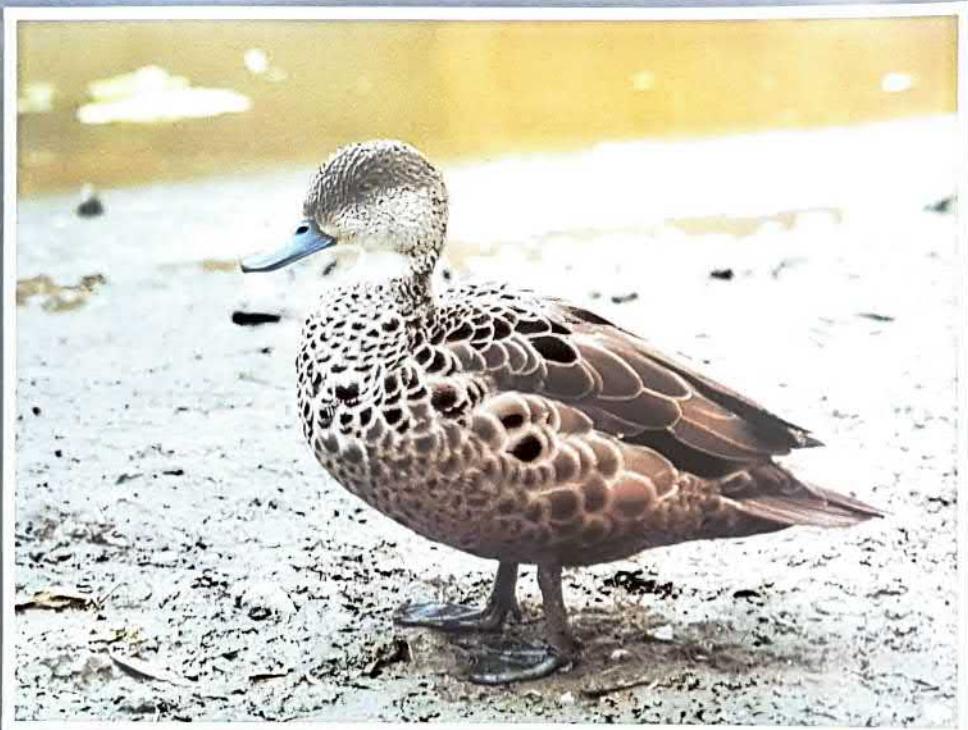


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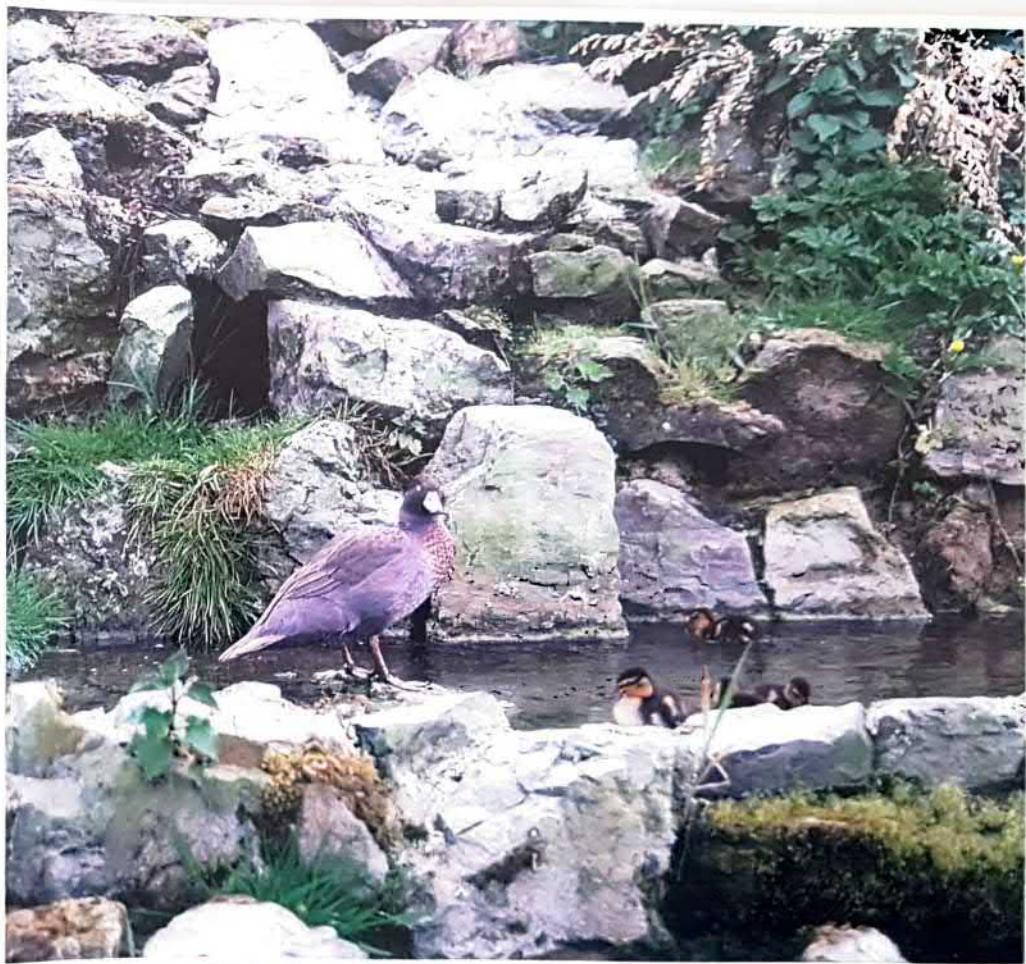


Flight

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WATERFOWL JOURNAL



In association with ducks unlimited U.S.A., Canada and Mexico



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— FOR WATERFOWL AND WETLANDS —

PO BOX 44-176 LOWER HUTT, NEW ZEALAND

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Cover Photo: Blue duck and young at Arundel Wildfowl trust, U.K.

