Ken Cook

Following our advertisement in Flight regarding wetland financial subsidies, the initial burst of applications seems to be easing to a more manageable level.

The first eight applications, amounting to a little over \$12,000, have been approved and some have been completed.

Applications received for subsidies on existing ponds have been declined, as we are currently assisting with the construction of new wetlands or the enlargement or enhancement of existing ponds. Several applicants have been happy to accept advice on how and where to create wetlands, with no financial assistance.

Subsidies approved in this round of applications have included the following:

- The Geoff Reid Stage 2 has been completed and now forms a series of very attractive ponds fed by the Mikimiki Stream. The area lends itself to the economical construction of wetlands of which there is no better example than Ed Campbell's newly completed ponds on Whare Flats at their property at Mikimiki.
- On the southeastern corner of the North Island at Lake Ferry, Murray Nix has built three new ponds, which are awaiting the end of this season's drought to fill what certainly looks like very worthwhile wetlands.
- At Woodville, Snow Parkinson is completing the fencing of his captive pond, where he has a spring fed pond containing five types of waterfowl. Scaup seem to thrive well there.
- Andy and Mirabelle Tannock have attacked the encroaching willows on their Opiki pond and have changed their wetland to bigger and better.
- Shandon Golf Club, with inspiration from Tom Caithness, has created a very interesting wetland on the course and, with a DU sign erected there, we can hope for a raised profile in the Wellington region.
- At Ohakune, Di Pritt is creating a new pond and retiring a hectare of farmland along with it. Also, a very comprehensive enhancement programme is planned for the "Heather Paddock" dam by raising the water level and retiring further areas by fencing.
- Further north, at Matapouri, Mike and Jane Camm are developing a significant wetland area in brown teal country. This is an exciting project with much interest from DOC, too. This project comes as an extension of the Operation Pateke exercise by assisting in the vital habitat restoration.

The above eight projects have been subsidised by our SWAMP funds and already other worthwhile projects are being evaluated for assistance.

OPERATION ROYAL SWAN REPORT

Project Co-ordinator David Johnston

The Royal Swan Project was set up in early 1986 to establish a safe haven for the species. The NZ Wildlife Service and others had been concerned by the rapid decline in the wild population which had diminished from about 2000 down to 200

- mainly through the Wahine Storm in 1968.

Over time, DU has successfully established over 50 pairs from Invercargill in the South to the Far North of New Zealand. I believe the species is fairly safe but problems do exist. Most of our stock originated from Lady Isaac's and the late Sir Neil Isaac's collection at Peacock Springs and our gene pool is quite small. We have hoped for some years to import eggs from Australia and we hope this will happen in the coming year.

The breeding season has again been poor and our efforts have been to re-establish pairs of swans which have lost mates. In the last Flight, I sought help from our members in letting us know of the availability of cygnets, as our other problem is the loss of birds from the project.

Although this will be my last year as Royal Swan Project Co-ordinator, Jim and Raana Campbell and myself will still be involved with the shifting of birds and in giving any other help possible to our members. It is fitting that I thank the people involved over the years. It has been great meeting you all and I would like to offer special thanks to Jim and Raana Campbell, Lady Isaac and many others. Our new Royal Swan Project Co-ordinator is William Abel, P.O. Box 13-212, Johnsonville, Wellington, Ph. (04)586 2752.

OPERATION PATEKE

Project Co-ordinator Alan Wilks

At the beginning of June, 11 breeders were holding 23 pairs, an increase of five pairs during the last year which I established to replace deaths and ageing stock, plus two new breeders.

Not all breeders had provided reports at the time of writing but from the information to hand the scheme has produced the target figure of approximately 40 birds. This was despite the disappointing season with reports of infertile clutches and juvenile deaths.

A release of 18 birds provided by Otorohanga Kiwi House and Hamilton Zoo was undertaken by DOC from Whangarei in March. These were released at Whangaruru in the Bay of Islands. We have not had any further information from DOC regarding the release.

Paul Asquith, Chairman Wildlife Committee, Moturoa Island Ltd. (Bay of Islands) wrote with welcome

encouraging news in April: "You will be pleased to hear that the brown teal supplied by DU some years ago are still doing well, with their progeny returning to Moturoa each year to breed. We had about 25 birds reach fully fledged stage last year and already (April) we have four pairs back in residence this year on our ponds making breeding-type motions."

