



## TRUST VET ASSISTS SURVIVAL OF WORLD'S RAREST PARROT

**New clues to Echo Parakeet problem** By Paula Harris

When the World Parrot Trust was launched in 1989, our first priority was to help the world's rarest parrot, the Echo Parakeet, which still numbers less than 20 birds in the wild. With your generous donations, the Trust was proud to present the Echo Parakeet project with a badly needed four wheel drive vehicle to enable field researchers to reach the remote forest in which the parrot struggles to survive.

The World Parrot Trust has consistently provided funding for the Echo Parakeet and maintained close relations with the project's director, Carl Jones, and the Jersey Wildlife Preservation Trust, which finances and manages the project with the co-operation of the Mauritius government's Conservation Unit. Recently, the World Parrot Trust was invited to become a major partner in the Echo Parakeet

project, contributing funds and parrot expertise to both the captive breeding programme and wild population management efforts. This new opportunity provides the World Parrot Trust with one of the greatest challenges in parrot conservation today.

The following story is drawn, in part, from a veterinary report by Andrew Greenwood, MA VetMB MIBiol MRCVS, a founder Trustee

of the World Parrot Trust and a member of the International Zoo Veterinary Group. When the captive population of parrots became ill this spring, Andrew advised project staff in Mauritius by telephone and by fax. Subsequently, at the request of the Jersey Wildlife Preservation Trust, the World Parrot Trust sent Andrew to Mauritius to investigate tragic mortalities among the Echo Parakeets.

The world's rarest parrot shares its Indian Ocean island home with the world's rarest falcon, the Mauritius Kestrel, and the world's rarest pigeon, the Pink Pigeon. Along with eight other indigenous bird species, the Echo Parakeet has declined largely because of mass deforestation on the island and the introduction of rats, monkeys and mynah birds. Forests were felled first for sugar plantations and later for pine plantations, leaving only one area of indigenous forest along a mountainous ridge. This region, the Black River Gorges, has been designated as the first national park in Mauritius. Though now secure from further development, the forest is encroached upon by exotic flora which threatens to strangle the natural vegetation on which the parrots depend for food. Weeding campaigns conducted for several years to eliminate foreign plants

have succeeded in creating a small, but fragile, haven for the parakeet.

Even if good foraging could be assured for the wild birds, their nest holes remain vulnerable. Rats and monkeys eat the Echos' eggs and young, while Indian mynah birds colonize the few available nest holes. Nature provides the final blow to the species. Cyclones regularly strike Mauritius, killing birds outright and stripping away vegetation so that the survivors have little or nothing to eat. Mauritius was once the home to six species of parrot, all of them unique to the island, but by the 1970's the Echo Parakeet was the only parrot species left apart from the introduced Ringnecks. Today the wild population is estimated at 16 to 20 birds.

### Captive Breeding Setbacks

To ensure the survival of the species, Carl Jones began a programme to breed Echos in captivity, following similar procedures to those which had proved so successful with the Pink pigeon and the Mauritius kestrel. Jones and his team have learned from long experience that they can remove eggs from the nest of wild



Vet Andrew Greenwood in Mauritius

**“psittacine**  
(sit'á sîn) Belonging  
or allied to the  
parrots; parrot-like”



**EDITOR:**

Rosemary Low,  
The World Parrot Trust,  
Glanmor House, Hayle,  
Cornwall TR27 4HY, U.K.

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parakeets in the early stages of nesting and the pair will immediately nest again. Chicks are removed only when it is apparent that the nest is going to fail and the chicks would die if left in the wild. So a captive population of Echo Parakeets can be established without depleting numbers in the wild.

But efforts to keep and breed Echo Parakeets have proved frustrating. Since research on the Echo Parakeet began on Mauritius in 1974, twenty birds have been maintained in captivity. None of the birds have reached breeding age. Beginning in 1979, a colony of locally-captured Indian Ringneck parakeets has been maintained in Mauritius at the Mauritius government's Black River Aviaries to act as foster parents for Echo Parakeets and chicks. A serious research effort began in the 80's with the ringnecks proving singularly effective foster parents, hatching and rearing almost every Echo egg and chick they have been presented with as well as breeding and rearing their own young.

However, 12 of the 15 Echo Parakeets held in the aviaries since 1987 have died. Seven birds were alive in the spring of 1993, deriving from eggs and chicks taken in 1991/2. In April disease swept through the captive population leaving only 3 birds alive, one sub-adult pair and a juvenile. Eight of the deaths (67%) have occurred in April/May when the birds were aged 4 - 18 months.

Although veterinary investigations have been conducted in the past, results have been inconclusive. No data remain on the 4 chicks harvested in 1974-5. Scant information on captive Echos dating from 1987 mentions, but dismisses, the finding of a number of Gram negative bacteria isolated from dead parakeets, organisms which we now recognise as major pathogens of parrots. Gram negative bacteria are normally found in the gut of man and most animals and birds, especially carnivores, but are not normally present in any numbers in parrots. Healthy parrots can probably fight them off and do not become colonized unless there is an underlying dietary, immunity or disease problem or an overwhelming challenge with severe contamination.

**Is Obesity a Mortality Factor?**

Detailed data on birds lost before 1991 are not available. Seven parakeets were examined in 1991. A preliminary report on these birds ruled out any significant infectious or parasitic disease, but concentrated on the large fat stores present in the bodies. This led to a major change in the



*Echo Parakeet at 48 days*

captive diet of the foster parents during the rearing period and of the weaned Echo chicks in an attempt to reduce a perceived obesity problem, but no further change in management took place.

Also to solve the obesity problem, the World Parrot Trust has funded research to create a better diet for the captive Echos. When St. Vincent parrots became obese at New York's Bronx Zoo, animal nutritionist Dr. Ellen Dierenfeld requested samples of the vegetation the wild birds ate in their native Caribbean forest. A detailed chemical analysis was made of each flower, leaf and fruit. Foodstuffs readily available to the zoo in North America were analysed and compared to native foods for vitamins, minerals and fibre content. A new diet, duplicating as closely as possible the foods the parrots selected for themselves naturally in the wild, was strictly administered to the parrots. Now the World Parrot Trust is funding a similar study for the captive Echo Parakeets. Samples of the indigenous plants eaten in the wild have been collected and shipped to Ellen Dierenfeld's New York laboratories for analysis.

Already the Echos are fed an almost entirely fruit, vegetable and leaf diet, but in spite of this the deaths have continued. Andrew Greenwood reports that the Echo Parakeet appears to be a rounded 'fat' bird, more closely resembling a pigeon in shape. Even the birds of the wild population which are foraging on native leaves and fruits have a similar appearance. A fresh look at the problems the Echos face in captivity was clearly needed.

**World Parrot Trust Begins Investigations**

The Trust's involvement with the captive Echo Parakeet mortality problems began in April 1993 when one bird died and others

became sick with signs of vomiting and lethargy. Andrew's treatment, advised by fax and telephone, consisted of antibiotics and anti-emetics, such as were available in Mauritius. They seemed to hold the situation. One bird in which treatment produced no response died 9 days after the first, a third began feeding again after treatment but was later lost and a fourth appeared to have recovered well, but died suddenly from intussusception and intestinal prolapse. A fifth bird which was also ill and treated, recovered and remains alive.

A water sample from the aviary water system was reported to be grossly contaminated with coliform bacteria, and unfit for human consumption. Postmortem examinations were carried out by aviary staff, with the help of the Ministry of Agriculture's laboratory. Gross examination of the bodies showed only one bird to be in fat condition. Various bacteria were cultured during life and after death from this group of birds, including coliforms. Various tissues were collected, shipped to the UK under licence and submitted to Rest Associates for rapid histopathology. The findings may be summarised as haemorrhagic enteritis with secondary kidney damage. One bird had salmonella isolated at postmortem. At the same time as the parakeet deaths, several Rodrigues fruit bats and two Mauritius fodies also died in the aviaries. The deaths of the fodies appear unrelated to the Echos, but most of the dead bats were not examined.

When the Trust sent Andrew Greenwood to Mauritius at the end of May, all deaths, except among the bats, had ceased and no parakeets remained on treatment. At the Black River Aviaries he approached the parakeet problem as a typical avicultural or zoo site investigation. He often conducts

this kind of study when aviculturists are experiencing unusual losses or reproductive failure among their stock. He assesses all aspects of the husbandry and management of the aviary, collects samples of known quality and origin and correlates this information with clinical, postmortem and other laboratory findings. At Black River he collected fresh faecal samples from 6 Ringneck aviaries and from the surviving Echo parakeets for culture. He also blood sampled six individual Ringnecks and sent the samples for virological investigation at the University of Giessen in Germany.