Ducks Unlimited (NZ) Incorporated is a private, charitable, non-profit conservation organisation dedicated to the preservation, restoration, creation and maintenance of wetland habitat in New Zealand, the propagation and conservation of the country's rare waterfowl, and the advocacy of wetlands as a valuable natural resource. This is achieved through six projects each with specific aims. These are: "Operation Pateke", the reduction of the threatened status of the New Zealand brown teal through the release of captive bred birds and wise habitat management; "Operation Gretel", to increase the number of grey teal in New Zealand through the provision of suitable nesting habitat; "Operation Who", the conservation of blue duck through the release of captive bred birds to expand the species range; "Operation Branta", to establish the Canada goose in the North Island as a valuable recreational resource; "Operation Royal Swan", the conservation of Mute Swan through the establishment of a captive breeding population; and "Operation Wetlands", to preserve, create and manage wetland areas through direct funding, technical assistance and public education of wetland values. The scientific study of wetlands and waterfowl is also encouraged through direct funding.

The organisation was founded in May 1974 by a group of concerned conservationists and incorporated by them in June 1975 at Wellington, New Zealand. Membership, in four categories, is open to anyone who supports the organisation's objectives. Junior membership is \$11.00 per annum, Full membership is \$27.50 per annum, Trade and Sponsor membership is \$55.00 per annum, and Life membership is \$550.00. Membership carries a subscription to "Flight", the official quarterly publication of Ducks Unlimited which currently reaches 2000 members and friends concerned with waterfowl conservation. Letters, manuscripts and photographs should be addressed to the "Flight" Editor. To assure prompt delivery, members should send subscription renewals and changes of address to National Headquarters at PO Box 44-176, Lower Hutt. Any views expressed by contributors in "Flight" are their own and do not necessarily constitute those of Ducks Unlimited (NZ) Incorporated.

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In my first report as president I would like to spend a little time reminiscing on the progress of Ducks Unlimited (NZ) during the past fifteen years.

During this period there have been many personal high points and few very low ones, and being the only survivor from the first year of the DU Board of Directors in 1974 I have been fortunate to witness DU's progress at very close quarters.

Many of the high points have undoubtedly centred around the success of DU projects, starting with GRETEL in 1975 when we saw 6% usage of the first nest boxes ever erected for Grey Teal, progressing to over 900 boxes erected in many parts of the country and a boost in the Grey Teal population from 20,000 to over 50,000. PATEKE followed hot on the heels of Gretel and none really thought we had any hope of achieving the original aim of 1,000 Brown Teal reared in 10 years, and whilst we didn't quite achieve this we have now reared nearly 1,200 in 12 years. BRANTA was launched the same year as Pateke and started in a modest way, with 12 geese being transferred from Lake Ellesmere to the North Island in 1976, but from then to 1985 just under 400 geese were transferred and today around 8,000 Canada's reside in the North Island.

Another important event in the progress of projects was the 1979 export of Brown Teal to the Wildfowl Trust in the UK and the Trust's successful breeding of several hundred birds since then. The all important WETLANDS project started in the early 1980's when DU financed stopbanking work adjacent to the 120 nest boxes at Tony Flexman's farm in the Waikato. Since then DU, with great support from many members, has created, restored and protected many vital areas of wetland with Home Lagoon being the highlight to date. A real high for me has been to see more and more people attempting to follow Horrie Sinclair's outstanding example to us all.

Of course, the biggest overall event to date was the gifting of the magnificent Sinclair Wetlands to DU, which was followed by an impressive fund raising campaign to create a major environmental attraction at the wetlands. When we commenced the fund raising some three years ago, none in their wildest dreams believed we could raise close to \$300,000 and erect such an outstanding building at the wetlands. Such is the support for DU and what it is attempting to achieve. Recent years have seen two new projects getting into full swing, and WHIO & ROYAL SWAN are, I'm sure, destined to be as successful as other DU projects.

Another recent high point was the purchase of the Pearce Wetlands in the Wairarapa — an internationally important area for wildlife. A major fund raising venture to eliminate DU's mortgage on this property will begin soon and I'm confident that DU members and friends will ensure a successful campaign.

Another area of DU activity that has maintained a very high profile since 1974 has been the quarterly production of FLIGHT. Like all DU projects FLIGHT revolves around the input from individuals and one only has to look at the annual accounts to see that Brendan Coe, who has printed FLIGHT for us since 1982, has ensured that costs come down each year and quality goes up. The involvement of people on the DU Board of Directors has always been of the highest calibre. And while on this point I should mention that the DU Board always encourages participation at Board meetings by any members who feel they have something to offer, or who are interested in viewing the work of the Board at close quarters, and I

Presidents Report

would like to extend an invitation to members to attend Board meetings. (Dates of meetings and venue can be obtained from the Secretary).

The DU Board's ability, under the Constitution, to invite people to participate at Board level has been one of the main reasons for DU's successful management over the past 15 years. The system of 8 so-called 'permanent' Directors occasionally comes under fire, but I can assure you that without it DU would certainly not be the success that it is, for it allows for important and essential continuity. However, in spite of this permanency the DU Board has changed many times during the 15 year period and only myself, Diane Pritt and Gary Gurney have survived over 10 years. While on the subject of the DU Board meeting, Mark Newcomb joined the Board in 1981 and his expertise in many areas will be sadly missed. Fortunately for the Board, Mark has generously offered to continue to play a major part in organising the national raffles. Mark's place on the Board has been filled by Auckland lawyer David Rice and I would like to take this opportunity to welcome David to the Board. David has considerable experience in wildlife matters, having been involved with the Auckland Acclimatisation Society for a number of years.

The employment of Dr Grant Dumbell as our Executive Director represents another significant milestone in our progress and we certainly have the ideal person for the job. In a very short time we've already seen great results from Grant's activities and expertise.

Other incredible high points over the last year, or so, have been — the support from our Patron, with an Open Day at Peacock Springs and \$15,000 raised for DU, and her support for the Mute Swan recovery programme; the quite magnificent financial support from the Bradlands Wildfowl Trust; our excellent relationship with the QEII National Trust and the Trust's support for waterfowl and wetlands.

