Psitta scene

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

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PROGRESS IN PARROT CONSERVATION

by Rosemary Low

"Parrots are important because their beauty, character and adaptability have won them a special place in the hearts and minds of our species", wrote Mike Reynolds. "Through this special relationship the parrots have the opportunity – not yet fully realised – to make people aware of the appalling speed at which so many wild and unspoiled places in the world are being ruined. We see the parrots as ecological 'pathfinders', leading the way to a wider understanding of what is at risk: nothing less than the survival of our planet."

Mike Reynolds astute statement focusses on the fact that parrot conservation is, in the long-term, also assisting the future of the human race. This might seem far-fetched – but ultimately the survival of man and that of most parrots depends on the same thing – the preservation of large tracts of forest and other undisturbed habitats throughout the world. Destruction of forest affects rainfall, causing drought and flooding, famine and disease. Many such catastrophes of recent years originate from deforestation.

The Kea Parrot of New Zealand (*Nestor notabilis*) and the Austral Conure (*Enicognathus ferrugineus*) from southernmost Chile and southern Argentina are as familiar with snowy landscapes as are our cousins from Canada – but most of the 330 or so species of parrots which exist today are confined to the tropics. Many of these inhabit rainforest *and* other types of habitat but a very large number are confined exclusively to rainforest. They cannot survive without it – and these, of course, are the most vulnerable of all the threatened species.

During the past couple of years biologists have estimated that 1,000 of the world's 9,000 bird species are threatened with extinction. They also believe that approximately 100 species of parrots are similarly threatened. Only a decade ago such an estimate would have seemed incredible. But a great deal has happened in the intervening years. One of the factors which has led to the decline of a number of species has been over-trapping for export to the insatiable markets of the USA, Europe and Japan. Another has been deforestation, especially in Brazil and other South American countries, and on certain Indonesian islands. On some islands of the Caribbean where parrots still survive (some of the earliest extinctions were played out here) human population growth and development of the tourist industry has disturbed and reduced parrot habitats. These catastrophes (together with the occasional natural one, such as Hurricane David which hit Dominica in 1979), have resulted in field studies on a wide variety of parrot species being carried out during the past decade. Twenty years ago we were ignorant of some of the most basic aspects of the natural history of parrots, except regarding some Australian species which are easy to study in their natural habitat.

In the neotropics (South and Central America) and in most parts of Indonesia and New Guinea, one needs more than ornithological skills to observe most parrot species at their nests, or when they are feeding. One needs no small measure of the stamina of the fabled explorers of the past, combined with the climbing skills of a Sherpa. Many parrots nest at heights of 50ft or more, in locations where flooded forest, snakes, trees protected by giant thorns and unfriendly (even head-hunting) natives are likely to be encountered before nests can be located. One of the reasons why field work has become not only possible but urgent, is that formerly inaccessible areas have been opened up by logging. In some areas of New Guinea, for example, teams of biologists work literally a few feet in front of the bulldozers recording for the first and last time in history the flora and fauna that exist there

"psittacine
(sit'ă sīn) Belonging or allied to the parrots; parrot-like"

Conservationist Bill Oddie meets a friendly aviary-bred Kea at Paradise Park, UK. *Photo: Nick Reynolds*

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Puerto Rican Amazon at Luquillo breeding centre.

Little Lorikeet at its nest. Photo: John Courtney.

and which, in only a few days hence, will be obliterated forever. Forests and their inhabitants which have taken millions of years to evolve, are wiped out in minutes to satisfy world-wide demands for hardwoods or other commodities.

There are now so many man-made pressures on countless species of fauna, that man has to reverse his destructive role. To save some of the most important parrot species, he has to work hard and fast. Parrot conservation is in its infancy; there is no time to experiment – the plight of many species is too urgent. Conservation biologists must learn fast. They will have to try to take, as best they can and where appropriate, what has been learned from one species and apply it to another.