TREASURER'S REPORT

Craig Worth

In my report for the financial year ending March 31, 1998, I would like first of all to thank my predecessor Glenys Hansen who for many years served this organisation as Treasurer. Glenys resigned for personal reasons and, despite the difficult times she endured, she managed to fulfil her obligations for the previous financial year. This was truly appreciated.

I would also like to thank Chris Strong who provided Sinclair Wetlands information.

Administrative changes have taken place this year, namely the introduction of computerised invoicing for subscription collection. A change in bankers from Westpac to Bank of New Zealand was brought about by the availability of a BNZ Cash Management system. This allows direct crediting of accounts payable and receivable, transfer of funds, transaction reports and overseas payments all from our PC. However, Westpac Merchant Banking has been retained.

We have also incorporated a budget reporting system so we can address any major variances if and when they occur. These changes have allowed us to maintain an effective day-to-day control of the operation.

This year saw a major turnaround in our fortunes with the sale of Pearce Wetlands for \$125,000 in November 1997 and the sale of Sinclair Wetlands as a going concern for \$320,000 in December 1997. This has allowed us to clear our total liabilities and invest \$190,000 with NZ Waterfowl and Wetlands Trust. In addition, it now places DU in a position where the administrative costs can be safely covered by membership income.

In conclusion, this organisation is now in a strong financial position and can look forward to an exciting year to come.



1997-98 ANNUAL ACCOUNTS

Note: The following is an abridged version of the audited Ducks Unlimited annual financial statements for the year to 31 March 1998. Members desiring a complete set of accounts should write to P.O. Box 9795, Newmarket, Auckland.

**KOPPENS
PASCOE**
PARTNERSHIP
CHARTERED ACCOUNTANTS
REGISTERED

AUDIT REPORT

We have audited the financial report on pages 1 to 12. The financial report provides information about the past financial performance of Ducks Unlimited (NZ) Incorporated and its financial position as at 31 March 1998. This information is stated in accordance with the accounting policies set out on page 12.

Management Committee Responsibilities
The Management Committee is responsible for the preparation of a financial report which fairly reflects the financial position of Ducks Unlimited (NZ) Incorporated as at 31 March 1998 and of the results of operations for the year ended 31 March 1998.

Auditor's Responsibilities
It is our responsibility to express an independent opinion on the financial report presented by Ducks Unlimited (NZ) Incorporated and report our opinion to you.

Basis of Opinion

An audit includes examining on a test basis evidence relevant to the amounts and disclosures in the financial report. It also includes assessing:

- the significant estimates and judgements made by Ducks Unlimited (NZ) Incorporated in the preparation of the financial report, and
- whether the accounting policies are appropriate to Ducks Unlimited (NZ) Incorporated circumstances consistently applied and adequately disclosed.

We conducted our audit in accordance with generally accepted auditing standards in New Zealand. We planned and performed our audit so as to obtain all the information and explanations which we considered necessary. We

obtained sufficient evidence to give reasonable assurance that the financial report is free from material misstatements whether caused by fraud or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the financial report.

Other than in our capacity as auditors, we have no relationship with or interest in the Society.

Qualified Opinion

The Society's activities included cash fundraising. There is no system of control over which we can rely for the purpose of our audit and there are no satisfactory audit procedures that we can adopt to confirm independently that all fundraising was properly recorded.

Subject to the foregoing, in our opinion, the financial report on pages 1 to 12 fairly reflects the results of operations for the year ended 31 March 1998 and the financial position of Ducks Unlimited (NZ) Incorporated as at that date.

Our audit was completed on 18 June 1998 and our qualified opinion is expressed as at that date.