Other highs during the past 15 years have been our excellent relationship with the government wildlife agencies; firstly with the Wildlife Service and more recently with the Department of Conservation. Unfortunately, for me, both organisations have also produced low points — the first one being the demise of the Wildlife Service and the departure of many fine people and secondly the continual restructuring of the Department; not only because of the bad affect these moves have had on our wildlife, but also the disruption of staff, whose lives have, in many instances, been seriously affected.

DU's relationship with environmental groups overseas has provided many high points and these notes would not be complete without mentioning the outstanding support we receive from DU in the USA and DU in Canada. The goodwill between our groups is one of the keys to the success of the name DUCKS UNLIMITED.

Of course, Jim Campbell's work as President over the last five years has also been a major reason for our continued expansion in all directions, and I can also tell you that it was with great trepidation that I decided to take on the role. I can also tell you that during his period as President Jim travelled from one end of New Zealand to the other — many times over — sat on his bulldozer for hours on end creating magnificent wetlands, attended every Chapter meeting, visited DU Canada twice, etc., etc., etc., and never once claimed any expenses!

Knowing Jim as I do, he will be carrying on in the same vein for many years to come. I also know that I can rely on his support and that of all DU members. DU (NZ) is an organisation that I have been honoured to be a part of for so long.

Neil Hayes

The New President

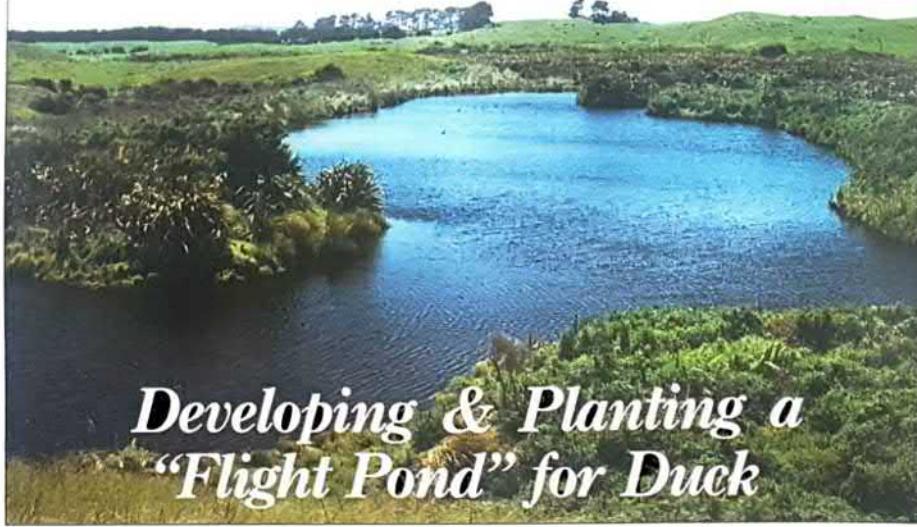


Neil Hayes

Neil Hayes joined the DU Board of Directors at its third meeting in 1974 and he has never missed any of the 65 meetings since that time. His enthusiasm for waterfowl and wetlands started in the early 1960's and in 1967 he erected a complex of aviaries on his quarter acre section in Wainuomata. Since then he has reared just over 1,000 birds, with the majority being Brown Teal, Scap and Grey ducks. In 1969 he found time to become the first Secretary of the NZ Pistol Association and for nearly a decade he was a top pistol shooter, winning 13 of the 15 National Pistol titles and representing New Zealand on many occasions. For the past 21 years he has been a tutor and course supervisor in the NZ Technical Correspondence Institute's Department of Mechanical & Production Engineering. He holds professional qualifications in engineering design and in management.

Neil's other interests (apart from working for DU) include photography, clay target shooting, book collecting and waterfowl hunting. While working for DU he has written a number of important paper's on DU's Operation PATEKE — another of these is due to be published in the UK later this year.

Neil's wife, Sylvia, has also made a major contribution to DU's progress, having been a member since 1974 and a major supporter behind the scenes.



Developing & Planting a "Flight Pond" for Duck

Ponds planted in keeping with the natural environment are attractive to waterfowl.

by John Dyer
Field Officer
Auckland Acclimatisation Society

This article assumes you've already established a pond but now wish to plant the bare site to maximise duck usage. I'll explain here the tried and proven success formula but also the pitfalls to be avoided.

Planting cannot begin until stock are fenced out and such a fence should include a gate to allow the animals access once or twice a year to help in later years to keep rank growth manageable. Where the pond is to provide stock watering, one edge can be left available to the animals or better still the overflow can be directed into a trough or similar arrangement to allow watering outside the enclosure.

Within the fenced area you'll want to establish both trees and shrubs to provide fruit, nuts, acorns, flowers and cover which can be used by both game and non-game alike. However large trees should not be planted so close to the pond as to shade it and in most cases this means planting the southern edge only. A mixture of oak species that includes English oak (*Quercus robur*) and Pin oak (*Q. palustris*) will prove most productive, the former provides the protein the birds crave when they're recovering from moulting and breeding stress. The latter's seed or mast falls within the hunting season, the advantages of which should be obvious.

In front of the oaks there are a number of possibilities and Black tupelo (*Nyssa sylvatica*), Shadblow (*Amelanchier canadensis*), Ginkgo (*Ginkgo biloba*) and any of the cherry species are recommended.

Duck need security and feel most relaxed when there is a low vegetable screen around the pond hiding them from passing prying eyes. Screens of flax are ideal but other possibilities

include feijo hedges, *Lonicera nitida* or tree lucerne. Another novel approach to planting a screen is to plant a hedge of hawthorn, barberry or holly. Better still a mixture of all three. My main flight pond is near a boundary and such a hedge in time will discourage all but the taxodium takes over the role.

Sedges and rushes can be planted along the edges if not present naturally. Unless grazed too hard, out-competed or overly shaded these should continue to provide food and cover. Turning over muddy soil often encourages a stand of willow weed (*Polygala*) the following year, alternatively root stocks can be transplanted onto muddy shores. Ducks frequently dine exclusively on this species.

Between the outer screen and the pond edge areas of grass can be left to go rank and this provides not only cover for nesting but also the mature seed heads find their way into the pond where greys, mallards and shoveler sift them up.

