Psitta scene

News about parrot conservation, aviculture and welfare from The World Parrot Trust

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WORLD PARROT TRUST NEWS FROM DOWN UNDER

By Michael Reynolds

OUR AUSTRALIAN PROJECT

Nearly four years ago at the Loro Parque Convention I asked Joe Forshaw to look out for an Australian parrot conservation project which might be suitable for World Parrot Trust support. He subsequently proposed that we might assist the work needed to sustain the isolated population of a sub-species of the Red-tailed Black Cockatoo, *Calyptorhynchus banksii graptogyne*. This bird occurs only in S.W. Victoria and in South Australia. Only 500 to 1000 remain, and they are threatened by the loss of natural nest trees and Brown Stringybark forests.

The Trust has now met half the cost of this program for three years and we have received excellent reports from Joe Forshaw, Dr. Bill Emison of the Victoria Department of Conservation and Natural Resources, and from Wayne Caldow, a local farmer and conservationist who is employed at key times of the year to guard the known nests and also encourage his fellow farmers to preserve the ancient nest trees.

I have to admit I was hoping to visit this project at some time, and the opportunity occurred when I was invited to be a speaker at the 7th National Avicultural Convention at Melbourne last March. My wife and I arrived in Melbourne a few days before the convention, and drove westwards with Joe Forshaw and Bill Emison to Edenhope, a very pleasant farming area rich in cockatoos and other parrots. We stayed in a comfortable holiday cottage at a large farm run by the very hospitable David and Elisabeth Edgar. (Incidently, if anyone wants a great Australian experience, write to them for details at: Nerrinyerie, Harrow, R.M.B. Edenhope 3318, Victoria, Australia).

We went to a progress meeting of conservation experts from both states, and were greatly impressed by the professionalism and dedication of all involved. Australians are determined to protect their endangered wildlife, and any unauthorised person approaching the protected nests is certain to be detected. In any case, the fledglings are micro-chipped, and blood samples are taken for DNA purposes.

The following day we went with a cherry-picker vehicle which gave access to a number of nests, some of them artificial. In most of them the young Red-tailed Blacks were close to fledging, and it was fascinating to be able to photograph them in the nest, and being handled by Bill Emison and his team. At no time during this busy day did we see an adult bird; no doubt because the chicks were being slimmed down for their first flight and could expect only one feed in the evening.

After a third day spent watching a variety of parrots, including Yellow-tailed Black and Sulphur-crested Cockatoos, Long-billed Corellas, Musk Lorikeets, Red-rumped Parakeets and several other species, we left the area having committed The World Parrot Trust to supporting the program for a further three years. This because (a) our funding encourages the continuation of matching state government funds, and (b) this project will help prevent the population falling to a critical level, where massive funds may be needed to ensure the survival of the sub-species.

THE 7TH NATIONAL AVICULTURAL CONVENTION

This was an extremely friendly and well-organised convention. The speakers included the indefatigable and provocative John Stoodley (who had just come from

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Joe Forshaw holds a Red-tailed Black Cockatoo fledgling while Bill Emison takes a feather for DNA purposes.

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CONTENTS:

Members of IUCN The World Conservation Union

snorkelling on the Great Barrier Reef), and Mike Fidler (UK) who gave a most authoritative presentation on Gouldian and other Australian finches. Len Robinson showed outstanding slides of Australian rainforest birds, and Stan Sindel spoke about his work with cockatoos.

I spoke about breeding parrots at Paradise Park in Cornwall, UK, and returned the same evening to talk about The World Parrot Trust. This generated a lot of interest, and many delegates spoke to me about setting up WPT Australia. We are currently looking into this possibility, and if there is enough sustained interest to make it work, we'll let you know. Aviculture is alive and well in Australia, but has particular problems largely created by its special combination of developed aviculture and endemic parrots. This has led to a situation where private aviculturists are not, as a group, well regarded by the authorities, and vice versa. It is just possible that the Trust might be able to improve relations between these parties, by giving new emphasis to the scope for aviculture to contribute both funds and expertise to conservation objectives.

Other Australian highlights included driving through the Kosciusko National park, seeing Gang-gangs in flight, visiting Stan Sindel's aviaries and seeing his remarkable library, and staying with old friends on Scotland Island, north of Sydney, where five species of parrot join you on the balcony for breakfast. (Another good place for b&b - write: Philip & Trilby Bond, Ferryman's Cottage, Scotland Island, Pittwater NSW 2105).

A BRIEF VISIT TO NEW ZEALAND

It seemed a good idea to visit New Zealand and try to see the three K's: Kakapo, Kea and Kaka. In a hectic week we drove South to Milford Sound to see Keas doing exactly what they are reputed to do, i.e. eat cars. We found only one pair, apparently on duty in a car park to entertain the tourists. The numbers of Kea are thought to be declining, although current estimates range between 1000 and 5000.

We saw North Island Kaka at Mount Bruce Wildlife Centre near Wellington, and the south Island Kaka at Te Anau on the edge of the south Island's Fjiordland. This is a beautiful bird, and on the back cover of the February 1994 'Psittascene' you can see an excellent photograph taken by Rosemary Low on Kapiti Island.

In this issue you will find a detailed report from Rosemary about her visit to see the Kakapo on Maud Island, so I won't expand on that subject, apart from to say that we also had the amazing experience of meeting 'Hoki" the partially hand-reared Kakapo. Once again, we could not but be impressed by the dedication of the staff of the New Zealand Department of Conservation. The experience and leadership of Don Merton (celebrated for his success in achieving the recovery of the Chatham Island Black Robin, from a single pair up to the current 155 birds!) is critical to the Kakapo Recovery Programme. We had the pleasure of staying with Don and Margaret Merton and learning a great deal about the unique problems of the Kakapo.

A small flock of Long-billed Corellas.

Don is now confident that the Kakapo will be saved, and he gave me a copy of a recent report he had written, which states the many positive aspects of the programme. This report follows the article by Rosemary Low.

Finally, we met prominent New Zealand aviculturists Des and Pauline Colpman, who had arranged a meeting of the Avian Society Incorporated at which Rosemary Low spoke when she was in the country last year. Following this meeting funds were raised for the Trust, and I was delighted to receive a cheque for NZ$1025 to be used for the conservation of endangered parrots.

How to sum up a first visit to Australia and New Zealand, with their combined total of around sixty species of parrot? Even if you've seen parrots in the wild before, nothing prepares you for the shock of seeing your first great flock of cockatoos. To any aviculturist who has only seen parrots in captivity, I would say: 'If you like them in an aviary, you'll go crazy when you see them in the wild!' As the world shrinks, it becomes easier to see parrots in the wild, and eco-tourism will play a large part in helping preserve essential parrot habitats. In a future edition of 'PsittaScene' we will attempt to review a few of the more accessible parrot-watching locations.

A pair of Gang-gang Cockatoos in Stan Sindel's aviaries.

THE WORLD PARROT TRUST GALLERY OF ENDANGERED PARROTS

By Rosemary Low

No.5 Blue-crowned Lory *(Vini australis)*

In the second draft of **Parrots, An Action Plan for their Conservation: 1993-1998,** produced this year by ICBP, 17 species are listed as being critically endangered. The plight of some of these species, such as Spix's Macaw, Imperial and Puerto Rican Amazons and Kakapo are very well known. Many, perhaps most, people will not be familiar with the names of some of the others on the list. The names of others are known but the fact that they are very seriously endangered is not. In the coming issues we will present a series of short items to highlight these birds.

Even more splendid than the most beautiful flower, the lori songbird ("fringillaire" in French) is the uncontested jewel of the birds of Futuna, and,to a lesser extent, of Alofi.
Futuna is an island in French Polynesia, located to the east of Australia, between the islands of Fiji and Samoa. Unfortunately, its numbers are diminishing in Futuna. Although its scientific name is "Vini australis", the locals call it "sega". The lori is not endemic to the area, as it can also be found in Fiji and other archipelagos of the central Pacific. This small bird can be distinguished by its shrill cries. It can usually be found in couples in coconut palms and "erythrines" (in French) of the species Erythrina fusca, whose scarlet, honey tasting flowers constitute the lori's favourite food.

RED TAILED BLACK COCKATOO PROJECT

Progress Report March 1994

By William B. Emison, Wayne D. Caldow and Joseph M. Forshaw

Introduction

The Red-tailed Black Cockatoo *(Calyptorhynchus banksii)* is a well known and sometimes common bird across much of northern, western and eastern Australia. There is also a small and isolated population of Red-tailed Black Cockatoos *(C.b. graptogyne)* which occurs in southwestern Victoria and adjacent parts of the southeast of South Australia (i.e. southeastern Australia). A recent preliminary study in southwestern Victoria indicated that the Red-tailed Black population should be considered endangered, for the following reasons: its numbers are low, probably less than 1000 individuals remain: the geographical range is small and isolated: breeding, which seems to involve only a small proportion of the population (ca 10% or less), has only been recorded within the northern half of the birds' range; the diet is specialised; nest requirements seem relatively specific; and habitats are fragmented and threatened.