R. J. Koppens
Koppens Pascoe
Chartered Accountants
Hamilton

DUCKS UNLIMITED (NZ) INCORPORATED

STATEMENT OF FINANCIAL POSITION

AS AT 31 MARCH 1998

Last Year		This Year
	Current Assets	
\$371	Mosgiel - S/W No. 3 Account	\$--
	National Bank of NZ - Mosgiel	
9,114	- Development Account	--
1,523	- Operating Account	--
18,249	- Term Deposit	--
--	Bank of New Zealand - Hamilton	231,578
5,934	Mastercard - Operating Account	--
1,220	Accounts Receivable	148
1,830	Office Supplies on Hand	--
5,781	Goods and Resale on Hand	4,126
6,011	GST Refund Due	--
50,033		\$235,852
	Fixed Assets	
481,803	As Per Schedule	78
531,836	Total Assets	235,930
	Less Liabilities	
24,823	Current Liabilities	
4,197	Accounts Payable	12,537
--	Prepayments	--
	GST Payable	10,909
29,020		23,446
	Term Liabilities	
36,000	HA Sinclair	--
77,000	NZ Waterfowl & Wetlands	--
	Trust	--
100,000	BNZ Finance Ltd	--
600	Duck Bonds	--
213,600		--
242,620	Total Liabilities	23,446
\$289,216	NET ASSETS	\$212,484
	Represented By:	
\$289,216	Equity (As Scheduled)	\$212,484
\$289,216	TOTAL ACCUMULATED FUNDS	\$212,484

DUCKS UNLIMITED (NZ) INCORPORATED

CASH EXPENDITURE ACCOUNT

FOR THE YEAR ENDED 31 MARCH 1998

Last Year		This Year
	Management Services	
\$378	Advertising and Publicity	\$--
760	Bank Fees	741
--	Insurance	20
394	Conference Fees	363
4	Corporate Sponsors	--
2,430	Freight and Duty	127
15,373	Interest Payable	17,533
52,759	Management Contract	1,194
2,797	Postage and Tolls	2,602
1,402	Printing and Stationery	1,870
1,100	Professional Fees	2,713
640	Storage	481
175	Subscriptions	85
1,549	Travel and Board Meetings	50
646	Sundry	221
80,407		\$28,000
	Membership Services	
14,193	Flight Production	14,834
4,755	Recruitment Expenses	79
417	Stationery and Postage	--
19,365		14,913
	Conservation Projects	
468	Peteke	6,973
300	Royal Swan	--
1,822	Whio	--
139	Wetlands	--
1,872	Pearce Wetlands	431
--	Wetlands - Swamp	1,649
--	Education/Promotion Expenses	889
4,601		9,942
\$104,373	TOTAL CASH EXPENDITURE	\$52,855

DUCKS UNLIMITED (NZ) INCORPORATED

REVENUE ACCOUNT

FOR THE YEAR ENDED 31 MARCH 1998

Last Year		This Year
	Membership	
\$1,778	Life	\$889
1,290	Gold Sponsor	1,109
630	Silver Sponsor	1,346
1,845	Bronze Sponsor	5,146
1,622	Family	1,600
15,111	Contributor	13,200
98	Junior	125
22,374		\$23,415
	Donations and Fundraising	
8,254	Annual Conference Fundraising	6,418
27	Annual Conference Registrations	--
	Profit/(Loss)	(1,876)
17,706	Chapter Receipts	11,838
7,998	National Raffle Profit	8,133
1,680	Sales Trading Profit	734
1,749	Flight Advertising	1,270
4,847	Sponsorship & Donations	2,822
42,261		29,339
	Other Income	
446	Interest Received	4,247
890	Life Membership Capital Reserve	--
1,336		4,247
	Conservation Donations	
222	Peteke	4,147
750	Royal Swan	875
1,967	Whio	--
200	Wetlands	--
25	Pearce Wetlands	50
3,164		5,072
\$69,135	TOTAL REVENUES RECEIVED	\$62,073

DUCKS UNLIMITED (NZ) INCORPORATED
SINCLAIR WETLANDS PROJECT ACCOUNT
FOR THE YEAR ENDED 31 MARCH 1998

Last Year	Income	This Year
\$1,878	Donations	\$580
4,700	Grazing income	2,350
2,367	Interest Received	862
8,686	Specific Purposes Income	1,967
17,631	Total Income Received	\$5,759
	Expenditure	
1,778	Advertising and Publicity	448
28	Bank Fees	13
--	Bird Food	216
84	Cleaning Expenses	30
721	Electricity	577
55	Fuel & Oil	129
--	Insurance	1,925
7,463	Manager's Honorarium	6,857
350	Office Expenses	72
428	Professional Fees	88
798	Rates	549
	Repairs and Maintenance	
1,641	- Buildings	2,201
270	- Fences	214
261	- Plant and Equipment	417
2,600	- Tracks & Paths	355
50	- Water Supply	--
839	Telephone & Tolls	519
2,803	Travel Expenses	--
1,890	Vehicle Expenses	1,441
8,800	Wages	8,105
617	Weed and Pest Control	147
333	Sundry	151
8,149	Depreciation	--
39,958	Total Expenditure	24,454
\$22,327	DEFICIT FOR YEAR	\$18,695