In a polka-dot arrangement in this rank grass area plant small shrubs such as odd flax bushes, taller Cotoneaster esp. (*C. figida* and *c. distichia*). Elderberries (*Sambucus nigra*), Guelder rose (*Viburnum opulus*) or similar. The smaller shrubs should be planted nearer the water's edge and the taller ones further back.

Clumps of tall grasses such as Reed canary grass (*Phalaris arundinacea*) planted in the shade of these odd trees will make an ideal nesting site that neither hawk nor magpie will readily notice mother mallard within.

Some shrubs should overhang the water to provide escape cover for both adults and broods. Flax and Cotoneasters are useful and most small ponds would benefit from one or at the most a couple of weeping willows overhanging on the southern side. If these are planted anywhere else on the pond they should be pollarded at about 6ft height and allowed to grow no higher. Swamp cypress (*Taxodium distichum*) similarly treated should provide some cover and

Remember that while planting can make average ponds into top class ones you can have too much of a good thing.

Don't close the pond in completely with trees. Ducks need to fly in and out easily and if they need to climb steeply and crash through branches to get out they'll frequent the pond less often.

Always study a pond closely before planning your planting. Note the way the birds fly in and out in different winds and note how the sun falls on it and where the birds like to come out and preen. If you place an old log in the water at this point they'll almost certainly use it in preference to the shore.

Don't crowd the shore as the birds fear the bushes may contain predators and will not rest easy there. However don't be afraid to divide a long shore into two by planting a visual barrier in the middle and extending it to the water. On large ponds this would have allowed two broods to be raised where only one would have been before as the first pair would chase off any others they saw. Some means of draining the ponds is desirable for two main reasons. Firstly to facilitate removal of invasive weeds such as raupo which if not checked take over the open water area. Secondly draining the pond, or alternatively lowering it by a weir system, allows the hardened mud to be planted and when the seed crop (say, willow weed or Japanese millet) is ripe the level can be reraised. Ducks will flock into the feed in droves as soon as the word gets around.

If you have islands, either already present or floating rafts built for the purpose don't overdo the planting there either. The exception is that in a group of islands one or two can be heavily planted as ideal nest sites. The rest should be left as grass with one or two shady shrubs.

Once you've got this far you should have a pond that others will envy and if you don't "overdo it" provide steady and productive shooting through the season. You should also have the satisfaction of knowing you're putting a lot back into your sport and as they say you only get out of it what you put into it.

Many of the species mentioned can be obtained from nurseries. Others can be propagated by seed or cutting. If readers need help finding any of these species they could write to me. Residents within the Auckland Society district may be able to obtain many of these free on application to the Society office.

AUCKLAND ACCLIMATISATION SOCIETY
P.O. BOX 17032, HAMILTON TEL. 071390168

Additional Information

There are several trees the Auckland Acclimatisation Society seeks to establish in New Zealand to plant to increase wildlife values. The following, like swamp cypress, actually grow standing in water.

water elm★ (*Planera aquatica*)
water tupelo (*Nyssa aquatica*)

We also seek a number of very flood tolerant trees.

willow oak★ (*Quercus phellos*)
water oak (*Quercus nigra*)
water hickory★ (*Carya aquatica*)

The seed of all these trees forms a very important part of the diet of mallards and incidentally wood duck in the Mississippi bottomlands of the United States of America. In contrast much of the heart of the Waikato "Duck Factory" is dominated by pussy willow as little else grows in this frequently flooding area. Consequently these alternative species may play an important role in future management.

We would be very appreciative of any information readers could bring forward of seed sources of the asterisk marked trees. This could save us a considerable amount in quarantining imported seed. ■

Predator Control - In Sympathy with nature

by John Dyer
Field Officer

Auckland Acclimatisation Society

min are catching quite worrying numbers of these predators. Cage traps, Fenn and Box traps all work well on ferrets. Ferrets breed between September and March so numbers caught increase in late Summer.

HEDGEHOGS (*Erinaceus europaeus*)

A useful animal in the garden who changes from Dr Jekyll to Mr Hyde in the fields. A large boar hedgehog can steal hen eggs though he's seldom caught in the act. Smaller hedgehogs are quite capable of dealing with pheasant eggs and those of quail especially. A noted killer of nesting hen pheasants, hedgehogs are noisy while moving about at night and can be found and shot because of this. They also snore loudly in their dens in daytime. Often hedgehogs are caught in traps set for other animals and are attracted by a wide range of baits.

Hedgehogs in New Zealand are prone to mange caused by the mite *Capararia tridips* and these afflicted animals are often seen wandering in daylight. The number of hedgehogs found flat on NZ roads exceeds that of their ancestral home in the UK, suggesting they're more numerous here.

STOATS (*Mustela erminea*)

The stoat is my candidate for the worst predator of New Zealand game and other wildlife. A recent study examined the gut contents of 1250 stoats. It was revealed 43% had recently eaten a bird or birds. Another NZ study revealed 77% of known nest predations, in one intensively studied area, were due to stoats. (A further 20% being attributed to rats and mice collectively). Because stoats have a high metabolism they need to feed at frequent intervals.



Fenn Tunnel set in corner of stone wall.

alternating spells of activity with periods of rest. They'll eat the equivalent of one third of their body weight each day and if there's an abundance of food they'll kill much more than they need and store the rest. They hunt by both day and night. They're capable swimmers having reached off-shore islands. Wildlife officers playing tape calls of marsh crakes deep in the Whangamarno Wetland twice called stoats into range. However, they usually hunt by scent. Their fondness for skylarks is such that their nests are often lined with their feathers. Stoats breed quickly and soon match any increase in their food supply.

The bulk of females are mated before they leave the nest and by means of delayed implantation can bear as soon as they're old enough. Trapping programmes tend to bias toward males but clearly from the foregoing it is the females that need the targeting. The Fenn trap Ducks Unlimited has imported is the best for the job and needs to be used properly to be effective. Continental box traps with their see-saw action will catch animals down to mouse size and consequently the lightweight female weasel or stoat that might not trigger a Fenn is thus caught.

Although NZ's authority, Dr Carolyn King has pointed to the futility of trying to eradicate stoats nationwide, the fact remains that localised reductions are possible. (We are currently investigating reports that the animal was trapped to extermination in South West Wales and the Iberian Peninsula.)