Background

Research conducted by the Department of Conservation and Natural Resources (DCNR) during 1988-94, found that the loss of Brown Stringybark forests and suitable nesting hollows are the main threats to the Red-tailed Black Cockatoo in SE Australia. Past clearing of Brown Stringybark forests has reduced this essential habitat and has caused the remaining areas to be broken up and fragmented. Frequent burning, particularly by fires which damage the canopies, may have also had an adverse effect on the food resources of these cockatoos.

The old, dead, standing River Red Gums on farmland that provide nesting hollows for the cockatoos, are now under serious threat throughout the bird's range. Often these trees are used as a source of firewood. Many others are just pushed over and burnt. This slow decline in, and lack of, available nest hollows may already be limiting the cockatoo's ability to produce young.

Since the inception of the project, a steering committee has guided the scientific research. The committee is composed of representatives from the Flora and Fauna Branch, Horsham Region, Portland Region, World Parrot Trust and, recently, South Australian National Parks and Wildlife Service. In 1992-94, steering committee meetings were held in Edenhope on 15 December 1992, 28 April 1993, 9 March 1994 and in Mt Gambier on 15 December 1993.

To ensure the long-term survival of the Red-tailed Black Cockatoo in southeastern Australia, the cooperation and involvement of both the rural community and government departments are required. Scientists working with the project recommended that a local resident be employed to liaise with the rural community both for enlisting its cooperation in conserving the species and for obtaining more information on the cockatoo.

The World Parrot Trust (WPT), through the Keith Ewart Charitable Trust, has provided funds to DCNR to employ a person to assist with the project on the Red-tailed Black Cockatoo in SE Australia. This position is part-time and, during the 1992-93 and 1993-94 breeding seasons, Wayne Caldow, a farmer in the area where the cockatoo presently nests, was employed from February to May. The grant from the WPT was for salary; operating costs were provided by DCNR.

Joe Forshaw holding the baby.

Aims

- To establish a network of observers in the rural community which will feed back information on distribution, abundance, feeding and nesting of the Red-tailed Black Cockatoo.
- To gather breeding information from known nest sites.
- To search for other nesting locations and to obtain historical and current information on breeding sites from members of the rural community.
- To obtain information on feeding and food preferences.
- To liaise with landowners to protect nest trees and potential nest trees and to encourage the planting of River Red Gums and Bulokes.
- To erect a few nest boxes in one of the nesting areas to ascertain if they will be used by the cockatoos.
- To determine how fire histories of the blocks of Brown Stringybark influence the distribution of the Red-tailed Black Cockatoo in SE Australia.
- To investigate genetic differentiation between breeding groups of Red-tailed Black Cockatoos in SE Australia.
- To obtain a profile of a preferred nest site.
- To understand the movements, both seasonal and long-term, of the Red-tailed Black Cockatoo in SE Australia.

Results and methods

Network of observers

The network of 65 observers in the rural community (local residents, field naturalist clubs and schools) which was established in 1991-92 continued to provide Mr Caldow with records (e.g., distribution, nesting, feeding) of the Red-tailed Black Cockatoo.

Breeding biology

Twenty-three nests were found during the 1992-93 breeding season. This total was considerably higher than that for any of the previous four seasons of this study (1988-89, 12 nests; 1989-90, 13 nests; 1990-91, 7 nests; and 1991-92, 3 nests). However, seven of the 1992-93 nests failed, probably because of inclement weather in November and December and we suspect that most of the parents from these failed nests renested in nearby trees. If so, the total number of pairs (16) involved in breeding in 1992-93 was commensurate with those in 1988-89 (12 pairs) and 1989-90 (13 pairs).

Because of the nest failures and apparent renestings, the fledging of young was very asynchronous in 1992-93. The first fledgling was noted on 3 February (it may have fledged as early as 25 January) and the last indication that a chick was still in a nest was on 20 May.

Eleven nests were found during the 1993-94 breeding season. The eggs in two of these nests failed to hatch and a young chick disappeared from a third nest some time between 2 February and 10 March. The other eight nests each either appeared to have fledged a young or had a large young present at our last inspection (10 March). Ten of the eleven nesting attempts were in the three known traditional nesting areas in Victoria while one nest was found in South Australia (the first nest found in that State during our study).

In 1993-94, nesting activity was recorded as early as 6 October and the first fledgling was seen on 4 February.

Supplementary nest hollows

As our study progressed, we began to suspect that one of the reasons for the low number of nests was because of the loss of suitable nest hollows from traditional Red-tailed Black Cockatoo nesting areas. Many of these losses have resulted from the old dead trees being cut down for firewood, while others have been just pushed over or have fallen from natural decay.

To see if it was possible to assist the nesting of this endangered population, we placed four supplementary nest hollows in dead trees (which did not have suitable natural hollows) in a traditional nesting area after the

This beautiful Red-tailed Black Cockatoo is clearly ready to fledge in a day or two.

1991-92 nesting season. One of these supplementary nest hollows was taken over by a pair of Red-tailed Black Cockatoos in 1992-93 and a young was successfully reared.

After the success of the 1992-93 nesting season, we placed an additional six supplementary hollows in trees in traditional nesting areas. In addition, because we were running out of dead trees in which to place the hollows, we also obtained six disused wooden electricity poles, put them into place in the areas and attached a supplementary nest hollow to the top portion of each one.

So, at the start of the 1993-94 nesting season we had erected 16 supplementary nest hollows (10 supported by dead trees and 6 on SEC poles) in traditional Red-tailed Black Cockatoo nesting areas. At least five of these 16 hollows were used by nesting Red-tailed Black Cockatoos in 1993-94. At the last examination (10 March) three of the hollows each had a chick, but two others had failed (an addled egg was present in each of them). Two of the hollows with chicks were on SEC poles and the other three hollows (one with a chick and two with addled eggs) were in dead trees. Additionally, we have recorded Yellow-tailed Black Cockatoos, owls, Long-billed Corellas, and Maned Ducks using the supplementary hollows. One of the 16 hollows has also been recently taken over by feral bees, which will render it unsuitable for use by birds.

Thus, early results indicate that the Red-tailed Black Cockatoo quickly utilises supplementary nest hollows and of the supplementary hollows available (4 in 1992-93 and 16 in 1993-94) at least 30% have been used by this endangered population.

Public awareness and education

During the past year, DCNR continued its awareness campaign on the plight of the Red-tailed Black Cockatoo in southeastern Australia. The campaign is designed to inform local landowners and public land managers about what they can do to assist with the conservation of this species. In particular, we emphasise the importance of retaining dead and live hollow-bearing trees, regenerating areas of River Red Gums and Bulokes, retaining areas of Brown Stringybark forest, reducing the frequency of canopy fires in Brown Stringybark forests, and reporting sightings and breeding records of Red-tailed Black Cockatoos.

Future direction

Next breeding season (1994-95), the work will continue to concentrate on the nesting and nesting success of the Red-tailed Black Cockatoo. We are examining the possibility of using volunteers (e.g., Victorian Group of the Royal Australasian Ornithologists Union) to assist us with searches for nests. More measurements to obtain a profile of a preferred nest site will be made. Such a profile will enable us to construct supplementary nests with dimensions suitable for this population of cockatoos. The supplementary nest hollows will be closely monitored and we plan to place more such hollows in suitable areas.

Investigations (botanical) of the Brown Stringybark trees and Bulokes (which is also an endangered taxon in Victoria) are required. Such investigations will help us to understand the past and present movements of the Red-tailed Black Cockatoo as well as providing us with information about reasons for success or failure of breeding attempts.

Proposals for a three year study of the movements of the Red-tailed Black Cockatoo in southeastern Australia are being prepared. This will involve radio tracking of individuals (probably young of the year) from their nest sites to the feeding and roosting areas. This should provide insight as to how far these birds range, how their movements vary from season to season and the importance of their roost sites.

Fire histories of the Brown Stringybark blocks may also be important in helping to understand past and present movements of the cockatoo. In relation to this, an understanding of the effect of fire on the food (Brown Stringybark and Buloke seeds) of this population is required.

The awareness and education campaign and the gathering of information from the "network of observers" will be continued. The increasing amount of data being collected should eventually allow us to compare monthly or seasonal distributions of this cockatoo. Overlaying distributional maps over vegetation maps and fire history maps could shed further light on the movements of the subspecies and allow us to delineate critical areas of habitat.

Genetic studies focusing on the possibility of inbreeding will continue in 1994-95. DNA analyses of blood samples taken from chicks from the three known breeding areas will be done. Further samples will be collected during the 1994-95 breeding season to augment those collected in 1992-93 and 1993-94.

Procedures for making nest sites secure from illegal egg or chick removal by humans should be drawn up. This will have to be done in collaboration with law enforcement bodies in both South Australia and Victoria. It is proposed to place microchips in nestlings as a deterrent to illegal poaching and trade of this subspecies.