In this article I will describe some of the steps which have been taken so far, steps which hopefully will lead to the path of survival, despite mistakes which have been made. Manipulative management has been necessary in the case of species on the verge of extinction. Perhaps in some cases it has not been manipulative enough. For too long a soft approach was adopted when a more positive approach would have yielded better results. The first parrot to which manipulative management was applied was the Puerto Rican Amazon (*Amazona vittata*). Once it inhabited the entire island and was found in great flocks. However, by 1835 one third of the forest had been destroyed. Between 1850 and 1900 the human population on Puerto Rico had doubled to one million, and three-quarters of the island had been cleared for agricultural use. By 1912 less than 1% of virgin forest survived. By 1940 the only habitat available to this small Amazon was the mountainous Luquillo forest – a wet and inhospitable place. All the lowlands were deforested.

The first population estimate was made in 1954 when it was believed that 200 individuals survived. By 1968 the population had fallen to only 24 birds. Some factors which contributed to the rapid decrease were military exercises in connection with the Vietnam war, testing of herbicides, road construction and increased shooting. Taking of young for the local pet trade (the species has never featured in international trade) and cutting down trees to rob nests and using the same species of tree (*Palo colorado*) for charcoal burning contributed to the decline.

In 1968 biologists made a significant discovery: one reason for the poor breeding results of the few remaining pairs was lack of suitable nest sites. Over 1,000 trees in the nesting area were examined to reveal that the majority of cavities were too small or too wet to be used. This discovery was unexpected. However, it has since been found that, in widely differing countries, lack of suitable nest sites is limiting the growth of populations. In Mexico, for example, the Thick-billed Parrot (*Rhynchopsitta p. pachyrhyncha*) is threatened by the felling of large pines, leaving few trees, especially dead snags, suitable for their nests.

Some species not yet known to be endangered could suffer local extinction due to lack of nest sites. It could be years before this problem is apparent because parrots are long-lived. A local population could be large but non-breeding, or producing too few young to sustain its numbers. Nearly three years ago I stayed on the farm of a friend in New South Wales, Australia. I spent only three days there – three days which I will never forget. I was to see for myself how easily a local population of a species could be made extinct. A combination of factors make a small area just beyond the boundary of his farm one of the most important breeding areas for Little and Musk Lorikeets (*Glossopsitta pusilla* and *G.concinna*) in the whole of the state. These two species are not opportunist nesters; they have highly specialised requirements, perhaps known only to my friend who had been observing their nests over a period of 35 years. Few people have found nests of the Musk Lorikeet, a fact borne out by the rarity of eggs in collections and by the scarcity of photographs of this species at the nest.

The lorikeet nesting area of vital importance is on the property of one farmer. In 35 years John has found only 20 to 25 nests, some of which have been active for as long as 25 years. And then the farmer decided, for no specific purpose, to bulldoze most of the trees in the nesting area. My friend's agonised pleas fell on deaf ears. When I visited the trees were rotting where they had fallen, several years after their destruction. One fallen tree contained a cavity in which Little Lorikeets had nested for years. The entrance to the cavity had come to rest only 3ft from the ground – yet so attached were the lorikeets to their nest that they bred there for a further three years until the farmer burnt the log...

A casual observer in the area would observe that these two lorikeet species were fairly plentiful

and believe that thriving populations existed, but because of lack of nest sites most pairs never have an opportunity to breed. And with nomadic species such as lorikeets, populations are particularly difficult to assess.

Having diverged from the Puerto Rican Parrot, now let me return to that species. But for manipulative management at the few nests which remained in the early 1970s, the species would, in all probability, be extinct by now. Artificial nests were provided and nests already in use were patched with aluminium and fibreglass. This resulted in a small increase in the population which permitted a few young to be taken for a captive breeding programme by government biologists. This programme limped along for too many years until a furore erupted regarding its ineffectiveness. A lesson was to be learned from this early experience – that official captive breeding programmes of endangered birds of genera which are bred with success by aviculturists should be led by *experienced aviculturists*, not by field biologists. Now, at long last, encouraging results are being obtained with the captive Puerto Rican Parrots. Although the wild population remains at between 20 and 30 birds, the captive population on Puerto Rico is steadily increasing. There are critics, of course, who say that its numbers would by now have been counted in the hundreds had aviculturists been responsible for the captive birds during the past 15 years.