### Evidence Suggests Disease

After a thorough on-site investigation of the Echo Parakeets in captivity and in the wild and receipt of postmortem and clinical examination results, Andrew is convinced that the parakeet problem is a disease which must be tackled if the species is to be saved.

Faecal samples from the pair of Echo Parakeets and two of the 6 pairs of Ringnecks contained a number of Gram negative bacteria. All 6 Ringnecks were negative for Psittacine herpesvirus, but all were positive to polyomavirus, a highly contagious virus which only affects the chicks. Typically, chicks may die at a young age or simply be very difficult to rear, with repeated bacterial infections and poor growth rate. Also the results indicate that psittacine polyomavirus is present and active within the group, as it has been passed from parents to offspring.

The facilities at Black River Aviaries are about to be greatly

improved by the construction of the new aviary block where parakeets will be kept separate from other species and have a large flight cage. The present facilities have served the Mauritius Kestrel and Pink Pigeon captive breeding programmes well, but parrot species are extremely sensitive to disease and the Echo Parakeets will require a much more rigorously controlled environment.

### Fighting Disease on Several Fronts

Andrew made various hygiene recommendations designed to minimise the bacterial load to which the parakeets are subjected. All parrots are highly susceptible to infection with Gram negative bacteria, especially if stressed by other means, and such bacteria are regularly present as a result of contamination by humans as well as pest species. The obvious peak of mortality among Echo Parakeets in April may be associated with some heavy environmental contamination at that time of year, perhaps water-borne.

He also advised keepers of the possibility of transmission of disease between aviaries on their shoes, clothes and implements (so called fomite spread). Keepers should have no contact with domestic poultry or other birds outside their work and poultry must be excluded from the immediate environs of the aviary, as poultry diseases are present on the island.

Despite the excellent results achieved by the Ringnecks as foster parents, the presence of polyomavirus infection in this

group is potentially extremely serious. Andrew suggested that consideration may need to be given to phasing out Ringneck fostering. They could be replaced with artificial incubation and hand-rearing or, eventually, by Echo Parakeets as foster parents if and when pairs are established. Or a newly established Ringneck group either from within or outside the island (preferably within) could be used after testing them during a quarantine period for all available parrot diseases.

Routine monthly faecal samples need to be collected from all parakeets (Echos and Ringnecks) and submitted for Gram stain, culture and sensitivity and parasite examinations. Andrew would like to see a Mauritius government vet selected for specialized avian pathology in a U.K. laboratory.

### Monitoring Wild Populations

In any situation where highly endangered species are being managed and manipulated, as much as possible needs to be known about their disease status in the wild and that of any closely-related species present. Almost no work seems to have been done on this aspect of Mauritius wildlife, yet the presence of introduced Ringneck parakeets presents an obvious disease threat to Echos. Field research is conducted year round on the wild population, so it would be quite easy for fieldworkers to collect fresh faecal samples from wild Echos and submit them for regular analyses. The same could be done for Ringnecks if a regular feeding station or foraging area can be

established for them. An alternative would be to capture some wild birds and blood sample them intensively prior to re-release. This would allow further tests for blood parasites and psittacine beak and feather disease.

Other species, such as doves and passerines, may also present a threat to parakeets, as well as to Pink Pigeons and fodies, by transmitting virus diseases such as avian pox, or parasites. Their disease status needs to be studied, particularly with regard to the risks introduced by supplementary feeding in the wild.

### Lab Tests Continue

Histological sections from the four dead Echo parakeets have been submitted to the University of Georgia for DNA probe and immunofluorescence tests for the presence of polyomavirus, to see if this may have played any part in the losses. Blood smears from the captive Ringnecks have been submitted for examination for haematzoa, which was negative. Andrew is also considering the possibility of low-grade zinc toxicity from galvanised aviary wire and discussing a study of existing material from the Mascarenes' Reference Collection with the Leeds Metal Reference Laboratory.

Andrew is also anxious to re-examine the management records, postmortem reports and material from previous years, particularly as polyomavirus testing was not then available. Reviewing this material in the light of the current findings and with modern techniques could be extremely important to the success of the captive breeding programme for the Echo Parakeets.

The World Parrot Trust is committed to pursuing its investigations into the cause of mortality among the captive population of Echo Parakeets. In Mauritius some of Andrew's recommendations have already been implemented and others are underway. The three remaining birds are well now, but the mysterious disease must be identified and eliminated before spring returns, bringing with it the possibility of additional losses. Veterinary science is pitted against a seasonal time bomb in the fight to help save the world's rarest parrot from extinction.

*The World Parrot Trust is grateful to British Airways Assisting Nature Conservation for flying Andrew Greenwood to Mauritius to conduct his vital investigations.*



Mauritius Landscape

# THE STATUS AND CONSERVATION OF PARROTS IN THE KINGDOM OF TONGA

By Dr. Dieter Rinke

Since Captain Cook's voyages into the tropical Pacific Ocean, the islands of the South Seas have fired the imagination of the Palangi (the white man), and until well into present days, the islands between Hawaii, Tahiti, and Fiji have not lost their attraction.

But paradise has its dark sides, too. As in other islands and archipelagoes, islands in the tropical Pacific have suffered tremendous losses of their biodiversity since humans arrived. Since the "discovery" of Polynesia by Europeans, two species of *Cyanoramphus* from the Society islands, and numerous populations of *Vini* lorikeets from Polynesia have become extinct, and the New Caledonian Lorikeet (*Chamosyna diadema*) is almost certainly gone.

Much greater, however, were the losses of species and populations after the arrival of Polynesians. Bones of two more species of *Vini* (one named the Conquered Lory, *Vini vidivici*, in order to "honour" the human superiority over nature), and a species of *Eclactus* parrot from Tonga have been discovered, and the beautiful Polynesian lorikeets, which are now restricted to few islands, have populated almost every Polynesian island.

Hunting, the introduction of predators, and loss of habitat have been blamed for the extinctions and reductions in numbers of Polynesian birds. New comparative studies have revealed that, at present, the Ship Rat *Rattus rattus* is the most important factor causing the decrease and extermination of parrots in Polynesia, while in Melanesia, habitat destruction has an adverse effect on many parrot species.

Among the 20 most endangered parrots of the world (see "League table of endangered parrots" in *PsittaScene* 4/4), 4 species from tropical Pacific islands should be listed: Ouvea Horned Parakeet *Eumyphicus cornutus uveaensis*, Henderson Island Lorikeet *Vini stephni*, Ultramarine Lorikeet *V. ultramarina*, and Scarlet-Breasted Lorikeet *V. kuhlii*, all of which have populations of less than 2000. The Tahiti Blue Lorikeet *V. peruviana*, the Kadavu Shining Parrot *Prosopaea splendens*, and the Red-throated Lorikeet

*Carmosyna amabilis* may also be close to this low number.

In order to stop the continuing decline of birds in the Pacific region, the Brehm Fund for International Bird Conservation has started a programme for the preservation of endangered birds. The programme includes field surveys, captive breeding within the region, translocations, and education. Since 1989, we have focused on the conservation of birds in the Kingdom of Tonga. Negotiations are under way in order to install similar projects in other Pacific island nations. Besides a comprehensive programme to preserve Tonga's rarest bird, the megapode *Megapodius pritchardii*, our attention was drawn to two species of parrots.

Tonga has two species of parrots, the Blue-crowned Lorikeet *Vini australis* and the Red Shining Parrot *Prosopaea tabuensis*, the latter was introduced from Fiji in pre-European times. Our surveys found the lorikeets uncommon (on uninhabited forested islands) to very abundant (on islands with extensive coconut plantations), but absent from islands which

have been colonized by Ship Rats. The total number in Tonga may be about 20,000 birds. The Red Shining Parrot lives on 'Eua, where numbers are about 1,000.

3000 years ago, a species of *Eclactus* and the Collared Lory *Phygis solitarius*, were present on 'Eua, and probably elsewhere in Tonga, but have not survived the initial period after the arrival of humans.

The feathers of Red Shining Parrots are used to decorate mats since ancient times. Although coloured chicken feathers are now being used frequently, parrot feathers are still highly prized. Towards the end of the breeding season, many young parrots can be seen in the villages of 'Eua. They are kept as pets for a while, but, owing to poor feeding, most of them die, within half a year. Their feathers are then plucked, and, often, the birds are eaten.