Here he is later, looking out of his nest tree. This tree is typical of those in this area.

Further reading

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SAVING THE KAKAPO

By Rosemary Low

New Zealand is a country of spectacular scenic diversity and its avifauna is equally notable. Unfortunately, many species are already extinct. Of those which survive, the Kiwi is surely the best known and perhaps the strangest, having been aptly described as a feathered mammal. There is another bird which is equally as strange but much less known. It is the Kakapo *(Strigops habroptilus)*, the nocturnal parrot described by Dr. Sclater as "the most wonderful, perhaps, of all living birds". (Sclater was a great ornithologist, also secretary of the Zoological Society of London for 43 years until 1902.) Even Sclater would have been amazed had he known the facts of the Kakapo's combination of unique features. Most of these were not known until almost a century after he wrote those words.

Unlike any other parrot, the Kakapo is flightless, nocturnal and solitary. It is the heaviest parrot in existence, with males weighing up to 3.7kg and females in the region of 1-2kg. It has a facial disc of sensory bristle-like feathers from which arose the now obsolete name of Owl Parrot. When walking, its body and head are held horizontally. A herbivore, it has a unique bill structure for grinding food finely, with well developed ridges on the lower mandible. The gizzard (the organ in which food is ground up in most parrots) is small and degenerate.

All these characteristics are strange enough. It has others, also unique, which concern its breeding behaviour. Males have a social courtship ritual known as a "lek display" given from a traditional display ground or "arena". They also have an inflatable thoracic air sac, used to make a booming call unlike anything else known in the bird kingdom. The calls are carried out throughout each night for about 3½ months during the breeding season, in the years in which breeding occurs. The male makes a "bowl", a depression in the ground against a bank or tree trunk, so that the booming calls carry a great distance. To this bowl he hopes to attract a female. He will mate with her and then she must rear her young on her own. When they hatch, she will walk several kilometres every night in search of berries and other nutritious foods for her young.

All this sounds like the strangest fiction to anyone who has not heard of the Kakapo but knows something of the habits of parrots in general. No wonder this parrot is a source of fascination! My own interest in it started with the reports coming out of New Zealand in the 1970's regarding its critical status, and was fuelled just over a decade ago when I was researching the chapter on it in my book ***Endangered Parrots***. The more I read, the more I was touched by the plight of these trusting birds which have been abused by man for centuries.

Maoris hunted them for feathers, from which they made cloaks, also for their flesh, which was considered a delicacy. Early settlers hunted them for food - and even fed them to their dogs.They killed them for their skins, which they could sell to museums around the world for a few shillings each.(Today there are still hundreds of Kakapo skins in museum collections.) Later settlers introduced deer and possums which gradually destroyed their food sources, and rats and stoats which killed the females and their young, and feral cats which decimated whole populations.

It is little short of a miracle that the Kakapo has survived to this day. It originally occurred throughout North, South and Stewart islands, from sealevel to the upper limits of woody vegetation. It would have been extinct, or effectively extinct, without the intervention of the New Zealand Wildlife Service, now the Department of Conservation. Many people have played a part in the Kakapo's survival but only one has been intensely and continuously involved for two decades. He is Don Merton, prime architect in the strategies for Kakapo survival which are being played out today.

I had long cherished to meet Don, who is known throughout the conservation world as saviour of the Black Robin *(Petroica traversi)* from the Chatham Islands. He has played a major role in the survival of other critically endangered species, such as the Saddleback. It was his innovative methods, which included cross-fostering, which brought the Black Robin back from the brink of extinction when the population numbered just five birds, only one of which was a fertile female. But that is another story...

Today he is the leader of the Kakapo Recovery Group of the Department of Conservation (DOC). In recent years a major task of that organisation has been eradicating introduced mammals from islands of up to 3,000 ha (7,000 acres). These islands are refuges for many bird species which would by now have become extinct without their existence. Sadly, New Zealand's two main islands are no longer safe places for a number of endangered endemic species. All have suffered from the loss of habitat and the impact of introduced mammals. This country's birds evolved in the total absence of mammals (except bats). They therefore lacked the behaviour necessary to avoid predation and their numbers were rapidly decimated by cats, rats and stoats. The effect of possums and deer took longer to become apparent but were just as lethal.

So today Kakapo survive on just three islands, Little Barrier, Codfish and Maud. I was privileged to visit the latter island in the company of Don Merton and his wife during a visit to New Zealand in September 1993. It was the highlight of a lifetime's involvement with parrots for in my wildest dreams I never expected to see a live Kakapo. Only 47 are known to survive to this day, on island reserves normally visited only by DOC employees. Few of them ever see this nocturnal parrot. Twenty five birds are known to survive on Codfish Island, 17 on Little Barrier and 6 on Maud.

Even as our small boat approached Maud Island, I found it hard to believe that my dream could become a reality. I saw a rugged, bush-covered land, rising quite steeply out of the ocean. About 309 hectares (about 700 acres) in extent, Maud is located in Pelorus Sound, close to the north-eastern tip of South Island. In 1977 farming ceased there and the island was bought by the DOC. The bush then regenerated with amazing rapidity so that now secondary growth covers almost the entire area. Between 1974 and 1981, Maud was a short-lived site for Kakapo release; the birds had to be relocated with the arrival of stoats in 1982. IN 1989, after the eradication of stoats, transfers commenced again. Maud is now the home of three males and two females, plus the young female "Hoki" who was reared at Auckland Zoo in 1992. She was taken there from Codfish Island as a starving chick of five and a half weeks.

On my first afternoon on Maud, I spent a fascinating couple of hours with Don, Gideon Climo - the young man who has the privilege of looking after Hoki - and Derek Brown, the local DOC manager who visited the island with us. As we climbed to the 400m "summit", a beautiful vista opened up before us. The island's long, narrow peninsula (which is a haven for the endangered Takahe - a giant rail - and rarely visited by Kakapo) could be seen, jutting out into the blue of the Sound. The mountainous coastline of South Island almost fuses with that of Maud and in the distance the Chetwode Islands came into view. It was a sunny day in early spring and the sky was blue. The sunshine was an unexpected bonus after the wind

Derek Brown of the NZ Dept. of Conservation is honoured by a visit from "Hoki", the female Kakapo partially hand reared in 1992.

and rain of North Island.

Here food supplies for the Kakapo are varied and abundant. This species thrives in regenerated habitat and ranges on Maud from the shore to the summit. As we climbed, Don pointed out unmistakable "sign" of Kakapo. These include "chews", fibrous plant material ejected as compressed pellets, either still attached to the plant, hanging in little balls, or on the ground below. Grasses, including tussock grass, are favoured foods. I saw Kakapo droppings along their tracks, usually distinctive oblong piles, quite different to those of other parrots. I picked up a soft, newly-moulted Kakapo feather. Having read that their plumage is sweet-smelling, I held it to my nose and was amazed by the rich perfume. ("A biochemist could copy this!" I declared. "Then it could be sold as perfume and marketed in aid of Kakapo conservation!")

Don stopped to point out a fresh mark on the trunk of a manuka tree. Kakapo had recently stripped an area of bark. It was exciting, knowing how close they were! Derek and Gideon had tracking devices with which they could locate the birds, all of which have names. "Fuchsia is very near here" exclaimed Derek.During the day Kakapo roost in dense vegetation and are almost impossible to find. If they have to be caught, for relocation or for renewal of a transmitter, for example, a specially trained muzzled dog is used. It sniffs out the Kakapo's strong scent with little difficulty.

Eagerly I awaited nightfall. Even so, I was not certain that I would see Hoki, in her large enclosure. I did not know that she was so inquisitive that she would come to investigate the sound of our voices."Useless, imprinted, hand-reared birds!" I can just hear some readers saying. In fact, this has no bearing on the matter. Don told me that he had sometimes encountered wild birds which permitted themselves to be picked up and stroked "like a Persian cat". This is yet another unique aspect of the Kakapo. Having evolved over tens of millions of years without mammals, they had no chance to learn that mammals were to be avoided. Thousands must have died at their first encounter with man. The few which survive to this day were found in very remote places and would never have seen man before.

A view of Maud Island, one of the three islands on which the remaining 46 Kakapo live.

Its tameness is another endearing feature of a bird which I quickly dubbed "the avian equivalent of a panda" - a "cuddly" endangered species with tremendous charisma, which everyone falls in love with. On that night, four of us visited Hoki; we sat quietly and she came to see us, nibbling our shoes, and climbing up on Gideon, who she knows so well. After a few minutes, she lost interest and departed.

"Well, what do you think? Is it a parrot?" asked Don jokingly. As I had previously seen some excellent TV documentaries on or including shots of the Kakapo, seeing one live did not seem like an unfamiliar experience. But I was intrigued by unexpected behavioural traits, such as moving the head from side to side, more like a bird of prey judging distance, than a parrot. But, above all, it was an emotional experience, seeing one of the last survivors of an ancient species and one of only 17 females known to exist. Not any species - but one which few have been fortunate to observe this century. I felt a deep sense of privilege.