Millions of dollars have been spent on keeping the Puerto Rican Parrot extant. No other species, parrot or otherwise, has had so much money invested in its conservation. Never again will this happen; today, if millions are to be spent, they are used to buy habitat which hopefully preserves and protects a number of species. There is one exception, however. It is the case of the Kakapo (*Strigops habroptilus*), arguably the strangest parrot which ever existed. It is a native of New Zealand, where 47% of the species of land birds have become extinct since the arrival of man and where 55% of the survivors are in danger of extinction. None is in greater danger than the Kakapo.

This, the heaviest of all parrots, weighs about 4½lbs but up to 6lbs, and is flightless. These facts made it extremely vulnerable to predation by man. One early explorer stated that Kakapo was the principal food of Ngatau natives before the potato was introduced to New Zealand; others have recorded that Kakapos were used as dog food. More recently, during the 1860 and 1870s, this tame and appealing parrot was apparently the main item in the diet of the gold diggers. Not surprisingly, the Kakapo declined very rapidly and almost unnoticed. However, it was actually the subject of perhaps the first ever parrot conservation experiment. In 1890 a small island called Resolution was set aside as a bird sanctuary. Several hundred Kakapo were released there from 1890 onwards. But stoats reached Resolution and the Kakapo population there was decimated.

In 1952 the New Zealand Department of Internal Affairs made an appeal in the ornithological journal *Notornis* for assistance in locating the by now rare Kakapo. Between 1958 and the mid 1970s New Zealand's Wildlife Service made regular expeditions to search for Kakapo on South Island. But only eight birds were located – and all were males. Then helicopters were used to make extensive searches. This operation revealed a population of 18 birds; alas, all were males. The mainland population was effectively extinct. During this period, however, much more was discovered about the strange biology of this species: not only is it nocturnal and unusually solitary but, uniquely among parrots, it is a lek species – one of about only 80 worldwide. (This means that males clan together and perform courtship displays on traditional mating grounds.) It is the only flightless lek bird in existence. There are many other extraordinary facts about the Kakapo – but space does not permit their discussion here.

Female Kakapo feeding her chick.

In 1977 occurred the momentous discovery of another population on Stewart Island, off the south tip of South Island. The population of 200 included females, the first seen for 20 years or more. A reprieve for the Kakapo? Only just... The population was being depleted with great rapidity by cats, at one stage at the rate of 50% per annum. In 1980 dogs were used to find the secretive Kakapo and telemetry used to monitor their movements. Radio transmitters weighing only 30g are fitted to the bird's back. By the end of 1981 23 males and 11 females had been caught. In March 1981 two nests were located and in April that year a Kakapo chick was seen for the first time. This was the only Kakapo known to have been reared on Stewart Island.

In 1982 it was decided to transfer 11 males and seven females to Little Barrier Island. Two pairs found on Maud Island were also transferred. In 1987 only three females were known to survive on Stewart Island – and an estimated 37 males. At the end of the year 16 males and five females were transferred to tiny Codfish Island, not far from Stewart. Perhaps 20 Kakapo remained in the latter location – but it was not possible to locate them.

Clearly, the situation for this species was becoming desperate. A lot of time and money had been spent but the Kakapo still seemed bent on the downhill path to extinction. Then in 1989 a five-year recovery plan was launched; it was estimated that it would cost NZS 2.3 million. What has happened since then? In 1990 two females on Little Barrier Island each laid a single egg. One egg was infertile. The other hatched but the chick died at five days. This was a major disappointment as Kakapo do not normally nest every year but only in times of a plentiful food supply. Supplementing the diet with high-protein food was one of the steps taken under the new recovery plan. It worked! In 1991 at least six chicks hatched, one of these from an egg incubated at Auckland Zoo where another large New Zealand Parrot, the Kaka (*Nestor meridionalis*) has been reared from the egg. Sadly, the Kakapo chick died at five days, However, at last there is a new approach and the promise to remove infertile eggs in future years to discover if a second clutch will be laid. Long overdue? Yes. But 1991 will surely go down in history as the year of hope for New Zealand's most fascinating bird.