We collected such young captive parrots from the villages on 'Eua after two breeding seasons, and also obtained some older birds in poor conditions. By this, we established a captive flock of more than 30 Red Shining Parrots, which are held in a partly

public breeding station on Tonga's main island Tongatapu.

The parrots are held in two large aviary complexes, each with a 110 m<sup>2</sup> flock aviary and six smaller side-quarters, which have hollow trees for breeding.

In 1991, two pairs raised three young Red Shining, in 1992, five pairs laid 12 eggs, raising seven. The latter were transferred to Europe (Vogelpark Walsrode, and Mallorca, the breeding station of the Vogelpark Walsrode), in order to split the captive population for security reasons.

By August 1993, eight pairs have already produced 22 eggs, 9 of which have hatched so far. A few more females are examining nest boxes, and we expect some more clutches, which consist of either two or three eggs.

Similar aviary complexes are used to maintain and breed Blue-crowned Lorikeets. So far, we have raised two young lorikeets in 1992, and two pairs are breeding at present (August 1993). Lorikeets apparently need a different design of aviary, or may have to be kept in pairs, because only one pair per aviary bred so far.

The basic food for our lorikeets



Author feeding the parrots



Nestling of Red Shining Parrot at the age of 25 days.



Nestling of Blue-crowned Lorikeet, about 35 days old.

is a nectar solution (Bio-Tropic Lory Nectar and Nekton Lory), supplemented with pollen. The liquid is offered in half papayas or water melons, the pulp of which is partly removed in order to form a bowl. In addition, a variety of fruit (mango, sweetsop, rock melon, pear, and apple) is given depending on availability.

Blue-crowned Lorikeets are not threatened, but developing captive breeding techniques would be of value for future attempts to

reproduce in captivity its highly endangered congeners from East Polynesia.

Conservation programmes for endangered species are facing numerous difficulties and may be extremely expensive, once a species has been reduced to very low numbers (for example: Puerto Rico Parrot, Echo Parakeet, Kakapo). The Brehm Fund, therefore, made it one of its rules to act before such a situation would arise. Although Red Shining

Parrots are not threatened at the moment, large scale loss of habitat by logging may pose some problems in the future.

The establishment of forest reserves on inhabited islands takes a lot of effort and time, and is often unsuccessful with regards to proper control. Part of the solution to preserve endangered species in the Pacific would be to establish populations on remote, predator-free and inaccessible islands. Such islands are available

in most of the island groups.

We plan to release captive-bred Red Shinings on a remote volcano in Tonga. This project will not only guarantee the survival of these gorgeous birds, but also provide valuable data for future releases of captive-bred parrots into the wild.

Detailed reports about both species, including colour photos, have been published in the A.F.A. WATCHBIRD (in English, vol. XX, no. 4) and in PAPAGEIEN (in German, vol.5, no.4: and in press).

## PARROT CONSERVATION Politics, poverty, deforestation, habitat loss - what can we do to help maintain wild populations of parrots around the world? By Rosemary Low

In late 1991, an economic embargo was declared against the military government of Haiti, one of the poorest nations in the Caribbean which, with the Dominican Republic, forms the island of Hispaniola. About 150,000 jobs were lost when this happened. As a result, the poverty of the peasants is so acute that many have sold their few possessions just to buy food. Now there is only one way left to survive: to cut down trees to make charcoal to sell in the market. In some areas, no trees survive, so roots are used instead. Deforestation results in erosion, less rain, fewer crops and famine. Deforestation results inevitably in the decline, then the local extinction, and finally the global extinction, of forest-dwelling species. Parrots are especially vulnerable.

### Politics and Poverty

On Hispaniola, there are two parrot species: the Hispaniolan Amazon *Amazona ventralis* and

the Hispaniolan conure *Aratinga chloroptera*. Once common, both are on the decline. The Amazon is shot for food, and nests are robbed to sell chicks roadside, perhaps to unsuspecting tourists who are ignorant of international laws and local regulations which makes this illegal. If you did not know where your next meal was coming from, you might also shoot a parrot for food or rob a nest for money to buy a meager meal.

Halfway across the world, in Indonesia, is another island divided into two politically: Timor, in the Lesser Sundas. In 1975, East Timor (the Portuguese part which extends to more than 7,300 square miles) was invaded by troops from Indonesia who ruled the western part. Furious resistance from the people of Portuguese Timor resulted in 150,000 (one quarter of their population) being slaughtered. Several parrot species are endemic to Timor or are found also only on a couple of small islands: the Timor crimson-winged

parakeet *Aprosmictus jonquillaceus* and the Iris lorikeet *Trichoglossus iris*, both of which are rare in aviculture; the Edward's lorikeet *T. haematodus capistratus*, which was common in the 1970s and is

now rare in aviaries; the perfect lorikeet *T. euteles*, which was never rare and, in my opinion, never truly appreciated.

If you lived on Timor and you had lost your possessions and



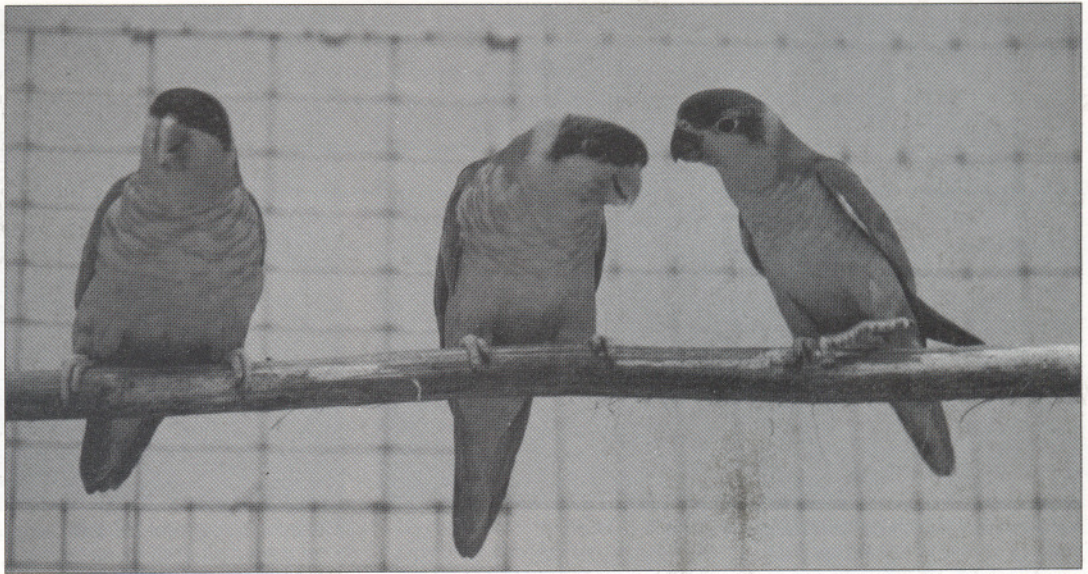
Hispaniola Amazon. Photo: Rosemary Low.

perhaps most of your family during the oppression, if cutting down a few trees to trapping a few parrots was the only way in which you could eke out a meager living, you probably would do it too. Deforestation in the Lesser Sunda Islands has been especially severe. This fact, and the high rate of trapping and export of the *parvula* sub-species of the Lesser Sulphur-crested Cockatoo, has resulted in it being classified as endangered. For a decade or more, it was the most commonly exported cockatoo; most parrot keepers would have greeted with incredulity the suggestion that it soon would be endangered.

I have used just two examples from areas of the tropics that once were rich in parrots but that have been torn by political strife. Wars, famine and poverty prevail in many parts of the world; conservation is an expensive luxury where people are starving or dying violent deaths. The sad fact is that so many bird species are now threatened with extinction that there never will be the resources or the personnel to save them all; in the past year or so, the figure of one third of all parrot species has been widely quoted. The fact is, however, that the status of many parrot species is not known. The situation may be worse than that.

### Habitat Destruction

A combination of factors has caused the decline of most species, with habitat destruction and trapping for local trade, export or food being the principal causes. However, not only in Third World countries are parrots threatened. In the wheat belt of Western Australia, fragmentation of habitat, small "islands" of forest within thousands of acres of cultivation, means that the white-tailed black cockatoos *Calyptorhynchus funereus baudinii* have to fly so far to find enough food that chicks remain untended in the nest for hours, incurring the



*Iris Lorikeets and their youngster, all bred by Rosemary Low.*

risk of predation: their growth rate is poor because they receive less food, and fewer young fledge than did formerly.