DUCKS UNLIMITED (NZ) INCORPORATED
STATEMENT OF MOVEMENTS IN EQUITY
FOR THE YEAR ENDED 31 MARCH 1998

\$337,239	Accumulated Fund	\$279,192
	Balance 1 April 1997	
58,047	Excess Expenditure	9,477
--	Extra Ordinary Items	
--	Loss on Sale of Sinclair Wetlands	81,146
--	Profit on Sale of Pearce Wetlands	13,891
279,192	Balance 31 March 1998	202,460
	Swamp Reserve Funds	
10,024	Balance 1 April 1997	10,024
10,024	Balance 31 March 1998	10,024
\$289,216	EQUITY BALANCE 31 MARCH 1998	\$212,484

Wetland Development at Shandon Golf Course

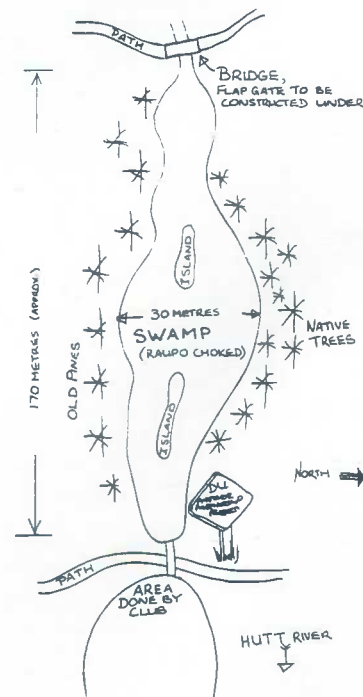
Shandon Golf Club, at the mouth of the Hutt River, is providing an opportunity for DU to promote its work with wetlands and wildfowl in association with a popular recreation. DU Director William Abel explains...

The development at Shandon Golf Club, where the Hutt River forms the course's north/south boundary, involves an existing waterway which is filled with fresh water on the high tide and runs out with the fall of the tide. One side of the development has a fine stand of native trees and shrubs, the other pines. The club intends to plant and landscape the development suitably. A flap gate will be installed to retain water on the receding tide.

It is well in the club's interests to maintain and enhance the area as it is in the middle of the golf course. The club excavated and landscaped an area of this waterway two years ago and it has a reasonable waterfowl population. The course also has a resident population of Canada geese and all the coastal birds associated with a wetland so close to the sea.

The club has an arrangement with a local contractor to accept fill from their developments, which gives the club access to machinery at reasonable rates. A ground keeper is an experienced machine operator. The development will need three or four days with a 12 tonne machine, at a cost of around \$1000, for it to be completed satisfactorily. DU has approved a subsidy of \$1000 for this work.

The club has adopted three flying mallards as its logo, and DU member Tom Caithness is a senior member of the club. Involvement in this development, and placing of DU signage, will considerably raise the profile of DU in Wellington and at one of the busiest golf clubs (over 1000 members) in the region.



Sketch map of Shandon development.

Let's Keep Ducks

The Sanctuary, a picturesque wetland created by Wairarapa DU member Bill Clinton-Baker, has featured in past issues of Flight. Bill shares his love of wildfowl and experience in creating habitats...

Nothing enhances a garden more than water - be it pond or stream or a combination of the two. Not only can attractive water-loving trees and plants be grown, but a collection of interesting waterfowl will add a further dimension.

What are the requirements?

Soil Type

It is important to check your soil type. Maybe you have a good sticky clay or loam. Equally, you may have stoney or light soil which will not hold water. It is possible to use a polythene liner for your pond, though again, cost is a factor.

Pond Size

Pond size will be governed by the area available. A small pond is quite suitable. One half the size of a tennis court will hold two or three pairs of ducks. Depth is important and even a small pond should be about two metres deep in the middle, and larger ponds as deep as possible. This is so the colder water at the bottom of the pond and the warmer water at the surface will set up convection or water movement. It is equally important for the water to shelve up to the banks, as the majority of ducks feed by up-ending to reach the bottom.

Siting and Landscaping

It makes a difference if your pond is in view of the house because much of the joy of a pond comes from watching the daily activities, not only of ducks themselves, but of other visiting birds - kingfishers, herons, stilts and swallows.