Next day I went around the island with Derek and Don. Derek was checking the stoat traps. There are 80 on the island and 60 on the mainland - only 1km away across the Sound - the extreme limit of a stoat's swimming distance - but it has happened in the past. Derek also carried out the daily task of replenishing the Kakapo feeders. It is vital that the Kakapo maintain good weights; without it successful breeding cannot occur. The males need good fat deposits for the period when they are booming, when they seldom feed, and the females during incubation and rearing. To this end, they are provided with walnuts, almonds, brazils and sunflower kernels. Recent analysis of key natural Kakapo foods has revealed their similarly high lipid content. Supplementary feeding is a relatively new concept and its value has already been proved with a four - five fold increase in egg and chick production - but not in chick **survival**, due to rat predation.

That night provided the unforgettable experience of watching Hoki by moonlight. Don and I sat quietly for an hour and were rewarded with seeing her behave as Kakapo have done for millennia, moving about, often on the run, feeding on grasses. I was spellbound, for it was like watching a truly wild bird. Hoki is the first Kakapo to be partly hand-reared and she is already providing new insights into the behaviour of the species, being the only existing Kakapo which can be readily observed.

So much has been learned about Kakapo management during the past decade and especially in the past five years. It is now accepted that intervention (to ensure that the birds receive adequate nutrition at all times, and to protect eggs and chicks from rats) is essential if Kakapo chicks are to be reared. The population is still declining - but now that experience in vital aspects of Kakapo management has been gained, Don Merton is optimistic about the future. "Important progress has been, and is being, made. There can be no doubt that we have the capability of quickly turning the species around".

Yes, Don is an optimist.Who else would have believed that the Black Robin could have been snatched from the brink? As a result of intervention, its population has climbed from five birds to over 140 in 12 years. The reproductive rate of the Kakapo is very slow; no such miracle could happen here. But it is feasible that Kakapo chicks will be reared on all three islands before very long. This will be the first step towards real recovery of the species.

Optimism is in the air. It is November and the breeding season is fast approaching. The weights of the females on Maud (recorded automatically at feeding stations) are cause for hope. Will Kakapo hatch on Maud this season? Will young be reared on Little Barrier and on Codfish? Will Hoki's name become symbolic of the future of this, the most extraordinary of the world's parrots?

"Hoki" means to return. Perhaps now Kakapo will start to return from the brink of extinction. Their young will survive and thrive to produce countless more generations on the island sanctuaries where at last they are safe again.

Male Kakapo 'booming' at night. *Photo: Don Merton.*

RECENT ADVANCES IN THE KAKAPO RECOVERY PROGRAMME

By Don Merton

(i) Survival of birds transferred to islands since 1980 has been remarkably high; (at least 16/23 (70%) females; at least 28/38 (74%) males.

(ii) Three further "lost" females have been located and are being brought into the management programme. This leaves only four females unaccounted for, two on Little Barrier and two on Codfish Islands. Seventeen females are now known to exist (including 1 subadult).

(iii) The number of females receiving supplementary foods has been doubled since late 1992:
13 out of 16 adult females are now accepting food supplements on a regular basis. Efforts to bring the other 3 into the programme are continuing.

(iv) We know now that it's feasible for non-(consistently) supplementary-fed females on Little Barrier Island to achieve breeding condition, to lay and incubate -but as on Codfish there is as yet no evidence that such birds can successfully raise young without our intervening.

(v) A partially-hand-reared female ("Hoki") has now been maintained in captivity in good health and condition for 2 years, demonstrating that maintaining kakapo in captivity is feasible.

(vi) Kakapo can settle, achieve breeding condition and be readily managed on small, highly modified islands (Maud and Mana Islands are examples).

(vii) There is now general acceptance that kiore (polynesian rats) present a serious threat as predators of nesting kakapo. As a consequence there is now a realistic level of commitment to controlling rats at kakapo nests.

(viii) We've recently discovered that some natural foods upon which kakapo were formerly heavily dependent during autumn and winter months are very high in lipids (fats). This dependency upon high fat foods has parallels in some other larger parrots.

(ix) Most of those involved in managing kakapo now accept that year-round ad lib supplemental feeding of a range of foods (including foods rich in fats) is necessary to provide a nutritional base adequate to support successful reproduction.

(x) We've discovered what may well prove to be yet another unique physiological feature in kakapo: the magnitude of their seasonal and periodic weight shifts (i.e. weight gains, in the order of 60%-100% prior to breeding in both sexes), reflecting storage and mobilisation of massive body fat reserves, is probably unique in terrestrial birds. This has very important implications for their supplemental feeding and other management.

(xi) We have recently discovered that some supplemental foods used contain low but potentially dangerous levels of organophosphates. These could inhibit successful reproduction, predispose birds to disease and even cause death. The problem has been addressed through use of organically-grown produce where feasible and removal of pesticides from kakapo islands.

(xii) Unquestionably, the most significant advance has been through introduction and refinement of a supplementary feeding regime which now provides a simple, practical and effective means of boosting production of eggs and young. Since the pilot feeding programme began 4 ½ years ago there has been a dramatic increase in both frequency and number of recorded breeding attempts (13 nests; at least 27 eggs laid and 13 chicks known to have hatched). This represents a 4-5-fold increase in frequency of breeding; of recorded breeding attempts; and in chick production known over the previous 10 year period when no concerted management occurred. However, chick mortality is unacceptably high: There is a recurring theme of starvation and predation. Curbing this (almost total) wastage of nestlings - which is robbing us of success - is, I believe, by far the most urgent issue we face.

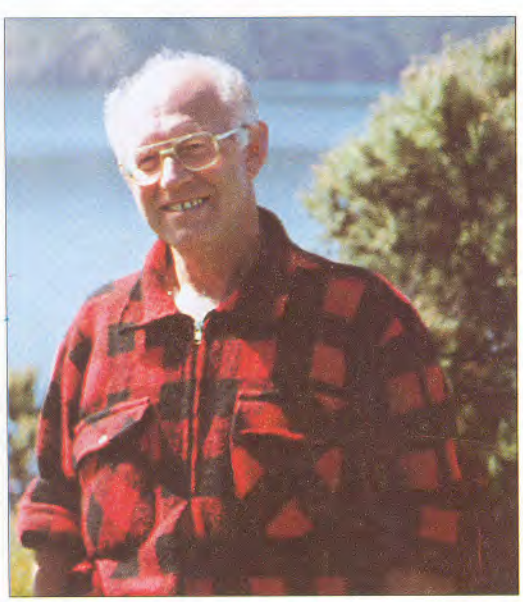
(xiii) With the recent doubling of the number of females within the management programme, greater production can be expected in future.

(xiv) For the first time in my 20 years of close involvement in the kakapo programme I believe the kakapo is at last poised for recovery:

- all birds known to exist are now settled in relative safety on island reserves;
- most have access to supplemental foods and are, as a consequence in better condition than at any time since the current management thrust began; and,
- all personnel involved are now aware of the serious threat kiore pose to nestlings and are committed to effectively controlling rats at nests.

These and other advances in knowledge and management capability lead me to believe that the dual goals of boosting the frequency of breeding, and of enhancing chick survival are now realistic and attainable goals.

3/5/94



Don Merton.

One of the ingenious Kakapo feeding stations on Maud Island

VASA PARROT'S FASCINATING BREEDING BEHAVIOUR

By Roger Wilkinson

Vasa Parrots are found only on Madagascar and nearby islands and are relatively little known with respect to their biology and behaviour. The genus *Coracopsis* comprises only two species: the Greater Vasa Parrot *Coracopsis Vasa* and the Lesser Vasa Parrot *Coracopsis Nigra.* Both are dull blackish or greyish-brown, have long necks and relatively small heads.

Vasa are unique in showing seasonal changes in their bill, feather and skin colour, in everting their cloacas in the breeding season, and in their loud song-like calling. The Vasa parrots love of sun-bathing - with most unusual poses being then adopted, their incredibly short incubation periods and rapid chick development additionally contribute to their distinction as being amongst the most unusual parrots. But these features, interesting as they are, are overshadowed by their fascinating sexual behaviour.

Wild Status

Lesser Vasa Parrots are considered to be common in the lowlands of Madagascar, though in general less plentiful than Greater Vasa. Both Greater and Lesser Vasas are on the Government list of harmful animals, are often hunted as food or captured for pets, and are not presently endangered. However, the Praslin Black Parrot *Coracopsis nigra barklyi* with a population of about 100 birds is endangered and knowledge obtained from studies of other Vasas may be relevant to its conservation.

Trade and History in Captivity

Large numbers of both Lesser and Greater Vasa parrots were exported from Madagascar between 1983 and 1988. Over 5,000 Vasa parrots were imported into CITES countries for these six years. What the initial captive figures were remain unknown but being conservative these could easily double the import figure.