Certainly any situation where prey are overly abundant (waterfowl collections, brown teal release sites etc), are the very places trapping programmes are justified. Incidentally if you're out hunting and miss a chance to shoot a stoat or weasel that dives to cover wait a few minutes and curiosity may cause it to come back for another look. An imitation of a squeaking rabbit or a squeaking noise can also cause them to reappear. If they drop the prey they're carrying wait quietly nearby as they'll usually return for it. Yet another "keepers trick" is that the urine of a bitch stoat in season (Sept-Oct) placed either on the plate of a trap or just inside the tunnel will attract dog stoats from some distance.

WEASEL (*Mustela nivalis*)

"The weasel is easily defined but a stoat is stoatly different". The weasel is much smaller than a stoat and lacks a black tip on the end of the tail. Because of their weight (especially females) they will often cross Fenn traps without setting them off. However the box trap can be set fine enough to consistently catch these and even lighter animals.

The weasel mostly finds pheasant eggs too large to deal with, but quail and other small eggs are regular diet features. They're capable of bringing down birds and animals however and in one instance a well grown hare was recorded. Like the stoat they can climb or swim readily although they're less prone to do so. Weasels have a patchwork distribution throughout New Zealand and some areas fortunately remain free of them.

FERAL HOUSE CAT (*Felis Catus*)

Every summer thousands of families going on holiday are confronted with what to do about the cat they acquired earlier in the year. In many cases it's past its cute kitten stage and so the decision is made to abandon it in the country. Out of sight — out of mind.

Ducks Unlimited's numerous waterfowl breeders will doubtless be aware of the need for strict hygiene when managing large numbers of waterfowl. The numerous picked clean skeletons to be found by most moulting ponds are indicative of nature's way of isolating infection in similar circumstances.

The hawk and the Paradise duck evolved

Feature Article

Several of us have made the mistake of trying to capture one of these kittens and tame it. The result is usually that the hand reached out to pick up the tiny fluff-ball is viciously shredded and later becomes septic. If their eyes are fully open — shoot them. On one off-shore island rare fauna has approached extinction because a single cat was smuggled into the lighthouse. How much more worrying is that cat-trapping programmes have actually run into three figures on some farms (always peaking over the Christmas holiday period). The Animals Protection Act provides for stiff fines for cat dumping but little useful information is laid with the police.

Cats can be dispatched with powerful air rifles with due attention to range. They are however best caught by cage traps. Fish is the best bait, either fresh or smoked. Failing this a portion of rabbit would be the next best.

RATS (*Rattus norvegicus* and *R. rattus*)

The rat is public enemy number one. A harbinger of many diseases including leptospirosis and salmonella.

Always exercise great care and hygiene handling dead rats and/or equipment contaminated by them. Wash your hands well afterwards or better still use gloves. At least one disease they carry is fatal. Less well known than their effects on foodstuffs is that rats are important predators on nests, eggs and young of game birds and songbirds. Even nesting Canada geese are bothered by rats.

Various baits are available and some of the pellet types give good results. You might be surprised at how much bait is disappearing over what period of time. Rest assured that after a while the bait use will suddenly and dramatically tail off and you'll have broken the back of the local population. Don't relax your efforts or they'll return however.

Fenn traps work fairly well on rats either baited or unbaited. Box traps need to be cleared early in the morning however as rats gnaw their way out. These traps are better set for mustelids first (i.e. ferrets, stoats, weasels) and only allowed to catch rats incidentally rather than be actually placed on rat runs. As a consolation, once repaired the traps' raty smell will prove irresistible to any mustelid, as all three species prey on rats and mice.

HAWKS (*Circus approximans*)

The Australian harrier is perhaps a little maligned. Diet studies have indicated that harriers are more likely to scavenge carrion than attack live prey. Similarly they have a sixth sense about which animals are sickly and will persist until they've caught them. This provides a valuable service to the rest of the population by limiting the spread of disease.

I recently saw an example of this in the King Country. Four hawks were hanging around a small pond with 30 or so moulting Paradise ducks on it. They appeared "sitting ducks" as the hawks took turns to fly overhead. However, closer investigation showed one bird to be "a bit Dicky". It became obvious it was this bird the weasels were interested in (no doubt they were drawing lots). The others seemed to have no trouble escaping by diving, if necessary.

Pukeko (*Porphyrio p. melanotus*)

The pukeko is credited with destroying both duck eggs and on occasion ducklings. It can also be a nuisance in gardens and even the pre-European contact Maori had problems keeping them out of their cultivations. Again I would suggest that pukekos were numerous when duck "darkened-the-sky" with their numbers. Pukeko and our native duck have evolved together and so no real threat is posed. However pukeko were put on the licence many years ago not so much for any sporting reason as to control their numbers. Any local nuisance can therefore be easily remedied. I personally prefer to have a few poohs around. However, if you feed or bait duck with corn you might be interested to open up the crops of a few of the local poohs!

together and the size and health of this parry population is best illustrated by the fact the pond referred to is within the district gazetted for this year's special parry season. In contrast, studies of Hawkes Bay parry populations showed wild cats to be significant predators of nesting females who would otherwise have benefited the local population. The Paradise duck of course didn't evolve with cats and it is unlikely their relationship is in balance.

Nonetheless I'm sure most readers will have seen hawks carry off ducklings and pheasant chicks. Those cases I've observed have usually had a reason behind them and most often it is that the mother bird had raised her brood in an area with insufficient cover. Thus the chicks had nowhere to escape the hawk's talons. In contrast, in more suitable areas, large broods were raised to flighted stage. We must reflect that hawks were around when ducks were "blackening-the-skies" and the factor which has changed since is the habitat which has shrunk. I will accept however that the clearing of the bush increased hawk numbers (it also decreased the falcons). However the hawk currently enjoys semi-protection and it is still illegal to shoot them unless you can prove they're causing economic loss — before you embark on controlling them.

The change in status reflects two facts. One is that a number of bitterns survive in all of New Zealand. Secondly that bounties paid on hawk's feet almost bankrupted some Societies yet little perceptible effect was noticeable in hawk numbers present.