If the pond is large enough, have an island or two, and also some rafts anchored to the bottom. The birds enjoy loafing on these, and they look nice and will be safe from predators. An inverted tray mounted on a post about a metre above the water will almost certainly be used as a nest site by swallows.

Predators

Dealing with predators is the second of the two "musts". Cats are the worst, especially wild cats. Have a drop trap (i.e., the cage type possum trap) baited with meat. The Timms yellow possum traps, baited with meat, are also effective (but not if you have a house cat).

Several tunnels with Fenn traps should look after stoats and ferrets (see In Flight Shopping, page 14). Rogue hawks can

cause trouble, and the decision to dissuade these must be yours.

Water

An adequate supply of water is essential for establishing a pond. For seven months of the year, water may be no problem. But come the hot weather from November through to March, an attractive pond can become a muddy puddle.

Ensuring your summer water supply is one of the two "musts". Perhaps a spring can be harnessed or a stream diverted. Although a considerable cost might be incurred, a bore could be sunk and water pumped for garden and pond.

Planting

Plant clumps of common rushes at intervals around the banks, as well as trees for shade and appearance, depending on the size of your pond. Remember that trees suck up a lot of water during summer.

Long and tussocky grass on part of the surrounds is good for nesting. Flax is better than pampas, which harbours vermin. A small patch of raupo is good cover, looks attractive and harbours aquatic life for food for waterfowl. Control it by spraying the outside flags with Roundup - a cooling job on a hot summer's day.



The pond at The Sanctuary which illustrates advice given in this article.

Species

When you turn to stocking your pond, consider some of the following, noting the special requirements and disadvantages of some:

Scaup or black teal - an indigenous NZ diving duck which is, I feel, number one for any collection. As bottom feeders, they do not compete with other ducks for food. They will nest in any thick cover.

Grey teal - self-introduced from Australia, these are neat little brown ducks with a distinctive wing bar. They will probably attract wild ones, and are great aerobatic fliers. Use nest boxes, available from DU and also suitable for carolina and mandarin duck.

Grey duck - an indigenous dabbling duck which nests in low cover. The remarks about mallard below apply to a lesser degree.

Shoveler - the male is the most highly coloured NZ duck. Shovelers have a broad beak for surface feeding and nest in tussocky grass.

NZ shelduck or paradise - grazers more suited to larger ponds.

Black swan - introduced from Australia and suited to larger ponds.

White or mute swan - introduced and more powerful than, and incompatible with, black swan. For large ponds only.

Mallard - not to be considered because a pair will call in their wild relations - which may come anyway - and inundate your pond to the detriment of other species and your grain bill.

Exotics - including Carolina or North American wood duck and mandarin (native of China). The males are highly coloured and most suitable for small ponds or aviaries. Use nest boxes.

Care and Feeding

Ensure that all birds you order have been pioniioned when young, otherwise they will simply fly away. Nest boxes will also need to have ramps.

Feeding will depend on the size of your pond and the natural food supply. Some grain - about a handful a day - is usually necessary. Use wheat or barley, although wheat is probably higher in protein. Feeding in shallow water near the bank stops sparrows getting the grain.

Can Teal Return to the Chathams ?

The proposal to re-establish brown teal on the Chatham Islands is potentially at the leading edge of a new wave of faunal restoration initiatives on the islands. Several species which are now extinct on the Chathams have populations in New Zealand and could be reintroduced to the islands.

Although once fairly widespread in lowland freshwater ecosystems in New Zealand, in the past 150 years brown teal numbers and range have been severely reduced. Brown teal are internationally recognised as an endangered species and are regarded by the Department of Conservation as a species in the third highest category for conservation action.

Brown teal numbers in the wild are now fewer than 2000, limited mainly to Great Barrier Island and Northland. Small populations of captive reared birds have been established on Tiritiri Matangi, Moturoa, and Kapiti islands. A few isolated birds in Fiordland now face imminent extinction.

Captive management co-ordinated by DU has, since the late 1970s, seen over 1600 birds released into the wild. However, these efforts have not been highly successful in establishing breeding populations on the mainland. This remains a challenge in the recovery programme ahead.

In the Chathams, brown teal became extinct early this century, and from the literature researched by Dr Grant Dumbell, may well have become scarce by the latter half of last century. Subfossil bone collections from the Chathams suggest that the birds were present in the larger islands and probably in reasonable numbers. Their habitat included the lowland freshwater wetlands in the lower reaches of coastal streams and the swamps behind the coastal dunes.