The first reported captive breedings occurred recently. Herr Winner of Neuwied bred Lesser Vasas in 1976 and Greater Vasas were first bred by Dieter Meyer in Germany in 1985. In 1985 Chester Zoo was the first U.K. collection to breed Lesser Vasa Parrots and duplicated this success with Greater Vasa Parrots in 1990.

Lesser Vasa Parrots at Chester Zoo

Lesser Vasa Parrots at Chester are kept as a group in a large flight. The Lesser Vasas are single brooded with a clutch of three to four eggs. Nesting has always been in the late summer with eggs normally laid in early August. Only the female incubates and she is sometimes fed outside the box by the male. Laying dates and hatching dates in 1991 indicated a maximum incubation period for each egg of 15 to 16 days. This seems incredibly short for a bird of its size - for comparison the incubation period of Cape Parrots is 24 to 28 days. Nestling periods were estimated at 37 to 48 days over a series of nests.

After fledging, the chicks are usually fed by the breeding female which continues to chase and be fed by the adult males. Only once was an adult male seen to feed a fledgling. Males held over from the previous years breeding showed great interest in the fledglings, including repeatedly attempting to feed and mount one.

Greater Vasa Parrots at Chester Zoo

The Greater Vasa are held as a trio of one female with two males in a medium sized outdoor aviary. Our Greater Vasas breed earlier in the year than the Lessers, laying a single clutch in May or June. Clutches are of two to five eggs, each normally laid on alternate days. Incubation is by the female only and normally commences with the first egg. In 1991 and 1992 the incubation period was determined to be 17 days! Shorter than the 18 days for a budgerigar. Greater Vasa Parrot chicks grow extremely rapidly and fledge after 45-49 days.

In the breeding season both sexes show a change in bill colour with the bill paling to ivory. When in full breeding condition, both sexes may show cloacal protrusions which are most obvious in the male.

The cloacal masses when everted by the males were egg-shaped and 50-55mm long x 40-45mm broad. The female less frequently everted her cloacal mass which then appeared smaller than the males. The female Greater Vasa becomes bald-headed when breeding and the bare skin on the top of her head, around her eyes and on her throat then turns mustard yellow. This feather loss and colouring of the skin begins just prior to egg laying and becomes more obvious after the chicks have hatched. Additionally swelling of the bill flanges occurs in the breeding female.

During the breeding season the female becomes belligerent chasing the males around the aviary and demanding to be fed. I saw full copulation on six occasions prior to and during the egg-laying period. The copulation behaviour of Vasa parrots is unique and the subject of a scientific paper with Tim Birkhead of Sheffield University (Ibis, in press). During full copulation, the cloacal mass of the male enters the female's expanded cloaca and the two birds remain locked together for lengthy periods. On one occasion this lasted over 100 minutes!!

During copulation the female preens and bites the nape of the male. The male may alternate bouts of vigorous copulatory movements with bouts of feeding the female. Full copulation only occurred between one particular male and the female.

Conclusion

We have enjoyed learning about the breeding and behaviour of Vasa Parrots at Chester Zoo but much remains to be learned. From our limited observations, certain predictions may be ventured about their behaviour and ecology in the wild.

The rapid development and short period in the nest of Vasa parrots may have been selected for, by a short period of food abundance, or perhaps, as a response to nest predation. This may have driven the evolution of a form of co-operative breeding where several males are needed to provision a single breeding female. Studies in the wild are needed to address these questions. Such studies would not only illuminate the fascinating behaviour of these parrots but form the scientific baseline on which conservation management plans must depend.

Lesser Vasa Parrot at Chester Zoo. *Photo Roger Wilkinson.*

ECHO PARAKEET NEWS 1993-'94 SEASON

By Tim Lovegrove and Line Wadum (World Parrot Trust & Mauritius Wildlife Fund)

The 1993-94 season has been an eventful one for the Echo Parakeets. Although there was no successful breeding in the wild population of five known pairs, an Echo pair bred successfully in captivity for the first time. Three of the five wild pairs attempted to breed between October and December 1993, but their nests all failed for various reasons. On 10 February 1994 cyclone "Hollanda" struck Mauritius causing much damage. It was the most severe cyclone for about 20 years. Post-cyclone surveys suggest that some of the Echos may be missing.

The conservation programme for the 1993-94 season began in mid September when Line Wadum and I arrived in Mauritius (from Denmark and New Zealand respectively). We started with surveys to check the known pairs and management work at several nest sites. When Kevin Duffy left Mauritius in April he had confirmed the presence of five pairs in the Macchabe Forest - Black River Gorges area, and a number of other birds, perhaps 16-22 in total. Jonathan Blount, who followed Kevin as the Echo Manager, also observed the five pairs and all were still present when Line and I started on the project.

Thus, at the start of the season, with five known females there was a chance that we might have up to five nests. Pair 2 was the first to show signs of breeding and both birds, especially the female, spent much time near their traditional nest site (a hole 6m up in a large *Labourdonnaisia glauca*) from early October onwards. However this was not the first pair to lay. I found Pair 5's nest (with the female already incubating) on 29 October - a good site 12m above the ground in an immense Tambalacoque *(Sideroxylon grandifolia)*. This is a massive tree, 2m in diameter at the base and over 25m high. The nest cavity could only be reached with special climbing gear. We do not know how long this cavity has been used by Echos, but it would not surprise us if it is a traditional site which has been used for many years.

Pair 5 apparently laid only one egg. It hatched on about 18 November and when inspected on 25 November, the nest contained a healthy chick. The female was very attentive and her mate visited frequently to provision her. On 30 November on a routine (daily) check, the female was seen at the nest hole in the late afternoon but did not go in. Just before dark she flew away - our vigil continued till after dark, but she did not return. Something was wrong. We climbed the tree next morning and found the cavity empty. There was no sign that a rat had eaten the chick and a young bird this size (12 days old) would have been too large for a ship rat to have carried from the nest. Normally rats would feed on young this size in the nest, and leave characteristic feeding signs - gnawed bones and fragments of skin, bill, feet and feathers. There was none of this. The only other potential nest robber would be a macaque (and these monkeys are present in the area). However, the hole was not an easy one for a monkey to reach. Around the nest entrance the trunk is massive (still over 1m in diameter), smooth and without limbs - few monkey handholds. Thus the loss of this apparently healthy chick remains something of a mystery.

Meanwhile the Pair 2 female was incubating 3 eggs (the first laid on 4 November). The first egg hatched on 1 December and the second on 3 December. The other egg, perhaps the first-laid, did not hatch and showed no signs of development when handled. The two young were inspected every second day with a torch and mirror. Both adults were very attentive at the nest and the young grew normally. When checked on 21 December they looked fine, but on 23 December we found them dead. When removed from the nest we found that they were yellow-looking and anaemic and small scars indicated that they had probably succumbed to an infestation of tropical nest fly *(Passeromyia heterochaeta)*. The larvae of this fly live in the nest lining and migrate upwards (usually at night), to feed on the blood of the nestlings. They are not usually visible during a casual examination, however, close inspection reveals the small lesions on the skin, possibly even larvae in the nostrils and overall anaemic appearance. Nest fly has been reported before in wild Echo nests on Mauritius and in some of the captive birds, it is endemic and widespread in Southern Africa and many lost species have been reported.

Clearly in our nest the two young died quite quickly. (It is more usual for the young to succumb rather gradually - thus alerting the observer that something may be wrong). In our nest there was no indication that anything was wrong until it was too late, and the adults behaved as if everything was normal. Obviously in future more rigorous and frequent checks of nestlings are needed, (i.e. up to twice daily), and they should be removed from the nest and examined closely. The nest material should also be treated with a suitable insecticide. This was done routinely at all nests (with mite powder) before the birds laid (with the exception of Pair 5's nest). However, the protection afforded by this probably declines quite quickly and frequent applications are needed. We need to find a suitable insecticide for this - (can anyone help with suggestions?). Since it is likely that some of the material will inevitably be ingested by both adults and young we need something proven to be absolutely safe. Ideally this should be mixed well through the powdery rotted wood which forms the nest base. Fortunately, the Echos seem to be quite amenable to disturbance at their nests and do not seem to be upset by frequent nest visits and manipulations.

With the loss of Pair 2's nest, (which was the last active one of the season) our hopes of some productivity amongst the wild Echos were dashed. Pair 3's nest - the only other one active during December had already failed about a week earlier.

Although Pair 3 lost their nest they did make history by being the first wild Echos to use an artificial nest cavity. They nested in a huge old tree stump which Kevin Duffy and Jon Blount had cleverly modified to create an "ideal" Echo nesting cavity. They opened up the side of this (already hollow) tree

Line and Tim busy preparing rat bait containers.