In the tropics, natural vegetation has been destroyed to make way for sugar cane and banana plantations. On islands, however, parrots are pushed to ever-dwindling areas as the human populations increase. On some Caribbean islands, parrots exist only in mountainous areas as small as 1 percent of their original range (Puerto Rico, for instance). On tiny Pacific atolls, there may be nowhere for them to go except plantations that have been sprayed with pesticides or where they are shot as pests.

On Mauritius, the population of the Echo Parakeet or Mauritius Parakeet *Psittacula echo*, the rarest parrot in the world, has been below 20 since 1978, if not longer. The destruction of native vegetation causes its decline. Biologists have worked for more than a decade to try to save it and the other endangered birds on this Indian Ocean island. In northwest Brazil, the only known population

of Lear's macaw *Anodorhynchus leari* estimated at 65 birds, is struggling for survival. Like many parrots, it has specific food requirements; there may not be enough to support a larger population.

### No Easy Solutions

The above does not make happy reading. The last one or two decades have seen crises of previously unknown proportions among parrot populations. No easy solutions exist. A number of underlying factors may be involved in the endangerment of species. These are usually not well understood until field studies have been made. Only then can one begin to address the problems. However, the scale of parrot declines and, world-wide, the urgent threats to the survival of thousands of other species of flora and fauna, mean that for only a small percentage will it be possible to stave off extinction. In many cases, this is best done by protecting entire habitats, rather than embarking on very expensive programs to save a single species, as occurred in the case of the Puerto Rican parrot *Amazona vittata*.

But, surely, many readers will exclaim, most parrot species can be saved through captive breeding. Some will continue to survive in aviculture long after they are extinct in the wild. But a few generations of domestication, or the very act of hand-raising, bring about changes in their behaviour which render them unsuitable for "reintroduction" (The correct term for the release into its former habitat for an animal that is extinct in the wild is "restocking").

Alas, a number of parrot species have become rare in aviculture after their export ceased. This indicated that without coordinated breeding programs, many will not be established in captivity. Too many have been sold as pets, or hand-reared and later

proved unsuitable for breeding. Denied the company of their own species during the formative months, they (especially the males) may have failed to learn behaviour typical of their own species, without which they cannot breed. Or the species proved difficult to breed and, at this moment, is in danger of dying out. In Europe, certain groups have suddenly been alerted to this fact and EEPs (concerted breeding programs for one endangered species usually initiated by zoos, in which private aviculturists are invited to participate) are being born at an encouraging rate.

You might have heard these words before, but at this point in time we really are at the crossroads where the fate of many parrots species can be saved.

### What Can You Do?

So far from the scenes of these crises, what can we do about the situation? It is almost too late to promote the sale of only captive-raised parrots. The fact that most airlines are now refusing to carry wild-caught birds means that soon or already the choice between wild-caught and domestic will not exist. But all those who breed parrots must act responsibly and in the best interests of the species. A proportion of young must be reared for breeding purposes - this means either parent-raising or keeping them with their own species until they are old enough to breed. Alternatively, they can cooperate with other breeders of the same species to sell unrelated sexed pairs as soon as they are weaned. The advent of chromosome sexing and DNA sexing makes this possible.

Secondly, everyone who makes money from their birds, and all others who can afford it or who can embark on fund-raising ventures, should donate to parrot conservation projects.



*Lesser Sulphur-crested Cockatoo - once commonly imported, now infrequently bred.*

# STOP THE TRADE IN PARROT CHICKS!

By Rosemary Low

The increase in the number of parrots in captivity seems to be bringing new problems every year. Parrot breeders used to be parrot lovers. Now it seems there are some who care little for the birds they breed. Profit is their only motive. How else can one explain a disturbing trend, brought to my attention by one of our members in the Netherlands? She appealed to me: please can you do something to try to discourage the sale of parrot chicks in pet shops.

She told me they are being sold in shops whose staff lack the experience to look after them, especially if they should become sick. They are unaware of the problems which can arise and are totally unqualified to advise the general public. They sell a parrot chick with a big bag of food, as though it were gold fish or a guinea pig. But as we, unlike the public, are aware, it is a helpless and vulnerable creature whose rearing needs to be accomplished by an experienced person. There are so many pitfalls for the inexperienced. Aviculturists with problems can turn to other breeders or avian veterinarians. A member of the public who buys a parrot chick in this manner will refer to the shop for advice, unaware that they need the help of a specialist.

Lack of expertise is one reason why mortality among chicks sold in this manner must be unnecessarily high. But there is another reason. In recent years large-scale importations of parrots from all corners of the tropics have resulted in an increasing number of diseases which affect parrots being introduced into aviculture. In very young parrots the immune system is not developed; they are extremely vulnerable to disease. In the same way that responsible owners of puppies do not expose their pets to other dogs until they are old enough to be vaccinated, young parrots should not be exposed to others from different sources.

What happens when pet shops buy parrots from various sources is that the young birds are exposed to viruses and bacterial infections to which they have no resistance. In the environment in which they were hatched they are better able to cope, although some will succumb. But moving chicks to a new location before they are independent, causes them much

stress. There are so many changes - food, environment and the people handling them. On a one to one basis, in the hands of a caring person, they will quickly overcome this. But where individual and expect attention is not available, they will be stressed and they will be at their most vulnerable. An infection or virus present in just one member of a group of young parrots can spread rapidly. The chicks may die in the shop. Or they may die soon after purchase by an unsuspecting buyer who cannot recognise signs of ill health.

Why do breeders sell chicks so young? The reason is simple: they remove them from the nest because hand-reared young are tame and have a higher value. However, weaning them is time-consuming and, for the inexperienced, also difficult. Sold at a few weeks they can earn as much money as when independent. Those who buy them for resale, convince prospective purchasers that to have a really tame bird which is "bonded" to them, they must complete its rearing. This is untrue! In fact, in many instances, young parrots which may have been reared by their parents and left with them until they are independent, then kept as a pet become just as tame as hand-reared birds. So much depends on the person who is caring for it. If the owner is sensitive and loving and able to understand the bird's needs, it will flourish. Many wonderful hand-reared parrots have been ruined by

insensitive and uncaring owners.

Selling unweaned parrot chicks to pet shops or specialist outlets is big business in the USA. There are many breeders there who have never weaned a chick in their lives! This seems to be inevitable where mass-production is involved. And with the gradual phasing out there of imported wild-caught birds, this practice is likely to increase. Indeed, it is normal practice. However, the situation in the USA differs in that there are many avian specialist veterinarians, for whom parrots make up the largest part of their practice. In recent years many have gained much knowledge in the field of paediatrics (care of chicks). The retailers who buy large numbers of parrot chicks usually work closely with a veterinarian. Some of them buy only from one source. Both these practices greatly lessen the disease risk. Be warned, therefore, that breeders in Europe cannot copy the American practice and expect a relatively high success rate.

The death of parrot chicks sold at the age of a few weeks will have a harmful effect on the pet industry and on aviculture. If you had just spent a large sum of money on a very young parrot which died after a short time, you would not be in a hurry to repeat the exercise. In all probability, you would never again consider buying a parrot. The same chick, purchased weekly, perhaps six or seven weeks later, would have the potential to be a life-long,

cherished companion. Purchase of food, cage and other items, would benefit the pet industry for years to come, to say nothing of the pleasure its owner would have experienced. Instead, its young life was cut short as the result of the breeder wanting bigger profits.

This is just another example of what a friend of mine describes as "the aviculture slave trade". If you are a responsible breeder or a caring potential purchaser, you will not be involved.

Large-scale breeders, however, will be unmoved by this plea. It would be impossibly time-consuming to wean all the young they produce. So what are the alternatives? They can pay experienced people to wean them and probably also sell them. This will not appeal to many as it will reduce their profit. Or they could let the parents rear the young, then sell them to discerning breeders or those who enjoy the challenge of taming a parrot. There are two disadvantages: the market is reduced and in some cases the birds will not nest again, therefore the number of young produced may be greatly reduced.

It is not the breeder who will put an end to this practice, I fear. It is not likely to be the purchaser. How can we reach these people when so many purchases are made on impulse? The only solution I can see is to make it illegal to sell unweaned parrot chicks across the counter of a pet shop. At least this would put an end to impulse buying.



Chicks of species which are popular as pets, such as the Umbrella Cockatoo, are most likely to be victims of being sold before weaning.

# RESEARCH AND BREEDING

## Report from Birds International Inc., Philippines

Dear Friends and Colleagues,

It is with pleasure that the Research and Breeding Centre that is operated by Birds International, Inc., is publishing this, its first regular Newsletter. It is now hoped that this format can be continued with two (2) Newsletters appearing each year in the months of June and December.