In 1995, the Brown Teal Recovery Group asked Ducks Unlimited NZ Inc. to co-ordinate an assessment of potential brown teal habitat availability on the Chatham Islands. The project received partial NZ Lottery Grants Board support in 1996, and in 1997 DU made up the balance and contracted Grant Dumbell of Applied Ecology to deliver the project in March this year.

The Chathams were selected for the study because of the past history of successful conservation efforts on offshore islands, and the knowledge that brown teal populations were once, and can be again, successfully established in suitable habitats on islands. The Chathams also

have the advantages of being free from mustelids and not suffering summer drought. If a population can be re-established, it would provide a back-up to the population on Great Barrier Island which is vulnerable to the introduction of mustelids.

Grant Dumbell undertook fieldwork on the Chathams in March 1998. He consulted with the Chatham Islands Conservation Board, the Department of Conservation Chatham Islands Area Office and members of the Chatham Islands community. His report*, recently handed over to DU, has been written as a result of this work.

Grant Dumbell's report details a survey of sites where releases could take place, and where there would be a good chance of the birds surviving, breeding and establishing a self-sustaining population. The report also examines the logistics of any release of brown teal in the Chathams.

Further downstream would be a raft of statutory approvals to be sought - release and transfer permits, wild capture permits if wild birds are to be involved, and a transfer proposal. As well as the necessary consultation with statutory bodies, the Chatham Islands Conservation board, iwi on the islands, and interest groups in the Chathams community would need to be consulted.

Any attempt to re-establish brown teal on the Chathams would have considerable research value in terms of what it could show for other similar projects in future. Grant Dumbell says in his report that it would be "a great opportunity to gain significant information which can be applied not only to brown teal recovery, but to recovery efforts for other threatened waterfowl such as Campbell Island teal and possibly blue duck."

While there have been successes in New Zealand with moving and re-introducing threatened species, the reasons for the successes are often unknown.

The Chathams project would be an opportunity to test a number of different release designs, i.e., releasing large groups at different sites in the same or consecutive years, or small groups over a range of sites in the same year, and so on. Equally, the opportunity would be there to monitor the success of releasing wild teal from mainland locations or hand-reared birds, or a combination of both.

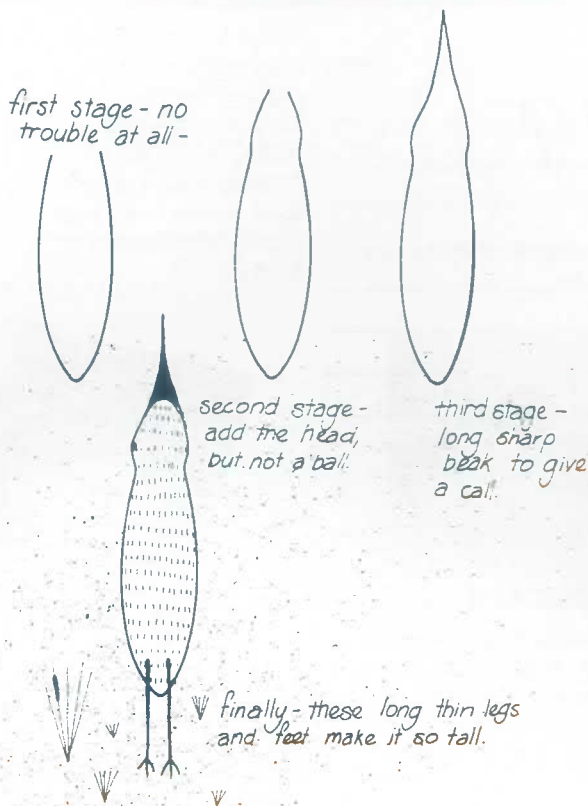
Copies of the report have been sent to all interested parties including, of course, the Recovery Group, for their consideration. DU has now to decide what further role it will play in developing the proposal to the point where brown teal are actually released on the Chathams. But Grant Dumbell says it is critical that the proposal and any release programme is well managed and taken forward in the full knowledge that it has the potential to establish some powerful precedents.

* Grant Dumbell. *Re-establishing Brown Teal on the Chatham Islands*. Applied Ecology. Auckland. 1998. This article has been freely adapted from this report.



The Te Awainanga River - one of the sites identified for release of brown teal in the Chathams. Photo: Grant Dumbell.