On one sheep station that went all out to control hawks it was found they subsequently had an explosion of rats. These disappeared when the hawks were allowed to return. The gamebirds would almost certainly have been better off when status quo re-established.

MAGPIES (*Gymnorhina tibicen*)

As yet we're unsure of the role magpies play in controlling game and songbird populations. Reports have come in of them carrying off California quail chicks and we've seen them locked in combat with our Red Legged partridge. I've seen them carry off eggs as large as turkeys so presumably those of duck and pheasant are also vulnerable.

However, the magpie is a useful controller of many farm insect pests and this should be taken into account. It is an Australian bird in no way related to the European magpie which is a confirmed enemy of game. We would appreciate any reports of magpies as predators and would point out to those who'd wish to cull their numbers locally that magpies can prove quite challenging to shoot, especially once they've woken up to what's going on. Like crow shooting in the States it's potentially a whole new sport. Perhaps like crows, magpies would come to a plastic owl decoy. We would be interested in anyone's experiments.

The pukeko is credited with destroying both duck eggs and on occasion ducklings. It can also be a nuisance in gardens and even the pre-European contact Maori had problems keeping them out of their cultivations. Again I would suggest that pukekos were numerous when duck "darkened-the-sky" with their numbers. Pukeko and our native duck have evolved together and so no real threat is posed. However pukeko were put on the licence many years ago not so much for any sporting reason as to control their numbers. Any local nuisance can therefore be easily remedied. I personally prefer to have a few poohs around. However, if you feed or bait duck with corn you might be interested to open up the crops of a few of the local poohs!

Feature Article

Blue Ducks in Egmont National Park

by Bryan Williams
Senior Conservation Officer
Department of Conservation
New Plymouth

During April 1987 six captive reared blue ducks were transferred from the National Wildlife Centre at Mt Bruce and released on the Manganui River in the Egmont National Park. For the four days prior to their release, the birds were held in a pen close to the river, and were fed on the same food as they had had at Mt Bruce. Fenn traps were also set in the area surrounding the pen, and although no predators were caught, this allowed the birds to acclimatise to their new surroundings in safety.

Before their release, all six birds were fitted with radio transmitters, however, only two birds were released with the radio packs in place. It appeared that the tail feathers of the juvenile birds were not strong enough to support

the transmitters as in three cases the feathers pulled out with the transmitter still attached.

After their release, the bird's began feeding within an hour and during the first two weeks their green droppings indicated that they were feeding predominantly on algae from the river. During this period the birds movements were followed, however, after this they simply disappeared and no sign of them was found over the next six to twelve months, despite several searches. A reported sighting of three bird's in the Te Popo stream was made nine months after the release, however further searches by DOC staff were unable to confirm this.

A member of the public reported sighting three blue ducks on the Manganui river in December 1988, twenty months after the release, and this was finally confirmed in March 1989 when a juvenile female, identified by its call, was found 2km upstream from the release site. Two adult birds were then found further upstream, and while the male of this pair was still banded, the female had lost her bands. Fortunately, the trapper who made the original sighting was able to confirm that the

female was banded when first seen. It is now planned to monitor the extent of the juvenile female's territory and to release a male into it before the 1989/90 breeding season.

A further two blue ducks were then found on Lake Dive in April 1989. This lake is about 8km from the liberation site and while the male of the pair was banded the female was not. It is assumed that she was hatched in the wild, during the 1988/89 breeding season, and it is intended to catch and band her when she moults.

There are a further two, as yet unconfirmed, blue duck sightings from the Egmont National Park. One is from the Upper Makatawa River while the other is from the Wairakihiko River. If these two sightings can be confirmed, it will mean that five of the six released birds have survived for two years and that two juveniles have been produced in the wild. This confirms that captive bred birds are fully capable of surviving, and rearing young, in the wild and suggests that further releases should be made in the future as a way of re-establishing blue duck populations.

Activities of the Blue Duck Captive Breeding Group

The Blue Duck Captive Breeding Group met for the first time on the 5 May, at the National Wildlife Centre, to consider how the Blue Duck captive breeding programme was to be implemented. This programme has been embodied in the Department of Conservation's Blue Duck Conservation Strategy and is to be overseen and managed by Ducks Unlimited, in consultation with the Department.

The meeting's first job was to discuss and adopt the objectives and guidelines for the project which had been prepared by the project convener, Neil Hayes. This was done, with some minor alterations and additions, and these are printed elsewhere in this issue of "Flight".

The meeting then discussed its recommendations to be forwarded to the Blue Duck Liaison Group, which met in early June at Ohakune. It was felt that the release of any further captive birds would only delay the captive breeding programme's success. Instead, new breeding stock should be brought in from the wild, especially young females, as the current captive stock included a surplus of males. While 11 pairs of Blue Duck are currently in captivity, the capture of more females would allow 18 pairs to be in captivity for the 1990/91 breeding season. This would then speed up the process of having at least 10 breeding pairs of blue duck in captivity. It is pleasing to note that the Blue Duck Liaison Group embraced the Captive Breeding Group recommendations and we are now in a position where "Operation Who" can make a real contribution to the conservation of Blue Duck.

Since the meeting a computerised database has been set up to record the individual histories of all the birds currently in the programme. This is basically a studbook and

records each bird's sex, date of hatching, parents, mate, and breeding records. It will also allow us to record pedigrees so that each pairing that is made can be considered in the light of as much information as possible. It has already been used for deciding pairings for the coming breeding season. With the positive breeding signs that were achieved last year we are confident that this year will see the start of regular production of blue ducks for release into the wild. When this is coupled with the results of the Mt Egmont trial release (see the article by Bryan Williams) we are sure that significant headway can be made over the next few years and that viable populations of Blue Duck will be established in areas where they were previously.

OPERATION WHO — OBJECTIVES, AVIARY REQUIREMENTS & PARTICIPATION

The project will be supervised by a Captive Breeding Group, which will consist of:

- Three members of Ducks Unlimited, one of whom shall be the Convenor and shall be the DU nominee on the Blue Duck Management Liaison Group, and one of whom shall be a participating breeder.
- The Conservation Officer, Protected & Endangered Species Section of the Dept of Conservation, and
- The Officer-in-Charge at the National Wildlife Centre.