It seems a natural place to start by looking at some of the more important breeding successes that have taken place during the first part of 1993, from January until June. One group of the psittacines which have received much attention in recent years at the Centre are the *Loriinae*. The completion of a new facility in late 1992 increased the breeding accommodation available for these birds at the Centre by an additional 100 breeding cages. Nineteen types have been bred during the first six months of 1993, many for the first time. Some of the more important successes include the Rajah Lory (*Chalcopsitta a. insignis*), Cardinal Lory (*Chalcopsitta cardinalis*), Red and Blue Lory (*Eos histrio*), Black-Winged Lory (*Eos cyanogenia*), Obi Lory (*Eos squamata obiensis*), Black-Capped Lory (*Lorius chlorocercus*), Purple-Naped Lory (*Lorius domicellus*), Yellow-Bibbed Lory (*Lorius chlorocercus*), Musk

Lorikeet (*Glossopsitta concinna*) and the Mount Apo Lorikeet (*Trichoglossus johnstoniae*). The Scaly-Breasted Lorikeet (*Trichoglossus chlorolepidotus*) was one other species which bred for the first time in 1993, the first chick hatched proved to be a double surprise for not only was it the Centre's first successfully reared chick of this species, but it also proved to be a Cinnamon Mutation.

The Fig Parrots are following their 1992 successes with even greater consistency in 1993. At the beginning of the current year a great emphasis has been placed upon producing parent reared Fig Parrots, previously it had been easier and more productive to hand rear the chicks. Following extensive research and the provision of accommodation and dietary guidelines, large scale parent rearing is now being successfully achieved with all three *Psittaculirostris* species (Edward's, Salvadori's and Desmarest's) and also with the Double-Eyed Fig Parrot (*Opopsitta diophthalma*). The remaining species, the Orange-breasted Fig Parrot (*Opopsitta guillemetereti*) is currently the subject of much concentrated effort at the Centre and successful breeding is anticipated in the near future.

One first breeding success

(believed to be a world first) that has been particularly pleasing to everyone connected with the species, was the Centre's first breeding of the Guaiabero Parrot (*Bolbopsittacus lunulatus*). This species has proved to date almost impossible to establish in captivity on the few occasions that it has been seen in aviculture outside the Philippines, and even given the Centre's perfect climatic conditions and abundant supplies of natural food items, the Guaiabero has proved to be one of the most difficult of all psittacines to be established into a captive population. Now that a number of pairs have become established into a captive lifestyle at the Centre and now that the first chick has been successfully reared, it is hoped that this success can be built upon with more success being anticipated before the end of the year. The initial breeding pair have already laid, and currently are incubating their second clutch of eggs.

Another pleasing first breeding which has taken much time and patience before success has been achieved was the initial breeding of the Great-Billed Parrot (*Tanygnathus magalorhynchus*). The successful pairing of this species has been established at the Centre for six years before the first eggs were laid in the current season. The two resulting chicks were both reared in the Nursery Department after initially spending their first two weeks being naturally reared by their parents. Two other *Tanygnathus* species, the Blue-Naped Parrot (*Tanygnathus lucionensis*) and the Blue-Backed Parrot (*Tanygnathus sumatranus*) also continued their record of consistent breeding at the Centre which has been sustained now for several years.

The Racket-Tailed Parrots (*genus Prioniturus*) are currently considered to be among the highest priorities of the Research and Breeding Centre. The most successful species to date has been the Blue-Crowned Racket-Tailed Parrot (*Prioniturus discurus*) which is now breeding consistently with young birds having been successfully reared by both artificial and parent rearing methods.

The White Cockatoos (*genus Cacatua*) that are maintained at the Centre continue to prove to be extremely prolific given the

tropical environment of the Centre, especially the Indonesian species. One of the highest priorities of the genus is the Red-Vented Cockatoo. As an endemic species of the Philippines, this bird has long received close attention from the Centre and captive breeding continues to be successfully achieved. The young birds produced by the Centre will become increasingly important in aiding the current European and North American populations of this species, if they are to become sustainable. The Red-Vented Cockatoo is one species which BII has initiated an international study book for, anyone keeping this species is asked to contact the offices of BII to gain more information on participation.

Perhaps the one species for which the Research and Breeding Centre, and BII in general, has become internationally known for its breeding, is of the Spix's Macaw (*Cyanopsitta spixii*). It is with great pleasure that the Centre can formally announce the successful rearing of four Spix's Macaw chicks so far in the current 1993 season, and the possibility of a further clutch of eggs is by no means out of the question before the end of the year. The Hyacinth Macaw also has continued its record of success at the Centre, as have a large number of other Macaw, Conure and Amazon species. The Amazons and some of their closer relatives such as the Pionus and Hawk-Headed Parrot (*Deropternus accipitrinus*) generally initiate breeding slightly later in the season than Asian, Australian and African species at the Centre. Although the Centre already has many chicks from this genus, a complete description of their breeding will, however, be left until the December 1993 Newsletter.

Continuing improvements and building work at the Centre has included new, more seclusive accommodation for Palm Cockatoos (*Probosciger aterrimus*) and a new development of aviaries to enlarge the Centre's collection of Asian Hornbill species. The Hornbills are another subject group that are currently receiving much attention at the Centre, again, a description of the Centre's Hornbill collection and research work into their reproductive biology is scheduled for a future issue of this Newsletter.



Edwards Fig Parrots (*Psittaculirostris edwardsii*).



Spix's Macaw at Sao Paulo Zoo.

Amongst construction work currently being carried out is a new additional building for the weaning and conditioning of the Centre's hand-reared birds. From the start of 1993 much more detailed attention has been given to the conditioning of hand-reared birds produced by the Centre to prepare them for the future lifestyle that the bird will lead once it leaves the Centre. Many of the more commonly known pet species such as some of the Amazons, Cockatoos, African Greys and Pionus which are being reared to provide pet birds for domestic situations, now receive much greater attention from an early age in regards to their taming and familiarization, voice training, hand perching and general handling. Other species which are being hand-reared to provide future breeding stock, particularly endangered species which are being hand-reared receive a completely different format of Nursery care, which is designed to help eliminate the risk of imprinting and to encourage natural behaviour. Such birds which are being reared to provide

future breeding stock are handled and fed in such a way that human contact can be minimized and, whenever possible, these birds are familiarized with other birds of their own species as soon as possible in the rearing process. Once weaned they are then accommodated in large communal flight aviaries where they mix and interact with the other birds and, at the same time, strengthen and develop their flight muscles and improve their general level of fitness.

As already mentioned, the Philippines' own endemic birds are given an extremely high priority by the Centre. Successful breeding is being achieved with the Red-Vented Cockatoo (*Cacatua haematuropygia*), Blue-Naped Parrot (*Tanygnathus lucionensis*), Blue Backed Parrot (*Tanygnathus sumatranus*), Mt. Apo Lorikeet (*Trichoglossus johnstoniae*), Philippine Hanging Parrot (*Loriculus philippensis*), Blue-Crowned Racket-Tailed Parrot (*Prioniturus discurus*) and now the Guaiabero (*Bolbopsittacus lunulatus*) as well. It is hoped that the work currently being carried

out by the Research and Breeding Centre on Endemic Philippine psittacines can be expanded to include further species of Racket-Tailed Parrots. Currently, these species with the collaboration of the Philippine's Protected Areas and Wildlife Bureau (PAWB). Also, as will be described later, several international stud-books have been established at the Centre to monitor the status and current work being undertaken with some of the Philippine endemic species.

Of the other projects that BII is involved in, perhaps the most important is the Centre's on going work with the Spix's Macaw. At a meeting of the Spix's Macaw Recovery Group that took place in Brazil during the latter part of 1992, the importance of trying to release at least one captive-bred to join the single remaining wild bird, was universally realized and supported. Currently, final negotiations are being carried out in regards to BII donating one of the Centre's captive-bred birds to be flown back to Brazil for this purpose. The BII bird is a female, as it is believed that the remaining wild bird is a Male. Once all the details have been finalized, the female will be flown from the Philippines to Brazil where they will spend a period of time in quarantine and acclimatization before eventual release into the wild.

The progress of this bird and its proposed release into the nature will be further followed in future editions of this Newsletter, as will the breeding results and events at the Research and Breeding Centre. It is hoped that this Newsletter will be received with interest by our colleagues and that closer cooperation in the management of jointly held endangered species can follow in cases where this is needed. We welcome correspondents from other avicultural collections working with any of the species mentioned in the Newsletter and believe that there are many species such as the Fig Parrots, Lories, Alisterus and Tanygnathus where our captive breeding programs, based upon a sustainable number of bloodlines, could prove to be of great importance to Western avicultural populations of these species if they are to be self sustaining and viable in their long term future. We hope to review some of the Centre's work with specific groups of birds in more detail in future editions of the Newsletter.