DRAWING: The Australasian Bittern



...a regular feature introducing a simple drawing technique for new wildlife artists.

The Australasian bittern (*Botaurus stellaris poiciloptilus*) is also known as the Australian brown bittern, brown bittern or matuku-hurepo. A native of New Zealand, it is found on densely vegetated wetlands throughout our main islands and some larger offshore islands but no longer in the Chathams; also in New Caledonia, SE and SW Australia and Tasmania.

It is 710 mm from beak to tail and both sexes are alike, with mottled brown colouring and golden buff on the upper surface. Legs and feet are pale green. The female builds the nest, usually in reed beds, and breaks down all the reeds within reach until the platform is well above water level. She lays three to five olive-brown eggs which take 25 days to incubate.

Bitterns are hard to see. If disturbed they freeze with their bills turned skyward, as in the drawing, so that they look part of the reed bed. They feed on fish, eels, frogs and tadpoles, insects, worms, spiders, lizards, rats, mice and even birds.

Illustration republished courtesy of Alan Fielding.



DUCKS UNLIMITED NEW ZEALAND INC.

For Wetlands and Waterfowl

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

.....
 Title First Name Surname Phone Fax
 Address

Membership is available in seven categories:

Junior (under 16) ☐ \$10 Contributor ☐ \$35 Family ☐ \$50 Life (one payment) ☐ \$1000

Note: Bronze, silver, and gold sponsorships, which can be changed annually, include the membership fee of \$35.00 inc.GST. For the balance, sponsors will receive a receipt as proof of a tax deductible donation

Bronze Sponsor ☐ \$60 Silver Sponsor ☐ \$125 Gold Sponsor ☐ \$250

My donation of \$ is enclosed. Please fine my cheque attached.

Please charge my VISA/MASTERCARD No:

Expires: Signature:

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

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

Shopping

FOR AROUND THE POND



FENN TRAP MK 6

Deadly on ferrets, stoats, weasels and rats, these all metal traps are easy to set and are the ultimate quick kill tunnel trap. **\$30.00 each or \$50.00 pair**

FENN TRAP TUNNEL

These heavy duty moulded fenn trap tunnels are perfect for safely setting your Fenn Traps. Each tunnel can be used to house either one or two traps, depending on your set. As used by the Department of Conservation, they actually increase your catch rate. **\$35.00**



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. Bait with either fruit or meat depending on your trapping target. **\$40.00**

BAIT STATION

This waterproof heavy duty plastic bait station is ideal for around your captive pond or aviary. It has a huge bait reservoir and can be used against possums, rabbits and rats. It really is a "set and forget"

predator control weapon to add to your trapping programme. **\$25.00**



GREY TEAL NEST BOX

As featured in Flight magazine, 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**

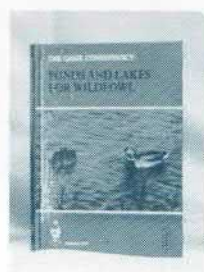
ESSENTIAL READING

NEW ZEALAND WETLANDS: A MANAGEMENT GUIDE

Far and away the most comprehensive New Zealand guide to managing wetlands. This has a load of answers to your questions about how to build a wetland, what to plant, what lives in a wetland, what legal controls apply and where to go for further information. This book is required reading for anybody who is serious about looking after wetlands. **\$25.00**

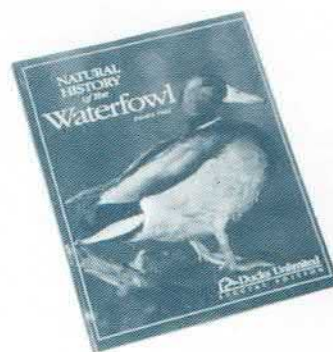
PONDS AND LAKES FOR WATERFOWL

Published in Britain by the Game Conservancy, this book covers the development and improvement of waterfowl habitat with many interesting ideas. **\$54.00**



NATURAL HISTORY OF THE WATERFOWL

A superbly illustrated large format book. It covers 160 members of the duck, goose and swan families from around the world. The text deals with all aspects of biology, feeding habits, courtship and migration. Coloured maps show the distribution of each species and large photographs simplify identification. **\$195.00**



THE DU ART GALLERY

WILDLIFE CARDS

These cards feature attractive photos of mute swan and brown teal. Each pack contains 10 cards of each (total 20 cards). **\$10.00 per pack**