Yes, conservation is expensive – but it does not have to cost millions of dollars. This is borne out by the remarkable results achieved on certain small Caribbean islands. These have been well documented – so I will not go into detail here, but no review of parrot conservation methods would be complete without mention of the successes of a dedicated group of people on the islands of St Lucia, St Vincent and, more recently, on Dominica. These islands are of special interest to parrot lovers because each has an endemic Amazon Parrot – or two in the case of Dominica. Those interested in conservation will frequently encounter the word endemic. It means confined to one country, island or area. Some parrots endemic to Caribbean islands exist in areas only a few square miles in extent, because they have been pushed into the mountainous interior by the ever-expanding human population.

St. Lucia Parrot in the breeding facility for the species at Jersey Wildlife Preservation Trust. Photo: Philip Coffey.

The St Lucia Parrot (*Amazona versicolor*) once occurred all over the island of 235 square miles. A decade ago its range had contracted to 40 square miles and its population to 150 or fewer individuals. It was believed to be declining fast, mainly due to hunting. Then something remarkable happened. Along came a young Englishman called Paul Butler. With his dynamic personality and campaigning skills, he spear-headed a movement which, incredibly, made parrot conservation on the three islands, not only effective but fashionable – *and fun*.

How did he do it? The key to his campaign was education, starting with the youngest element in society. He went to the schools. With a wealth of ideas and inventiveness which few conservation workers can ever hope to equal, he breathed new hope into parrot conservation. I can do no better than to use Paul Butler's own words to describe what has been achieved on St Lucia:

"Saint Lucia implemented a comprehensive conservation programme that initiated legislative enactments, reserve establishments, and captive breeding programmes

simultaneously and underpinned these by a far reaching and innovative conservation education programme. It incorporates the usual components of a traditional education project plus the innovative use of music, dance, theatre and the interaction between government, non-governmental organisations and local businesses. This tri-partite approach, with the external agency serving solely as a catalyst providing core materials and technical assistance, has resulted in a sustainable programme of conservation education which has long outlasted the initial involvement of outside funding. At the same time it has generated a surge of local pride and determined efforts to protect the island's natural patrimony, the end result being that the government declared *Amazona versicolor* to be the island's national bird, passed strict new domestic wildlife laws and ratified CITES...

"As a result of the stringent new protective measures and a cessation of all hunting the wild population of this beautiful psittacine has increased from about 150 to over 250 in the space of a decade." (Butler, 1990).

Paul Butler's latest innovation is the "Jacquot Express", Jacquot being the local name for the St Lucia Parrot. In 1990 he enlisted the help of the World Parrot Trust to provide a mobile interpretive centre which could carry the conservation message to every community on the island in a lively and attention-getting format. A renovated British Leyland bus was stripped of its seats and fitted with displays illustrating environmental problems on St Lucia. Decorated with forest motifs and squawking like a parrot, it attracts instant attention. At the time of writing, the World Parrot Trust has delivered a second bus for Dominica, and is preparing a third for St Vincent.

WPT was founded only three years ago by Mike Reynolds, who I quoted at the beginning of this article. As members are aware, the Trust raised £150,000 in its first 2 years and immediately used it to fund urgent projects, like the Jacquot Express. Yes, education of people whose heritage include an endangered parrot is an urgent task. Without local education there can be no conservation. Education projects on small islands are comparatively easy; it is possible to visit every school. Transfer the scenario to the vastness of Brazil, for example, and the task is a very different one.

In 1990 the World Parrot Trust established a special emergency fund to help conserve what is surely Brazil's best known parrot: the Hyacinth Macaw (*Anodorhynchus hyacinthinus*). It is believed that 20 years ago the population of this conspicuous bird, the largest and arguably the most magnificent of the parrots, was in the region of 100,000. Now the wild population is believed to number only between 2,000 and 3,000 with probably a similar number in captivity. Not until 1987 was this macaw placed on Appendix 1 of CITES (the category of the most endangered species). The Hyacinth was rarely imported until the early 1970s – and then trade occurred on a scale so large that at one stage dealers in Europe had unsold birds on their premises for months. The market had been flooded. It was scandalous that such trade had occurred and surprising that it was not until 1987 that an attempt was made to stop it. Of course, habitat destruction also played a part in its decline – and although it is protected by CITES, illegal capture has not ceased.