Tim Lovegrove refills a supplementary feeding station for the wild Echo parakeets.

and "improved" the cavity by adding an upper and lower inspection door and a new entrance hole. The side was then closed in with fibreglass and timber and finally camouflaged with pieces of rotted wood and bark. It looked superb - (the Echos obviously thought so too!). Two eggs were laid (the first on 25 November). Unfortunately the nest was abandoned on 18 to 19 December during a spell of very stormy weather when Cyclone "Cecilia" brushed Mauritius. During incubation, the behaviour of the female was a little unusual in that she occasionally spent long periods (30 - 50 minutes) off the nest, apparently feeding. Her mate provisioned her at approximately hourly intervals at the nest entrance, but this cannot have been sufficient.

At the time we were not too concerned about the eggs chilling because the Aviary Echo pair, which had begun nesting several weeks earlier, had similar behaviour and both their eggs hatched successfully. In the Aviary pair the long spells off the nest appeared to be thermoregulatory. In retrospect it appears that the Pair 3 female was hungry. We rescued the abandoned eggs and brought them to the aviaries where they were placed under a female Ring-neck Parakeet. They did not hatch. However, both eggs showed advance development so they were clearly fertile. The message here is that eggs should be removed much earlier if females show any inattentiveness during incubation.

A major achievement this season (and the only known productivity in the Echo population) was the successful breeding of the young Echo pair at the Black River Aviaries. Two young hatched from the two eggs laid. One chick died young (the egg it came from was smaller). The other is now independent and is doing well. The discovery of high levels of pathogens in the local water supply at the Aviaries may help to explain poor survival of captive Echos in recent years. Of 20 brought into captivity since the 1970's only 3 remain. All captive Echos now receive bottled water.

One might question our management policy this last season and question why weren't Echo eggs/young brought into captivity much earlier, and indeed why wasn't double clutching a routine part of management. (Echos are known to recycle in about three weeks if clutches are removed early). There was good reason for leaving the wild birds to it this year. Psittacine Polyoma virus has been found in the Black River Aviary Ring-neck population and as yet the distribution of this virus (which is often fatal if young birds contract it) is unknown in Mauritius. It may already be endemic in wild Ring-neck and Echo parakeets. However, until the question about the spread of Polyoma is answered, we have decided not to bring further Echos into captivity unless absolutely necessary. In January and February we collected faecal samples from five wild Echos (3 females, 2 males), from many of the wild Ring-necks which roost communally in the Black River Gorges, and from the captive Echos and Ring-necks at the aviaries. The samples have gone to the U.K. for analysis and we are now awaiting the results. If the virus proves to be wide-spread then we will have no problems bringing more Echos into captivity nor releasing captive-reared Echos. However should the virus be confined to the captive Ring-necks (and perhaps Echos), then we will have to keep the captive population separate.

If Polyoma is found to be widespread our approach next season will be to remove all first clutches from wild nests early and bring these to Black River for captive husbandry - either to be raised by Ring-necks or hand-reared. The wild Echos should recycle and a similar level of management (with some improvements) will be undertaken as last season. Rats will be poisoned and trapped as before, nests will be guarded and checked frequently, and nestlings will be examined closely for possible nest fly attacks.

We will also persevere with the supplemental feeding trials. There was very little success with this during the 1993-94 season, and no food has been taken at all in the Mare Longue Plot where Kevin Duffy fed birds quite regularly between 1991 and 1993. Pair 1, which nests in the Mare Longue Plot, didn't even attempt to breed this last season, despite supplemental food and suitable nest cavities being available. Shortly, we will erect a feeding platform in the Pair 3 territory in the hope that Pair 3 might benefit.

Further management of nest cavities will be done to facilitate access for checking broods and placing fresh nest material. New nest sites will also be built. Last season a storm-damaged cavity reconstructed in timber by Jon Blount, was completed by adding a layer of ferro-cement. This material has considerable potential for constructing nest sites. These will incorporate inspection doors and a drawer in the base (containing the nest). Replacing the nest material will be simply a matter of pulling out the drawer and transferring the nest contents into a new one containing fresh "treated" nest material. A similar technique was employed by Don Merton's team in New Zealand with Black Robin nest boxes, where soiled nests were regularly exchanged for clean ones. Such measures all help to reduce disease and enhance survival.

On 10-11 February, Mauritius was struck by the most severe cyclone in about 25 years. "Hollanda" did considerable damage. Although the native forest is mostly all still standing, and in places looks hardly altered, there was much canopy loss and considerable loss of flowers and fruit. It appears that we may have lost some Echos as well, although our post-cyclone surveys are continuing and as the weeks pass, more of our "lost" birds are reappearing. The head count is made all the more difficult at this time of year because they may form loose post-breeding flocks (hence confusion between pairs is possible), and they also range widely for other food sources, such as the starfruit trees in the lower Black River Gorges. The post-cyclone survey has emphasised the difficulty of identifying birds individually. It is imperative that we colour-band as many Echos as possible. At present, there are no banded Echos and banding and individual recognition are essential tools in endangered species management. There is also considerable scope for radio telemetry.

We are optimistic that we will relocate most of the birds and are encouraged by the very high survival of the Pink Pigeons and Mauritius Kestrels.

Last year a few Echos were seen in the forest at Bel Ombre on the southern slopes of Mauritius. A recent post-cyclone survey indicates birds are still present, but we don't know how many. More surveys will be conducted. It is possible a small population, separate from that in the Gorges, exists there.

Where do we go from here? Although there have been setbacks much has been learned about management of the Echo. We know that double-clutching is possible, so a quick expansion of the captive population is feasible. We know that nests can be protected from rats and how quickly young can succumb to nest fly. The first successful nesting of Echos in captivity has been a breakthrough. While we still have some pairs there is obviously some hope - we only need to look at what was achieved with species such as the Mauritius Kestrel and the Black Robin to see what can be done.

Echo parakeets in the wild are elusive and difficult to photograph. This is one of Line's better shots.

INTERNATIONAL NEWS ROUND-UP

USA

WILD BIRD CONSERVATION ACT OF 1992

Summary of Effects

The Wild Bird Conservation Act, a significant new step in international conservation efforts to protect exotic birds subject to trade, became effective on October 23, 1992. The Act focuses on bird species listed on the Appendices to the Convention on International Trade in Endangered Species (CITES). If you import birds, you must now meet requirements imposed by this new law in addition to existing requirements imposed by CITES, the Endangered Species Act, the Migratory Bird Treaty Act, or other regulations that may apply.

It is important to note that the Act does not cover exotic bird products or all birds. The following birds are exempt from the provisions of the Act:

- birds native to the 50 States and the District of Columbia;
- domestic poultry, sport-hunted birds, museum specimens, and dead scientific specimens; and
- birds in the families *Phasianidae* (pheasants and quail), *Numididae* (guineafowl), *Cracidae* (guans and curassows), *Meleagrididae* (turkeys), *Megapodidae* (megapodes), *Anatidae* (ducks, swans and geese), *Struthionidae* (ostrich), *Rheidae* (rheas), *Dromaiinae* (emus), and *Gruidae* (cranes).

IMPORTATIONS ALLOWED UNDER THE ACT

Permit Required

The U.S. Fish and Wildlife Service may issue permits to allow importation of otherwise prohibited species if the Service determines the importation does not undermine the species' survival. A permit must be issued by the Service prior to importation. Permits may be issued only for the following purposes:

- scientific research;
- zoological breeding or display:
- pet importation when owners are returning to the United States after at least a year's absence; and
- cooperative breeding programs, if the programs have been approved by the Service.

In addition, the Service allows birds listed under CITES that were exported from the United States by their owners to return to the United States. These importations are allowed provided the birds were exported legally with a CITES permit and a copy of that permit is presented when the birds are to be returned to the United States. Also, owners must accompany these birds when they are returned to the United States.

Permit Not Required

The Act provides for certain otherwise prohibited importations without a permit provided the Service has approved the species, the captive breeding facility, or a scientifically based management plan for the species. The Service has not approved any species, breeding facilities, or management plans to allow for imports without a permit. In the future, the Service will publish an approved list for each of the following categories:

- certain approved captive-bred species,
- certain species from approved foreign captive breeding facilities, and
- certain wild-caught species from countries with approved management plans.

Until the Service has issued approved lists for these species, their import will not be allowed.

APPLYING FOR A PERMIT TO IMPORT BIRDS

Permit applications and any other information you may need are available from the Office of Management Authority.

EDITORS NOTE:

This information was supplied by the US Fish and Wildlife Service and applies **only** in the USA.

STOP PRESS • STOP PRESS

The WPT will be at the AFA Convention 4-7 August 1994 in Knoxville, Tennessee. Charlie Munn and Mike Reynolds will speak at 7pm on 4 August. For convention bookings call 602.484.0931. The convention focuses on African and Australian species.

STOP PRESS • STOP PRESS

FRANCE

On Saturday the 12th of November 1994, a congress dealing with aviculture and conservation, will take place in ARRAS (north of France). The "léres Rencontres Ornithologiques Européennes" will be organised by the CDE (group of french aviculturists), which is looking forward to promoting parrots' conservation and especially the WPT's work, in France. It is hoped that Rosemary Low will be a speaker. Other lecturers will be Harry Sissen, Marc Boussekey (France, Red-vented Cockatoo EEP Coordinator), Jaap Vredenbregt (Holland, specialist of artificial incubation), Didier Leportois (France, regional Studbooks keeper).