PLEASE SEND ME THE FOLLOWING ITEMS

Name: _____	ITEM _____	QTY _____	PRICE _____	TOTAL _____
Address: _____	_____	_____	\$ _____	\$ _____
_____	_____	_____	_____	_____
Phone: _____	_____	_____	_____	_____
PAYMENT DETAILS	_____	_____	_____	_____
I enclose my cheque for	_____	_____	_____	_____
\$ _____ as payment.	_____	_____	_____	_____
Please charge my credit card	_____	_____	_____	_____
VISA/MASTERCARD	Prices include GST and Postage & Packing		TOTAL \$	_____
	Tax Invoice Required <input type="checkbox"/> Tick			
Card No. _____	Send your completed order form and payment details to.			
Expires: _____	Graham Gurr, P.O. Box 9795, Newmarket, Auckland. Ph: 09 489 5337			
	Please allow three weeks for delivery.			
Signature: _____				

Flight Eco-File

MORE ON THE LEAD SHOT ISSUE

The October 1997 Flight carried a short article on the question of environmental hazards posed by lead shot, with the undertaking to keep members informed of developments on this issue.

A recent issue of Conservation News*, issued by Forest and Bird, announced a new campaign to protect New Zealand's wetlands and lakes from contamination by lead. Forest and Bird has approached relevant government ministries and wants an immediate phasing out of lead shot and lead fishing weights.

A report on lead poisoning in cattle and sheep** by Professor D.M. West of Massey University confirms the toxicity of lead shot ingested by birds. Because birds' acid stomachs are close to their gizzards, which grind food and any lead shot they have eaten, they are particularly susceptible.

The Forest and Bird article cites a 1992 study undertaken in the Waikato which indicated that up to 14% of wildfowl had lead shot in their gizzards.

West's report finds lead is less toxic under most conditions to sheep and cattle grazing pasture used for shotgun shooting, i.e., clay target ranges. There may be a possibility of pasture lead levels rising over time, resulting in higher blood and tissue lead levels in sheep and cattle, but lead contamination from other sources can be very high. One study suggests that vegetation near a busy highway may contain up to 500 parts per million of lead from exhaust fumes. Normal pasture levels are up to 10 parts per million.

However, stock fed silage (in which the acidity converts some of the metallic lead into a toxic soluble lead salt) from pasture contaminated by lead shot may suffer chronic lead poisoning.

Elsewhere, West quotes a United Kingdom study in which, in an experiment, a calf was given 100 grams of lead shot a month over four months. The calf's blood values remained

normal, and low tissue levels indicated that there was very little absorption from the lead.

* Conservation News. No. 108, March 1998. Royal Forest and Bird Protection Society of New Zealand. P.O.Box 631, Wellington. Wellington, 1998.

** West D.M. Lead Poisoning in Cattle and Sheep. Institute of Veterinary, Animal and Biomedical Sciences, Massey University, Palmerston North.

WHITE-WINGED DUCK

The article "Wetlands and the Emerging Fresh Water Crisis" in the April issue of Flight detailed how wetlands are crucial to the world's freshwater supplies and how they are the most fragile and threatened of the planet's ecosystems. Recent catastrophic forest fires in Indonesia (edged out of the headlines by political developments) destroyed over a million hectares of peat swamp forest wetland in areas like Sumatra.

The Sumatran peat swamp forests are also the habitat of the white-winged duck (known locally as the spirit duck because of its haunting call). The Wildfowl & Wetlands Trust (WWT) has been working to save the species for 30 years, but now reports that fewer than 2,500 now survive in the wild, and possibly as few as 250. Only three sites in Sumatra are known to support more than 20 of the birds, and all of these have been damaged by fire. As much as 30% of the world's white-wing duck may have perished. In a draft action plan prepared for the Species Survival Commission of the World Conservation Union, WWT has listed the bird as among endangered species with a 50% chance of becoming extinct within the next 10 years.

WWT has accordingly appealed to organisations and individuals for money to get scientists into the field in Sumatra as soon as possible to survey the damage and make plans for protection of surviving birds.



WINCHESTER®

MORE THAN A NAME. A LEGEND.



Foreman's Reserve (Wairarapa). Photo Alan Wilks.

Proud to support Ducks Unlimited
New Zealand Inc.
in their efforts to conserve
New Zealand's wetlands and waterfowl