So what can be done now to ensure that a few years hence the Hyacinth is not in the same perilous position as the Puerto Rican Parrot, the Kakapo and several other parrots whose populations cannot be counted in more than double figures? The Hyacinth Fund of the World Parrot Trust has been drawn up to work with the appropriate national and local organisations in Brazil, with the assistance of leading wildlife conservation specialists.

A big welcome for the Jacquot Express in St. Lucia.

Hyacinth Macaws. This Limited Edition Print has raised significant funds for macaw conservation. Prints still available.

The first part of its objective, to assess the population in the wild and in captivity, is already under way. The second part is expensive and more funds are needed before it can be implemented: to provide trained wardens to monitor and protect it in its natural habitat.

The third part is to encourage and help co-ordinate the breeding of these macaws in captivity. I might add here that the production of parent-reared young or those which are hand-reared and immediately placed in a breeding programme (*not* sold as pets) will be vital for the future of this species in aviculture. Unlike the other three species on which I have focussed in this article, in which captive birds are held in only one (two in the case of *vittata*) official breeding programmes, the Hyacinth Macaw is in the hands of hundreds of aviculturists and – unfortunately – pet owners. Many of these breeders keep this species only for commercial reasons and make thousand of dollars annually from their pairs. I would suggest that the least they could do would be to give 10% of their income from this species to the Hyacinth Fund. We plundered these birds from the wild... now it is time to give something back.

The fourth part of the Hyacinth's Fund's aims is to reintroduce captive-bred birds into the wild, if and when conditions allow. No one will pretend this will be easy; there will be a host of difficulties to overcome. I fear, however, that it will be virtually impossible unless there are *parent-reared* captive-bred birds available. At the present time, I know of only one breeder in the USA who permits Hyacinths to rear their own young. This concept is not popular because it reduces the number of young which can be reared in a year – and therefore the income. Breeders of Appendix 1 species who have jumped on the conservation bandwagon and claim to be motivated by conservation, might prove this point by allowing their pairs to rear the chicks from one nest to independence every year – or at least every other year. And then ensuring that the resulting young are used *for breeding purposes*. I suspect that not until this occurs will aviculture be taken seriously by the conservation community.

Not everyone is fortunate to have the facilities available to breed magnificent macaws such as the Hyacinth. But many would like to play a part, no matter how modest, in conserving them. They can do this by making a donation to the World Parrot Trust. Your contribution is desperately needed in the fight against time to save the most endangered species.

Reference cited:
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NB – This article first appeared in *Bird Talk Magazine*, USA.

INFECTIOUS DISEASE RISKS TO PARROT AVICULTURE AND REINTRODUCTION

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Introduction

Parrots, as a family among birds, seem to be susceptible to a large number of highly contagious mainly viral diseases which may have severe effects on captive populations, particularly those maintained under intensive conditions. Most of these diseases are potentially fatal, some uniformly so, whilst others may decrease production or the viability of offspring. Some have long incubation periods of up to several years which, coupled with a lack of tests for the carrier state, enable them to infect whole groups of parrots undetected. Vaccines are generally unavailable or marginally effective. An understanding of these disease risks is very important for the maintenance of parrots in collections and, particularly, for their safe transfer between collections and eventual reintroduction into the wild.

Diseases which will be considered in this paper are:

Herpesvirus (Pacheco's disease)

Polyomavirus (avian papovavirus)

Psittacine beak and feather disease

Proventricular dilatation disease (Macaw wasting disease)

Internal papillomatous disease

Chlamydiosis (psittacosis)

There are other virus and infectious diseases of parrots, but they are of lesser importance in this general context.

1. Psittacine herpesvirus infection

This virus, one of a group of avian herpesviruses which includes falcon herpesvirus, pigeon herpesvirus, Marek's disease and others, is very common in shipments of New World parrots, particularly Amazons. Most infected birds die during quarantine with acute severe liver disease, but others may be unrecognised carriers. Cases have occurred in UK collections after several years without the introduction of new birds. Herpesvirus carriers typically begin shedding virus, or become ill, because of some intercurrent stress such as breeding, dietary change or transport. A vaccine is available in the US and has been used in South America before shipment but with very poor results, possibly because of strain variation within the virus. The human antiviral drug acyclovir (Zovirax) is effective at stopping outbreaks, but there is usually too little warning to save the individual bird. It is not known, however, whether the recovered birds may remain carriers.