#### CALL FOR PARTICIPATION IN FORMING INTERNATIONAL STUD-BOOKS FOR PHILIPPINE ENDEMIC BIRDS.

BII, in collaboration with the Philippine government's Protected Areas and Wildlife Bureau (PAWB), has now formally established international stud-books to record and review the status of the following endemic Philippines species. Forms of participation are currently being prepared and will be sent to anyone wishing to join in with the project. These stud-books will play an important role in assessing the future conservation management of the birds listed not only in aviculture but in assessing the priorities for increased field study and land management conservation of remaining wild populations as well. It is hoped that aviculturists will recognise the importance of these stud-books and will contact the address given at the bottom to register their birds of the following species:

- Red-Vented Cockatoo
- *Cacatua haematuropygia*
- Blue-Naped Parrot
- *Tanygnathus lucionensis*
- Blue-Backed Parrot
- *Tanygnathus sumatranus*
- M. Apo Lorikeet
- *Trichoglossus johnstoniae*
- Philippine Hanging Parrot
- *Loriculus philippensis*
- Blue-Crowned Racket-Tailed Parrot
- *Prioniturus discurus*
- Palawan Racket-Tailed Parrot
- *Prioniturus platenae*
- Green Racket-Tailed Parrot
- *Prioniturus luconensis*
- Sulu Racket-Tailed Parrot
- *Prioniturus verticalis*
- Mountain Racket-Tailed Parrot
- *Prioniturus montanus*
- Mindanao Racket-Tailed Parrot
- *Prioniturus waterstradti*

(NOTE: Although the Tanygnathus species listed above are not strictly endemic to the Philippines islands, it is felt that their populations within the Philippines are key to the species overall survival and so they have been included within the group of birds covered by this initiative).

Any aviculturists that would be willing to join the stud-books for the species listed above, should contact the office of BII at the address given below:

Stud-book Administrator, Birds International, Inc.-Research and Breeding Centre (BII)  
99 Timog Avenue, Diliman,  
Quezon City, Philippines  
Tel: (632) 965-222/(632) 923-0430



Hawk-headed Parrot at Paradise Park.

# INTERNATIONAL NEWS ROUND-UP



## AUSTRALIA

### Australian National Aviculture Convention

The Aviculture Federation of Australia, as the co-ordinating body for aviculture and bird-keeping in Australia, has announced details of the Seventh National Aviculture convention to be in Melbourne, the capital city of Victoria, from 11-14 March 1994.

Some of Australia's leading aviculturists - including Jim Gill "Avian Veterinarian"; Carl Roberts "Finches"; Syd Smith "Parrots"; Stan Sindel "Parrots and Bowerbirds"; Ken Weeks "Lovebirds" and Ross Weber "Pheasants and Waterfowl" will speak at the convention. They will be supported by four English aviculturists - Mike Fidler, Bill Paynter, Mike Reynolds and John Stoodley.

The Third National Avicultural Convention, held in Melbourne in 1985, was hailed as a "friendly convention" and the 1994 convention promises to live up to that well deserved reputation. There is only one way to find out the truth of this claim, yes, to visit Australia - a country of great beauty, fascinating birds - and interesting aviculturists.

The 1994 venue is the Ringwood Performing Arts and Convention Centre in Melbourne's leafy eastern suburbs. As Australian conventions attract about 350 delegates all participants have the opportunity of getting to know a wide range of interesting people - from far and wide - in the atmosphere of aviculture fellowship.

Rosemary Low, editor of PsittaScene, recalls with great affection her first visit to Australia for the 1989 convention in Adelaide, South Australia, when she was one of the overseas speakers. Among the things Rosemary vividly remembers are - the commitment of Australian aviculturists, the smoothly run convention, the variety of lectures presented, the friendliness of the delegates and speakers, and the thrill of seeing native Australian birds in the wild.

For further information and a registration form contact:

John Hince, Publicity Officer, "Donnybrook", Piper's Creek Road, Kyneton, Victoria 3444, Australia; phone (054) 22 3364

Graeme Hyde  
Editor, Australian Aviculture

## BENELUX

### Press release on how Smuggling of rare cockatoos discredits bona fide breeders.

April 27, 1993. The World Parrot Trust Benelux and the organisations of breeders Onze Parkieten, Pakara and Parkietensocieteit disassociate themselves energetically from the illegal import of eggs or chicks of rare Australian cockatoos. In an unacceptable way the more than 20,000 bona fide breeders in the Benelux are brought into discredit again by smuggling activities.

Since three years rare Australian cockatoos, including Redtailed Black Cockatoos, are popping up at several breeders. The birds are equipped with a closed legging as proof of being bred in captivity. However, these kind of birds have not or very seldom been bred in Europe. So there is a reason to view the coming parrots with a certain mistrust. The World Parrot Trust suspects that the eggs or chicks have been imported illegally, despite the high degree of protection from the Australian government. Then the birds are hand-raised, equipped with rings and sold at very high prices.

Our organisation to protect parrots, together with three national organisations of breeders, disapproves and wants to make a stand against these evil practices. Such behaviour does not benefit the protection of the birds in any way and will not be tolerated by members of WPT.

The Australian government is the lawful owner of the cockatoos. Therefore she has to be involved in decisions regarding the future of these birds. WPT pleads the following options: re-introduction supervised by experts if possible, or placement with bona fide zoos and breeders. The last option based on breeding-loan to exclude any financial profit.

The World Parrot Trust, supported by the organisation of breeders mentioned, offers all possible help to secure the care of these rare parrots. In this way WPT hopes that the confiscated birds will not prove to be the losers at the end.

### Latest Developments

Some of the accused have threatened in public to free confiscated birds at all costs. There have been some attempts to break into aviaries in order to find the hiding place of the parrots. (The market value have been estimated at Dfl. 1.5 mio.). Up till now without any success. For this reason zoos and breeders are reluctant to house the parrots.

One of the accused demanded

in court an arrangement to visit his confiscated birds. The judge refused to allow such arrangement because he was of the opinion that the Dutch government took care of the birds in a proper way and that sale of the birds abroad was not possible because the public prosecutor had no permission to do so.

Dutch police are now investigating in Australia to obtain further evidence.

Next session of the court is on October 5, 1993.

## CARIBBEAN

### PROVITA Nurtures Endangered Fledgling Parrots Confiscated from Smugglers.

by Franklin Rojas-Suarez

In October 1992, under the hot sun of the arid zone of Macanao (Margarita Island), we witnessed an event of great beauty: seven Yellow-shouldered Parrots *Amazona barbadensis* that we kept in captivity since they were very young were liberated into their natural habitat.

These birds were confiscated from smugglers two or three years ago when they were just a few days old, and kept by our team in large cages located in their natural habitat, away from human disturbance. Now, after a detailed medical examination that indicated the good health of the birds, a group was liberated provided with radio-collars. These transmitters will allow us to monitor the process of adaptation of the wild population.

Caribbean islands are known for their beautiful parrot species, most of them endemic. Nevertheless, many of them are either extinct or under severe danger of extinction. Among the extinct species, are seven macaws, four parakeets and three parrots.

The list of extinct subspecies and populations is much longer, in fact, the yellow-shouldered parrot (one of the seven species of the genus *Amazona* with the highest risk of extinction), became extinct in Aruba in 1947, and a similar story probably took place in Curacao and in the oriental portion of Margarita Island.

Currently, this parrot only survives in a few isolated patches along the Venezuelan coast on the Island of Margarita, La Blanquilla and Bonaire. Our studies have estimated populations of only 80 birds on La Blanquilla and around 800 on Margarita.

The main threat to this species is the capture of fledglings for commercial purposes. In fact, most of the juveniles are taken by smugglers before they are able to fly, using methods that are cruel and destructive. Fledglings are taken from nests using metal hooks or bromeliad leaves, frequently killing them. Nests are also damaged, as tree-holes are cut up with axes and machetes to give access to the fledglings, often destroying the nesting holes forever.

These factors are magnified in the very small population that survives in La Blanquilla, where almost all of the fledglings are captured every year.

About 20 parrots have been confiscated from smugglers and given to PROVITA. They are kept in large cages located in their wild habitat until they reach adult age and are then liberated.

The case of Margarita's Blue-crowned Conure *Aratinga acuticaudata* is more serious. Only 180 individuals survive in the wild, and the total reproductive success (birds that reach flying age) is practically nil: 89% of the fledglings are taken by smugglers at an average age of 16.74 days, and the remaining 11% are eaten

by rats or die from the damage they suffer during their capture.