The project objectives will be achieved by:

- The production of plans and specifications for captive blue duck enclosures.
- Where possible, the inspection of aviaries, prior to DoC inspection, to determine their suitability.
- Determining the availability of birds for captive breeding.

OBJECTIVES

- To propagate the NZ Blue Duck in captivity.
- To establish amongst DU members, other

Minutes

from the AGM

- (d) Selecting and supplying birds to persons or establishments with approved applications and with the necessary DoC permit.
- (e) Compiling readily retrievable data on:
 - (i) All persons and establishments holding blue ducks in captivity.
 - (ii) Ages and all relevant details of blue ducks held in captivity.
 - (iii) Annual breeding figures — eggs laid, eggs hatched, number reared, deaths and the reason for deaths, and all other important information — very much as already done for OPERATION PATEKE.
 - (iv) The transfer of birds.
 - (v) Banding information.
 - (vi) Release of birds into the wild and follow-up observation information.

Also under (e) it has been recommended to the Liaison Group that:

- (a) That no further birds be released into the wild unless the needs of the captive breeding group for breeding pairs are first met.
- (b) That consideration be given to the removal of eggs and/or juveniles from the wild for captive breeding purposes — this will shorten the lead time for release, (to be done in a non-disruptive way for the wild population(s)).
- (c) Constant liaison with all holders of blue ducks.
- (d) Establish sites for the flock mating (natural pairing) of blue ducks.
- (e) Rearranging the pairing of birds when successful breeding has not occurred after two seasons.
- (f) Identifying areas for the possible release of captive reared blue ducks into the wild.
- (g) Doing all things that will ensure that satisfactory numbers of blue ducks are reared annually in captivity; for example, seeking sponsorship for establishing and maintaining captive breeding facilities and birds.

CONDITIONS GOVERNING PROJECT PARTICIPATION

All persons or establishments wishing to join operation "WHIO" should approach the Blue Duck Captive Breeding Group through Ducks Unlimited. Participants will need to comply with the following conditions:

1. Maintain their aviary facilities in prime conditions at all times.
2. Ensure that the birds have an adequate supply of high protein food e.g. trout pellets, and fresh water at all times.
3. Produce an annual report — a standard form will be supplied each May by the project Convenor.
4. Be prepared to improve their aviary facilities when necessary.

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D.U. News

1990 ANNUAL CONFERENCE

After the fantastic success of the 1989 annual conference at THC Tokaanu it took the DU Board only a few seconds to decide that we will be back at THC Tokaanu for the 1990 meeting. The 14th and 15th July are the dates for 1990 and Diane Pritt will again be co-ordinating bookings. Reservations are already well advanced, so make sure you book early.

1988-89 ANNUAL BALANCE SHEET

The 1988-89 DU Financial Report was unable to be published in full in the last issue of FLIGHT. Any member wishing to receive a complete copy should write to P.O. Box 44176, Lower Hutt.

A DU BROWN TEAL SHOT IN NORTHLAND

One of the Brown Teal released at the Purerau site in Northland in January was reported as shot in mid-June, during the duck season. The bird, a male, was shot at Ohaeawai which is some 20 kilometres inland, and South, from Purerau. This is an interesting recovery and one that shows, again, that our brown teal are adapting well to the wild. And while its bad news to hear of one being shot, its good to know what happened to this particular bird.

RARE DUCK PREFERS FARM COMFORTS TO FREEDOM

A rare wild blue duck with a taste for farm comforts has turned its back on freedom and flown back to join its mates in a domestic flock near Carterton.

The male duck was freed into the wild in the Tararua Ranges in April after it was found mixed with farm ducks on the Mangatāre Stream.

But the duck was not one to forget its friends and surprised everyone by flying nearly 25 kilometres over 1600-metre high ranges to rejoin the flock. Department of Conservation district conservator Derrick Field said yesterday.

"He must have had quite an attachment to the domestic flock to fly that distance back," Mr Field said.

"It has taught us something about trying to manage this species. We have heard that it took him only a day to make the trip, but we are nowhere near certain about that."

The duck was teamed with a female raised at the Mt Bruce wildlife reserve when it was freed into the wild.

The pair were flown by helicopter the equivalent of a two day trek into the Park River, a tributary of the Waiohine River, 800m above sea level.

The ducks had not been introduced before they were freed by Conservation Minister Philip Woolaston, who watched them swim away.

There had been reports of a pair of blue ducks in the same sub-alpine valley but heavy snowfalls had stopped the Conservation Department officers going into the area.

Mr Field said it was hoped the valley could be checked later this week to find out if the female freed in April had teamed with another male.

It is estimated up to 2000 blue ducks remain in the New Zealand wild. But as they live only in the headwaters of fast flowing streams and tend to become isolated from one another they are difficult to trace.

CAROLINA WOOD DUCKS

Members breeding Carolina's should remember that it is strictly illegal to release them into the wild — without a permit from the Department of Conservation.

In 1984 DU looked closely at the possibility of breeding and releasing Carolina Wood Duck as part of a suggested new project, but because



Horrie receives the plaque from Peter Bygate Deputy Director General of DOC.

The suggestion was not looked on kindly by the Wildlife Service the idea was dropped. Should any member be interested in receiving copies of the Wildlife Service report please forward \$10 to P.O. Box 44176, LOWER HUTT.

MALLARDS

The article about mallards in New Zealand which featured in the March issue of FLIGHT seems to have aroused more interest than any item we've ever published. Perhaps we need more articles of a somewhat controversial nature in order to get a reaction?

Nel Hayes, who wrote the item in the March issue, will be commenting again in the December FLIGHT, but he has pointed out that the views in the item were his own and *not* those of Ducks Unlimited. Ducks Unlimited does not have any direct involvement with mallards, although we have always maintained that it is an extremely important species of waterfowl in NZ.

DU JOINS THE IWRB

DU has recently become a supporter member of the International Waterfowl Research Bureau. The IWRB's offices are at the Wildfowl Trust's head office, at Slimbridge in the UK.