The organisers are expecting to welcome 300. For further information, please contact Didier Leportois, 10 avenue Aristide Briand, 03200 Vichy, France.

NETHERLANDS

NINTH PARROT CONVENTION

By Stella Roomans

On April 16th, the ninth Parrot Convention was held in Birdpark Avifauna at Alphen a/d/Rijn, Holland. Most lectures concentrated on African Parrot species and African biotopes, as for instance the lectures of Roger Wilkinson from Chester Zoo. He first described the biotopes on the mainland of Africa, and remarked that most African Parrot species do not, as their counterparts in South-America, prefer the lowland and montane rainforest, but rather the dry, open savannah areas, which might be to their advantage, since the rainforest is endangered everywhere.

Another way of reducing the pressure on birds in the wild is by trying to breed them in our aviaries, provided that breeders aim at maximising biogenetic diversity, as Han Assink, chairman of the WPT - Benelux, pointed out. This can only be done successfully, he said, if breeders put the interest of biogenetic diversity before their own economic interest. The road to successful breeding with several African species was laid out to the audience by Marc de Bra, a Belgian expert on African Parrots.

Promising techniques for sexing and diagnosing diseases like PBFD and Polyomavirus using DNA tests were explained by Peter Scott, who also discussed the meaning of the test results and possible applications in disease diagnosis. These techniques might help enhance captive breeding results and thus protect parrot species in the wild.

Zoos and birdparks also try to contribute to the protection of parrot and other species: by participating in EEP programs, as mentioned by Avifauna bird manager Hans van der Sluis; by studying the most interesting breeding behaviour of the lesser and greater Vasa parrots in Chester Zoo (Roger Wilkinson); and by designing new housing facilities in zoos like the Rotterdam Zoo in such a way that the animals literally will feel "at home".

All in all an interesting, well-organised and pleasant convention, which gives us hope for the future of the parrots and certainly makes us look forward to the Tenth Parrot Convention, to be held in April 1995 in the Antwerp Zoo in Belgium.

UK

CUSTOMS OFFICER SAVES RARE PARROT

Richard Simmons, an HM Customs officer stationed at Dover, heard a strange noise coming from a ship's funnel. He investigated, and found a cage containing a Cuban Amazon parrot. The bird was confiscated, and after being quarantined, it was placed at Paradise Park in Cornwall where a mate will be provided for it.

TENERIFE

III International Parrot Convention - Loro Parque 14-17 September, 1994 - "PARROTS TODAY"

Loro Parque's first convention, organised in 1986, was attended by more than 500 people and the second in 1990, almost 1,000 people participated. With this past success, it is with great enthusiasm that we are now preparing a third event for the 14 - 17 September, 1994.

We have already appointed 20 organisers throughout the world including countries like Japan, United States, South Africa, Australia and Europe to help us promote our convention and the Canary Islands in the press, bird clubs, conservationist organisations, avian research centres, etc. in these countries. We hope in this way to reach our maximum number of participants which on this occasion will be 750 people.

Much has changed over the past 10 years in all fields of aviculture in relation to care and breeding of parrots in captivity. Medical attention, housing and special diets have all improved immensely and, most important of all, this information has been shared amongst aviculturists on a worldwide scale. This in itself would be reason enough to hold yet another convention but we feel that we have an even greater purpose to achieve — that of helping the plight of parrots in the wild. Year after year we continue to see species fall into extinction or decrease in numbers. At the II International Parrot Convention much was achieved to help save some of these species by donations and fund-raising activities and we hope to be able to raise even greater support at the third convention.

The theme of the convention this time is "Parrots Today" and we hope to highlight the changes which have occurred over the past decade. Our speakers will include renowned vets, breeders, scientists and conservationists who will be presenting a wide variety of topics which are of interest to everyone concerned.

The inscription price is of 30,000ptas which includes: a Welcome Cocktail on the 14th; dinner and entertainment on the nights of the 15th and 16th; and a Gala Dinner on the evening of the 17th. As before, all participants will have the right to free entrance to Loro Parque throughout their stay.

The Convention Centre is again the five-star Hotel Semiramis in Puerto de la Cruz, where we have obtained a limited number of rooms at special convention rates.

For further information please contact Loro Parque or your regional organiser.

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III International Parrot Convention 14-17 Sept. 1994

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Portela de Azoia, 2685 Secavém

BOOK REVIEW

PARROTS IN AVICULTURE

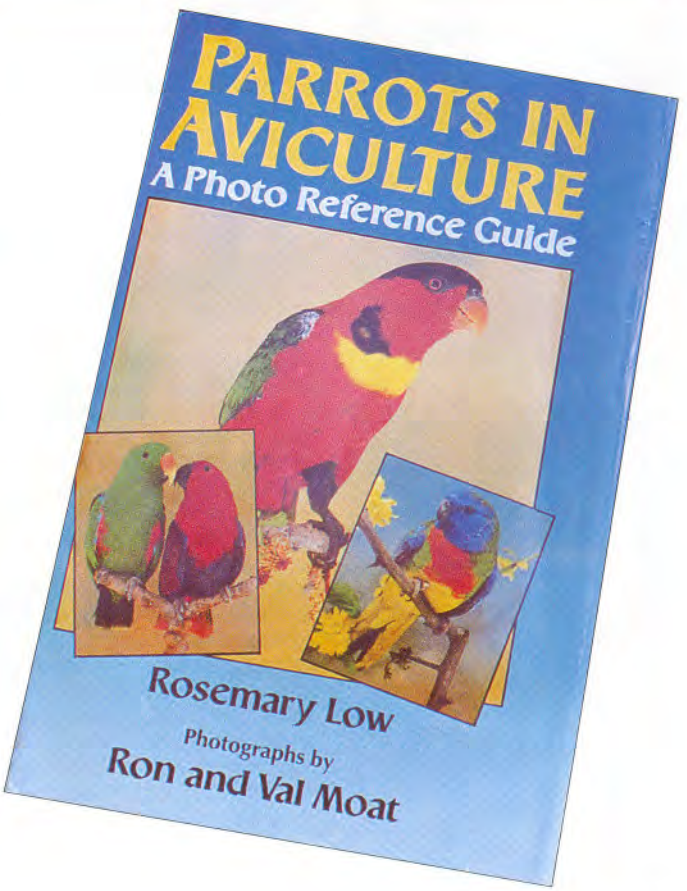
A Photo Reference Guide. By Rosemary Low
Photographs by Ron and Val Moat

This book is exactly what it says it is. A page is devoted to each of 220 parrots, including all those most likely to occur in aviculture, and also quite a few that most aviculturists are unlikely to have the privilege of keeping. The information is laid out in a most ingenious condensed manner, giving essential details of appearance, status in the wild and in aviculture, recommended accommodation and diet, and brief breeding notes.

The quality of the photographs is excellent throughout, with 90% being provided by Ron and Val Moat, and a first-class group of shots from Peter Odekerken of Australia. Any aviculturist who has tried to get good shots of his birds will be impressed by the achievements of these successful parrot photographers.

For anyone who wants a convenient quick reference guide to every species of parrot likely to be encountered in aviculture, this book can be thoroughly recommended. The price is £18.99 (UK) and it is published by Blandford.

Rosemary closes the book with a plea to readers to join and support The World Parrot Trust.



ACTION PAGES

IAS Directors present at the 7 May meeting, Memphis, Tennessee. ***Back Row:*** *Mike Reynolds, Richard Porter, Denise Reeve, Marc Valentine, Starla Swigert.* ***Front Row:*** *Steve Hartman, Veta Holloway, Will Pace, Jerry Pace, Luanne Porter (President), Diane Wolff. The pomeranians did not vote.*

INTERNATIONAL AVICULTURISTS SOCIETY SUPPORTS PARROT CONSERVATION

At a May 7 meeting of its Directors at Memphis, Tennessee, the International Aviculturists Society (IAS) decided to donate 50% of its surplus funds to support international parrot conservation projects recommended to the Society by The World Parrot Trust.

The sum allocated to conservation is $15000, part of the convention proceeds and donations of £30325 raised at the IAS Convention at W. Palm Beach, Florida in January 1994. A similar sum goes to help fund research by Dr. Kevin Flammer and Dr. Branson Ritchie into avian diseases.

The conservation projects include support for Lear's Macaw through the World Parrot Trust's 'Palm for a Parrot' scheme: this is a programme to plant palm trees essential to the survival of a species which numbers only 60 to 70 birds in Bahia, Brazil.

Another project supported was 'Parrots in Peril Ecuador 1994', an expedition which aims to increase the protection provided for three endangered parrot species in the Podocarpus National Park, Ecuador. Other funds were earmarked for work on Buffon's Macaw in Central America and Ecuador. As the work progresses, reports will be provided for IAS members by The World Parrot Trust USA.