In addition to the factors already mentioned, the Blue-crowned Conure is also being affected by habitat destruction. Many zones of its home range and feeding sites are being cleared by sand mining and by the current accelerated construction of touristic villas.

The case of the Blue-crowned Conure requires additional research, and urgent action must be taken to stop the factors that have been detected and quantified. Unfortunately, the fact of having a National Park that includes all its reproductive area has not contributed significantly to its conservation. In some cases we have even observed harassment by tourists and boatmen that increase pressure on this species.

The Yellow-shouldered Parrot and the Blue-crowned Conure are facing severe extinction threats. We invite your help.

Franklin Rojas-Suarez is Technical Director of PROVITA. Donations can be made to PROVITA account at: Banco de Venezuela International 500 Park Avenue, 8th Floor New York, NY 10022 Account No. 251-333423

Our postal address is: Apartado Postal 47552, Caracas 1041-A, Venezuela.

Please feel free to contact us for any additional information you may require.

## SOUTH AFRICA

The World Parrot Trust is pleased to support the Cape Parrot Project which is being organised by Olaf Wirminghaus of the Department of Zoology and Entomology at the University of Natal. £500 has been donated by the Trust to pay for

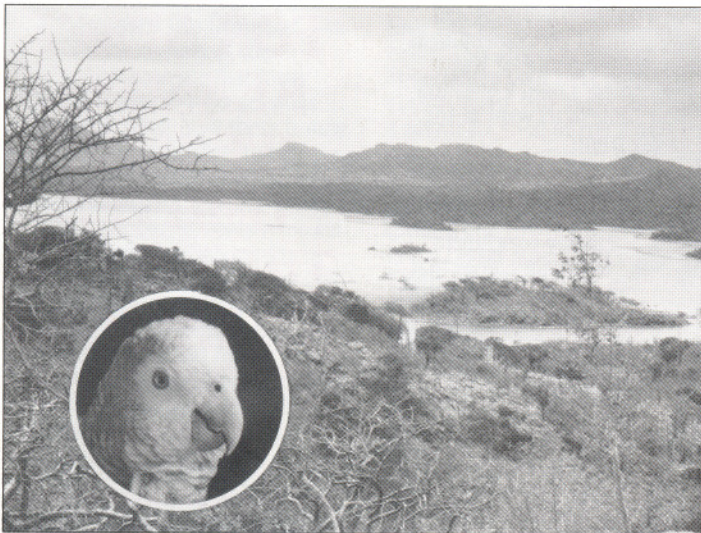
transmitters. An abstract of the proposal is set out below. We look forward to reporting on the results of this research in a future edition of *PsittaScene*.

### Project Proposal

The ecology and status of the Cape Parrot *Poicephalus r. robustus* (Gmelin) in South Africa

#### Abstract

Cape or brown-necked parrots *Poicephalus r. robustus* are listed as vulnerable in the South African Red Data Book for birds (Brooke 1984) and their numbers are declining. This decline is attributed mainly to illegal collecting, shooting by nut farmers and destruction of their forest habitat. The nominate race is confined to South Africa and only breeds in a narrow belt of mixed *Podocarpus* forest from the north-eastern Transvaal south to the eastern Cape Province, between 1000-1800m asl. Little is known of the parrots, particularly their breeding and feeding habits, despite their large size (+300g) and vociferous nature. There is also evidence to suggest that the subspecies *P. r. robustus* is a valid species though a full investigation including examination of DNA is required. The aims of this study will be to establish the breeding requirements and feeding habits of Cape parrots in Natal (province), and to conduct a census of the remaining populations of this subspecies in South Africa. A mathematical model, based on features of the forest identified as important to parrot occupation, will be developed to determine whether current areas lacking parrots are suitable for reintroductions. Once this information is available, a conservation plan for the Cape parrot can be drawn up with the collaboration of conservation bodies.



The Yellow-shouldered Amazon (*Amazona barbadensis*) and its habitat.



*P. robustus* Photo: Rosemary Low

We would like to bring to our readers' attention to a quarterly publication called 'The Shape of Enrichment'. This includes some ideas relevant to parrots, but will be of value to anyone keeping any animal. The subscription is \$8 per calendar year, but it must be paid in US funds only, drawn on a US bank.

Write to: THE SHAPE OF ENRICHMENT, 1650 Minden Drive, San Diego CA 92111 - 7124, USA

The following short article is re-published from 'The Shape of Enrichment'.

## **THE VALUE OF ENRICHMENT** By Peter Ryan, Primate Keeper, Edinburgh Zoo, Scotland

How do we "care" for animals? Perhaps by analyzing ourselves as animal keepers or zoo managers, we can decide what we expect of the job and what we are expected to offer the animals. The term "animal carer" is an ambiguous one. What exactly are we caring about?

Take, for example, a pet bird in a cage on its own. Perhaps it never leaves its small cage and perhaps, through ignorance, it is fed a poor or improper diet and lives in a stressful environment.

Now, this bird may be loved by its owner, its owner may "care" very much about the pet and eventually, sadly, grieve its death - but was that animal really cared about?

Surely this applies to our experience in zoos and our attitudes towards enrichment. Most keepers "care" deeply about their animals. The point is that, while we are busy caring *about* our animals, we may not care *for* them properly, by using enrichment techniques.

Do managers make it easy enough for workers to develop new ideas for the benefit of their animals? Are workers keen enough to develop new ideas or try ones suggested by managers and staff? If well-set routines are too strict to

allow any  
deviation  
from the  
day's



schedule, then perhaps the wrong system is in operation. What do we really think our jobs are about? Are we muck shovelers who care, affectionately perhaps, for our animals, or are we "habitat controllers" who show their care and interest by developing enriching enclosures and feeding regimes? It is my belief that a change in the way we perceive ourselves changes the way we work, as well as the content of that work.

Enrichment is a good example of how establishments can work together and how we can learn from each other. It is surely the one area where keepers can play the leading role, next to the animals of course, regardless of their position. The beauty of it is that ideas are free, whether we adopt them from other institutions. There is nothing wrong with utilizing the ideas of others, but surely wrong when we refuse to even try these new enrichment ideas.

People are often reluctant to change. This is understandable. When an establishment starts enrichment programs and sees them as beneficial, it almost seems like an admission that animals are now cared for where they once were not. Some proud people may have a problem dealing with this.

The fact is that most of our collective knowledge and understanding of animals comes from other people's work and success. No one establishment can discover everything. If we can so easily adopt ideas from predecessors, why do some of us have a problem adopting and implementing enrichment ideas from contemporaries? Has enrichment raised a question that some of us want to shy away from?

If we are now being told that we are not caring for our animals properly unless we employ enrichment techniques, does that mean we have not been looking after our animals properly up until now? Surely enrichment can be viewed as a development, and not as a change. We can't afford to be hung up on how it might look if we change our husbandry techniques or on how we thought we were doing okay until now.

Enrichment is all about animals. It is caring for them as mentally and physically well as possible. Unfortunately for the animals, enrichment has to start with us, the workers at the zoo.

Our responsibility is not only to the animals we look after. We must surely have a responsibility to all captive animals. We can, with real tact, encourage others to catch the enrichment "bug". Think about how we first became interested in enrichment. If it was through publications, we can pass them on; if it was by seeing something, we can talk about it to other keepers.

Many students who have no idea of zoo management or keeping routines and responsibilities have come to Edinburgh Zoo and contributed ideas for animals, such as feeding devices. It is possible to incorporate these ideas and ideas from other sources into general husbandry and day-to-day routines. More and more keepers are doing this and finding it an interesting and rewarding part of their jobs.

Perhaps we should ask ourselves, why we are keepers? Maybe our reasons will be better served if our animals are being enriched. Luckily, no matter how many times an idea has been done before - or, indeed, where it was thought up - that idea will be new and exciting to every animal that gets it for the first time.

**FOR SPACE  
REASONS,  
WE HAVE  
OMITTED  
THE LIST OF  
STUDBOOKS  
FROM THIS  
ISSUE**

# THE WORLD PARROT TRUST GALLERY OF ENDANGERED PARROTS

By Rosemary Low

## No.2 Uvaean Parakeet (*Eunymphicus cornutus uvaeensis*)

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.

To which parrot does the doubtful distinction belong of having the smallest range? It is difficult to answer this question with absolute certainty but one of the close contenders is the Uvaean Parakeet. It is found only on the island of Ouvea in the South-west Pacific, which measure about 15km in length. Most of its forest has been

felled and this striking parakeet survives in an area no more (and probably less) than 4 or 5km (2 1/2 to 3 miles) in length.