Membership will provide DU with access to a wealth of scientific information and also provide for the opportunity to participate in waterfowl and wetland matters, on an international basis. Any member who has a copy of Managing Wetlands and Their Birds — published by the IWRB — will appreciate the quality of information which is available to us.

FENN TRAPS

Thanks to John Dyer, Field Officer with the Auckland Acclimatisation Society, and his article on predator control in the March FLIGHT, sales of Fenn Traps are booming. John also carried out impressive demonstrations at the February Game Fair and the whole predator control scene is really getting fired up — from one end of NZ to the other. A recent shipment of 106 Mark 6 Fenn traps were all sold before they landed and a large slice of the next shipment, due in September, is also spoken for. So get your order in NOW!

It seems likely that we will be importing the Mark 6 model only. It's a little more expensive than the Mark 4, but it is larger and has better killing power. The price is currently \$28 per trap, including GST and postage.

KAKA AND KEA SIGHTINGS

Information on the distribution and status of some of New Zealand's native birds can be fairly vague. Without an indication of abundance and distribution it is difficult to assess whether a species is stable, expanding, or in decline. With this in mind the Department of Conservation's Science and Research Directorate is beginning a number of long-term schemes aimed at determining the status and distribution of several bird species. I am organising two of the schemes, one on kaka and one on kea.

It would be helpful if members of your organisation could now and over future years, send me any information on sightings of kaka or kea. Information should include:

- a detailed and accurate description of the area, (a map reference is preferable but not necessary).
- altitude,
- date and time,
- number of birds.

Note: Some birds may be banded with either a metal band and/or a colour combination of bands. Any accurate observation of the arrangements of these bands and on which legs, would be most useful.

SOUVENIR STAMPS AVAILABLE

In association with Stampways Ltd, the Otorohanga Zoological Society has recently launched a special edition of souvenir stamps. The \$2 stamps feature three species of kiwi, a saddleback and a pair of blue duck. A comprehensive range of First Day Cover sets, proof sets, and so on are available. For full details contact Eric Fox, Curator, Otorohanga Zoological Society, P.O. Box 222, Otorohanga — phone (0613) 7391.

DONORS TO A.G.M.

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D. U. 6TH ANNUAL CLAY TARGET CHAMPIONSHIPS

Sporting: G. Clark, Skeet: R. Nixon, Single Barrel: R. Nixon, Double Riser: R. Mikkelsen, Sparrows: R. Nixon, Points Score: B. Becroft, Single Riser: M. Havill, HOA: B. Becroft.

Team Shoot: Hamilton — R. Hickey, D. Calder, R. Mikkelsen, G. Williams, G. Nichol.

McIntosh Team: B. Becroft, G. Brears, M. Havill, G. Clarke, G. Nichol, B. Bell, R. Wheeler, J. Coatham, R. Mikkelsen, R. Doran, shot a total of 705 out of a possible 750.

EKETAHUNA CHAPTER NEWS

The Eketahuna Chapter will be holding a Simulated Field Shoot at the Eketahuna Gun Club ground on 29 October 1989 starting at 10.00 a.m. B.Y.O. Lunch.

The Soc Savage Acclimatisation Society team shoot will also be held on this day as well as the Chapter team shoot.

FIELD TRIP TO THE PEARCE WETLANDS

A field trip is planned for Sunday 15th October 1989 and it is hoped to visit the Pearce Wetlands and Home Lagoon. For further information please contact Tim Harrington, Masterton phone 069-87468 or Alan Wilks, Greytown phone 0553-49729.



SALES ITEMS

Duckshooters: Sportsmen & Conservationists	\$20.00
Complete Book of Australian Birds (Readers Digest)	\$85.00
Coloured Key to the Waterfowl of the World	\$14.50
Ducks, Ponds and People	\$14.50
Managing Wetlands	\$25.60
New Zealand Birds	\$25.60
The Duckshooter's Bag	\$11.30
The Duckshooter's Companion — Duckshooter's Bag & Gamebird Hunting	\$8.00
The Hawaiian Goose	\$15.80
The Mute Swan	\$25.50
Wildfowl Management on Inland Waters	\$51.00
VSH VIDEOS	\$21.50
River in Question — The Manganui-a-te-ao	\$66.50

APPAREL

DU Hat — Red/Fawn (one size fits all)	\$25.00
DU Jersey — Red/Green/Blue (state size)	\$76.00
DU T-shirt — White (SM, OS, XOS only)	\$14.00

BADGES

DU Decal	\$1.20
DU Lapel Pin	\$5.60
DU Cloth Shoulder Patch	\$9.60
DU Canada 50th Anniversary Badge	\$5.60
DU Duck Head Badge — Large Gold	\$6.75
DU Duck Head Badge — Small Gold/White/Green	\$5.60
DU Duck Head Stick Pin	\$5.60

STATIONERY

DU Ballpoint Pens — per box of 10	\$11.20
DU Maxipens — per box of 10	\$11.20
DU Maxipens — single	\$1.50
Janet Marshall Bird Cards — set of four	\$6.00
Waterfowl Writing Paper and Envelopes — set of 10	\$9.00
Waterfowl Note Paper and Envelope — set of six	\$6.00
Mallard/Canada Card — For framing	\$6.00

GENERAL

Janet Marshall Print	\$49.50
Janet Marshall Print signed and Russell Jackson Print (signed only)	\$85.00
Canada Goose Place Mats — set of six	\$28.60
Canada Goose Coasters — set of six	\$11.65
Mallard Duck Coasters — set of six	\$11.65
Fenn Traps MK 6	\$28.00
DU Duck Head Flag 62cm X 44cm	\$41.00
DU Cam-o-paint	\$4.60
DU Ashtray	\$4.60
DU Bottle Opener	\$4.20
DU Key Ring	\$4.60
DU Key Ring Nail Clippers	\$4.20
DU Letter Opener	\$4.20
DU Tea Caddy Spoon	\$4.20
DU Teaspoons	\$4.20
Number Plate Surrounds (Pairs) Red, Blue, Green	\$33.00
Engraved Crystal Wine Glasses (Set of 6)	\$75.00
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