Both organisations believe that this substantial donation demonstrates that aviculture is moving into a new era, in which the survival of parrots in the wild is seen as part of the responsibility of private aviculturists. In its five year history The World Parrot Trust has raised over $600000 for parrot conservation, and currently helps 20 endangered parrot species around the world.

The recent launch of World Parrot Trust USA makes it easier for US bird clubs and concerned individuals to make their own tax-deductible contributions to parrot conservation, using the Trust's special expertise and distinguished advisors, who include Mr Joe Forshaw, Ms Rosemary Low, and Dr Charles A Munn III. For information, contact the Trust's US Administrator, Ms Parker Thompson, PO Box 32127, Knoxville TN 37930-2127. Phone/Fax 615.531.3412.

For membership of the International Aviculturists Society, please contact Sallie Klink, Membership Chairperson, 14415 Dabney Court, Spring Hill, FL 34610. Phone 813.856.3587. To make a reservation for the January 12-15 1995 IAS Convention at Sheraton World Resort, Orlando FL, call (800) 327.0363.

RAIN RELIEVES PRESSURE ON LEAR'S MACAW

Dr Charles Munn answered his telephone in Maryland late one evening and heard a sound more beautiful than any symphony —— rain.

"Charlie!" cried Pedro Lima from his farm in Bahia, Brazil, "Listen!".

After three years of severe drought in the thorn scrub habitat native to the tiny remaining wild population of Lear's Macaw, the rain had finally come.

And, to the relief of ornithologists and ranchers alike, it is still raining —- heavily!

Licuri palms on which the Lear's Macaw are almost entirely dependent for food are thriving throughout the territory in which the birds traditionally forage for palm nuts. Equally important, the grass is also flourishing across ranches in the region, ensuring ample grazing for thousands of head of cattle. In times of drought, ranchers are prone to cut palm fronds for cattle fodder, further degrading the palms on which the macaws feed.

Pedro and his colleague Yuri de Barros have conducted surveys throughout the region they call "Lear's Land" and report that non-nesting adult macaws have plenty of food (at least for the time being) and seem to be in good condition. Based on new information Pedro has received from several sources, the wild population is now estimated at 75 birds —- fifteen more than the number of birds spotted one year ago.

But the news is not all good. The Lear's Macaw nest site is miles away from supplies of palms, which are in any case widely dispersed. Nesting adult macaws are unlikely to be able to reach good foraging grounds, so there is little hope that the species will successfully reproduce this year.

Meanwhile, the Project's "Palm for a Parrot" campaign is well underway to dramatically increase the numbers of licuri palms available to the macaws over the next decade. Agronomist and palm expert Danilo Lima has already planted out 28,000 licuri palm seeds on his farm south of Salvador. This month a further 22,000 seeds are due to be planted. Danilo anticipates a successful germination rate of 60%. By September he hopes to be able to transplant 30,000 palm seedlings into a purpose built nursery.

Biodiversitas, Brazil's prestigious non-government conservation organisation, is also assisting the project with research permits to study the Lear's Macaw nest site, where observations this season have been hampered. When permits have been issued, Charlie Munn has volunteered to train a team of Brazilian biologists in the methods he has perfected in Peru to investigate nesting macaws without disrupting their breeding or rearing behaviour.

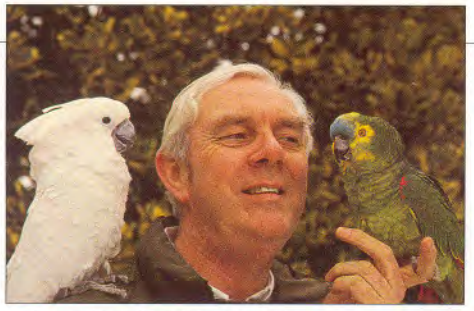
ERRATA
PUERTO RICAN PARROT: PSITTASCENE Vol.6 No.1

Page 6, column 1, para. 2, line 11 should read:
decade a study of the species

Page 6, column 4, last para. line 11 should read:
supplies for the parrots (to be

Page 7, column 2, first full para. lines 29 through 32 should read:
offered by critics for poor reproduction -- problems with techniques and an allegedly poor aviary location -- fail to account

We apologise for these errors.



Mike Reynolds with 'Susie' and 'Roger'.

A letter to all Members of the Trust

Dear Friend of the Parrots,

The Trust has just completed its fifth year, and for the first time we have achieved an annual income of £100000 ($150000). This would be small change for any major charity, but for us it is enough to give significant help to a dozen endangered parrot species. This is because we keep expenses to a minimum, and rely almost entirely on voluntary help.

The problem is that we have the opportunity to help many more parrots, but completely lack the necessary funds. Although we have put much effort into seeking funds from businesses and foundations, our success in those areas has been limited. The fact is that most of our funding comes from aviculture, from concerned individuals and from bird clubs. You will have read in this issue of 'PsittaScene" of the large donation just received from the International Aviculturists Society, and we believe this demonstrates the trust that Society has in our expertise and integrity.

We hope that others will follow their lead, and make their surplus funds available to us for wise investment in projects to help the survival and welfare of parrots around the world. We have won the support of most of the leading players in psittacine conservation, and work closely with such eminent figures as Joe Forshaw, Charlie Munn, Rosemary Low, Carl Jones, and Paul Butler. We have no doubt that our conservation initiatives have helped the image of aviculture.

You can help us, and help the parrots, in the following ways:-

- Select one of our endangered parrot projects as your own, and raise and donate funds for that bird.
- Consider becoming a Life Member of the Trust (£250/$400).
- If you are a member of any bird club or other group, encourage your fellow members to adopt and fund one of our projects.
- Consider leaving a legacy to the Trust.
- Help us find commercial sponsors, or funds from foundations.
- Insist on your 'parrot friends' joining the World Parrot Trust. When they do this, they identify themselves as caring and responsible aviculturists: The Elite of the Parrot World.

Please write or call me if you want to discuss any plans for developing the Trust. In the meantime, thank you for the help you are giving to the parrots.

Yours sincerely

Michael Reynolds, *Honorary Director*

Members receive our quarterly newsletter *PsittaScene* with news about parrot conservation and welfare.

Please send your completed form to:

UNITED KINGDOM
World Parrot Trust, Glanmor House, Hayle. Cornwall TR27 4HY

UNITED STATES OF AMERICA
Ms. Parker Thompson, Box No. 32127, Knoxville, Tennessee. 37930-2127, U.S.A.

CANADA
Mrs. D. Wyant. 85, Guildwood Drive, Hamilton. Ontario. L9C 6S3

BENELUX
Mrs. J Fiege. Graafseweg 37, 54 51 NA-MILL Netherlands.

FRANCE
M et Mme Prin, 55 Rue de la Fassiere, 45140 Ingre, France.

DENMARK
M Iversen, Aldershvilevej 80C, 2880 Bagsvaerd, Denmark.

HELP SAVE THE PARROTS OF THE WORLD

Please join the Trust, or encourage friends to join.

SUBSCRIPTION RATES **(please tick)**

☐ UK and Europe (Single) £15

☐ UK and Europe (Family) £20

☐ Fellow (Life Member) £250/US$400
Corporate (Annual)

☐ All Overseas Airmail £17/US$25
(payment by Access/Visa preferred)

☐ Additional donation of £/US$

Name.....

Address.....

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.....Zip/Postcode .....

Please charge my Access/Visa Acc/No.

☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Exp. date.....Amount £/US$ .....

Signature.....

OR: I enclose cheque payable to the WPT.

I heard about the World Parrot Trust from.....

PARROTS IN THE WILD

THE BAHAMA PARROT (Amazona leucocephala bahamensis)

The endangered Bahama parrot survives today on the islands of Abaco and Great Inagua at the northern and southern limits of its formerly extensive range. Although Christopher Columbus saw and described large flocks of these parrots when he landed in the New World in 1492, they have become rare. Parrots have declined and disappeared throughout the islands because of habitat loss, hunting and capture for pets. The Abaco population is unique among New World parrots because of its subterranean nesting habit. The parrots of Abaco nest beneath the ground, using naturally formed limestone cavities, and nests average 125cm in depth. They nest May through September, laying a clutch of 3-4 eggs and fledging 1-2 chicks. Abaco parrots are threatened by feral cat nest predation and the development of their Caribbean pine forest habitat. Increasing awareness for this parrot's plight has fostered support for the creation of a National Park on Abaco. Things can indeed be "better in the Bahamas" for Abaco's 1200+ parrots if their habitat becomes protected. It would be a terrible loss indeed if this national treasure disappears. (Photo and copy supplied by Dr. Rosemarie Gnam). GOOD NEWS - Bahamian Prime Minister, Hubert Ingraham, just announced the creation of a 20,000+ acre National Park for the parrot on Abaco under the Bahamas National Trust. Life is certainly getting "better" for this parrot.

We intend to continue this series of 'Parrots in the Wild', and if any reader can offer us a high quality shot that might be suitable, please get in touch.

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