The truth is that little is known about surviving habitat or numbers. The delicate political situation on the island makes it impossible for ornithologists to visit Ouvea. Its suggested population of 200 birds is not based on recent study. This may be an over-estimate. In the late 1930s when forests extended over most of the island its numbers were believed to be in the region of 1,000.

A long-standing threat to its survival has been the fact that local people take chicks whenever they find nests, as the beauty of this parakeet makes it a popular cage-bird on the island. The number of Uvaean Parakeets which have been exported from the Pacific is very small, thus the species is virtually unknown in captivity. However, in 1980 permission was given to export three pairs which were bred on the neighbouring island of New Caledonia. Probably a few wild-caught birds have left the island illegally.

A very small number of Uvaean Parakeets survive in Western Europe (and probably

nowhere else outside the Pacific region) - a number which is probably in the region of 20. Unlike the Horned Parakeet, which is now well established in Europe, this sub-species proved very difficult to breed. This is not altogether unexpected with island endemics which have a very small range and are probably highly in-bred.

This striking parakeet measures about 32cm (12 1/2 in). In plumage male and female are alike, although the female may be slightly smaller. Like the closely related Kakariki (*Cyanoramphus*) they are highly active, agile birds, swift in flight. The long feathers which form the crest are used in the courtship display. They bow their heads and the crest feathers fall forward. The Uvaean and the Horned are the world's only crested parakeets. Highly distinctive and extremely beautiful, the Uvaean is considered to be critically endangered. Unlike most other species in this category, nothing has yet been done to aid its survival. It has been suggested that captive breeding should be carried out at the Parc Forestiere on New Caledonia, where the Kagou (a large ground-dwelling bird, also critically endangered) is being bred for conservation purposes.



# LETTERS TO THE EDITOR

Members write

Springfields  
Colemans Hatch  
Nr Hartfield  
Sussex TN7 4HG

Dear Mr Reynolds  
I very much enjoy your newsletter.

Could you put a "Stop Press" in the next ref UK LORY GROUP.

"UK LORY GROUP - Please note contacts for this Group are:-  
Meetings and General Enquiries  
Alison Ruggles 0342 822 373.  
Stud Books Trevor Buckell 0980 622573 (and not now via Simon Joshua who through a change of career direction is neither now at University, nor administrator for the Group's Stud Books.)"

Yours sincerely  
Alison Ruggles

Pionus Breeders Association  
PO Box 540  
Johnson City  
Texas 78636

Dear Rosemary  
I wish to respond to a couple of items expressed by your readers in the latest edition of PsittaScene. Dr Tim Birt's tragic story about the killing of his prized female cockatoo and his lamentations about long term dangers this behaviour means for captive populations of cockatoos hint at weakness in strategic aviculture thinking. It is horrible that male cockatoos kill their mates in captivity with something resembling regularity, but it is also true that this fact is neglected in long range avicultural planning. Why should the death of a breeding female bird put a captive breeding programme in jeopardy or ultimately skew the sexual composition of a captive population? As Dr Birt suggests, it shouldn't if proper planning that takes this destructive behaviour into account is implemented by breeders keeping these birds around the world.. I would like to make a couple of suggestions that many postpone the development of such a dire prediction. I propose that by anticipating male cockatoo aggression and undertaking certain diagnostic and preventive steps it may be possible to mitigate the killing of female cockatoos by their mates and

therefore prevent the skewing of the surviving captive population that Dr Birt contemplates. Specifically, the mate killing behaviour of male cockatoos needs closer study and evaluation. We need to know what stimulated the male to attack its mate in the first place and whether there is specific behaviour that precedes the attack. Good observation may be one method for determining what is occurring with these captive birds. For example, Luther Deans, a friend of mine and an aviculturist who breeds many Cockatoos confided to me recently that he had never lost a female cockatoo to an aggressive male ; he had however, discovered a male that was not allowing his mate to feed, thus she was becoming weakened and perhaps, vulnerable to the bullying of an aggressive mate. Luther's solution was to remove the female which he accomplished before an attack could be triggered in the male. Similarly, my one pair of red-vented cockatoos began behaving strangely as this season's breeding cycle grew closer. I detected aggressive behaviour in the male's interaction towards the female and noticed him "hogging" the food dish. Mindful of Mr Deans's experience, I furnished an additional food dish and the aggressive behaviour flagged into a successful breeding season with the production of three fertile eggs. This behaviour was repeated after the first clutch was laid, I again provided an additional food dish, and another clutch of eggs was produced. I believe that the behaviour exhibited by the male-red-vented cockatoo may signal onset of the forthcoming murderous behaviour, although more observation and documentation of possible initial behaviour by other breeders is needed in order to verify this. Another clue to the potential aggression of a male cockatoo towards his mate may be her general state of health. If she is suffering through a mild bacterial or viral infection, her current health status may trigger her mate's aggressive behaviour. He may be ridding himself of an "unfit" partner. Blood samples , bacterial cultures, and other diagnostic tests may reveal that depressed health of the female cockatoo initiates the male's aggressive attacks. A pre-breeding check up of the female may give ample warning to the breeder that

a killer attack is imminent. These possibilities don't preclude the possibility of other factors at work here, but close observation and attention to the health status of the female cockatoo should be at least considered. Whatever the case, observations of the preceding kinds have to take place by aviculturists before solutions to male aggression in cockatoos; it is time to document the particulars and analyze these. Skewing of the captive population in favour of male cockatoos because of this destructive behaviour, would not occur if, as Dr Birt asserts, aviculturists plan for the future. Such a plan should have at least two aspects; the retention of offspring as replacements for currently breeding birds - with the emphasis of keeping females, in the case of cockatoo murder, and, I believe, encouraging parent birds to rear their own babies to independence. Then in concert with other aviculturists breeding the same species, the exchange of offspring for future breeding attempts should be practiced. This plan of action should begin to give an insight into what goes wrong with captive cockatoo pairs, and initiate a contingency plan for a time when something does happen to a breeding pair. Looking for clues for bad behaviour now and having a plan to deal with such an event should go a long way towards preventing Dr Birt's fear from becoming reality.

Sincerely

Bill Arbon, President  
Pionus Breeders Association

Thomas P Calvert-Lee  
Northampton

Dear Sirs

I was very pleased to read that the Goffin's Cockatoo kept in Tanimbar have been released. I understand your concerns regarding the unscientific nature of the release, but I was shocked to see the cages the birds were kept in and feel that it is preferable that they should "take their chances" in the wild rather than suffer a prolonged and ultimately fatal period of captivity.

I would like to write to thank the Government of the Republic of Indonesia for authorising the

release and would be grateful if you could let me have the relevant person to write to. I also enclose herewith a cheque for £25.00 which I would like to go towards the funding of the Status Assessment of the Goffin's Cockatoo on Tanimbar.

Thank you for your help.

Yours faithfully  
T P Calvert-Lee

Captive Breeding Specialist Group  
12101 Johnny Cake Ridge Road  
Apple Valley  
MN 55124 USA  
Tel: 612 431 9325

Dear Mr Reynolds

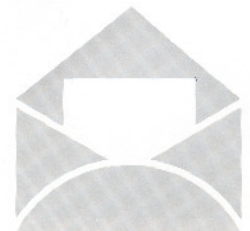
I am writing to express my personal thanks to you and to the World Parrot Trust for the contribution of \$500 to the CBSG. We are deeply grateful for your efforts to support our mission work.

The series of workshops that we have undertaken continues to flourish. We have now held 20 Conservation Assessment and Management Plan (CAMP) workshops and more than 50 PHVA workshops for nearly 60 species. In June we held a PHVA for the Chinese River dolphin in China, and another PHVA on zebra in South Africa. We are now focusing on preparations for the CBSG Annual Meeting in Antwerp.

I am pleased to tell you that Dr Onnie Byers has just joined our staff as part-time Program Officer, with specific focus on writing up workshop reports. Our activities - past, present, and future - are possible and successful only because of your financial support we have received from institutions like the World Parrot Trust. With your help, we will continue to grow in our role in international conservation in the years to come.

Thank you again for your support!

Sincerely  
Ulysses S Seal, Chairman





# PARROTS IN THE WILD



## **BLUE-THROATED MACAW** *Ara glaucogularis*

This remarkable flash exposure of this very rare macaw was taken by Eduardo Nycander and Charles Munn. Latest reports indicate that only one very small population remains in Bolivia.

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.