Serological and virus isolation (from faeces) tests are available, but the former cannot distinguish carriers from non-carrier contacts and the latter depends on the bird shedding virus.

Appropriate precautions are quarantine and testing of incoming birds. Probably faecal culture is worth doing as a newly arrived bird may shed virus under stress. Treatment of detected carriers would be controversial. The virus occurs naturally probably only in New World parrots and there is circumstantial evidence that some conures may be regular symptomless carriers. It is therefore wise to keep Old World and New World species separate and avoid mixing conures with Amazons and macaws.

2. Polyomavirus

This highly contagious virus is the only member of its family which causes systemic disease in any species. The rest cause typical infectious papillomas or warts. In parrots, only chicks are clinically affected (with a few recorded exceptions) but the disease is widespread in captive populations where the adults are carriers. Some 50% of German and US aviaries tested positive in serological surveys. The prevalence in Britain is unknown. The virus is spread horizontally between chicks in nurseries, and probably between symptomless adults. It is almost certainly vertically transmitted through the egg. Most species of larger parrot are susceptible and chicks die at 3 to 16 weeks, or may simply be very difficult to rear with repeated bacterial infections and poor growth rate. Diagnosis in nurseries may sometimes be presumptive, based on constant rearing problems correlated with serologically positive adults. Testing is difficult to interpret as sero-negative adults can be shown to shed the virus. The development of highly sensitive tests for viral DNA in droppings and tissues is likely to improve the situation in the near future. The host-virus relationship is highly complex and makes prediction of carrier or immune status very difficult.

Appropriate precautions are difficult to take. At present we can test adults in quarantine by serology (in Germany), with the caveats outlined above. There are no effective treatments or vaccines. Prevention of spread between chicks is crucial, always remembering that the symptomless chick may be the culprit and that the virus is easily transmitted and very resistant to disinfectants. Hypochlorite should be effective.

3. Psittacine beak and feather disease

This disease is now known to be caused by a circovirus and causes failure of feather and beak growth in all species of parrots, but is chiefly seen in cockatoos, African greys and lovebirds. Infection seems only to occur in young birds, which may die of acute liver disease, become symptomless carriers or demonstrate the classic signs at subsequent moults one or more years in the future. The virus affects the rapidly multiplying epithelium of the feather and beak causing new pin feathers to become pinched off or twisted and the beak to become first shiny and then to crumble away. There is no effective treatment for carriers or clinical cases. Generalised immunosuppression is common and the bird may die of some other unrelated infection. Extensive studies have taken place in the USA to produce a test for carriers and a vaccine but neither is currently available in the UK. Affected birds can be tested by the histological examination of a damaged feather and its follicle, and specific inclusions can be identified. The disease has occurred as devastating outbreaks in parrot nurseries and frequently leads to the euthanasia of affected adult birds. Some carriers can probably remain normal for life. It is now known that the virus can be egg-transmitted.

Precautions include quarantining any incoming birds, especially cockatoos, for long periods, elimination of breeding birds demonstrated to be infected by the presence of disease in their chicks, and introducing chicks into nurseries only if they have been incubator hatched. The disease is spread by parents to chicks in the nest by feeding, and between chicks by feather dust and dried faeces. It is even possible for the disease to be introduced by feather dust on keepers' clothes!

4. Proventricular dilatation disease (Macaw wasting disease)

This disease affects many species of parrots, particularly macaws, African greys and cockatoos. Adult birds waste and die after periods of regurgitating seed and passing undigested food in the faeces, whilst still eating well. There may be nervous signs, although these are much more common in chicks, which may show changes in voice, unusual begging behaviour and paralysis as well as regurgitation. Outbreaks occur in intensive parrot units but more often cases are sporadic. The disease is clearly transmissible but no virus has yet been definitively associated with it. The clinical and pathological picture are classical, but there are other differential diagnoses, such as candidiasis or gastric foreign bodies. No bird should be labelled as having MWD unless a definitive diagnosis has been made in an experienced laboratory, because of the potential implications for the collection.

There is a very long latent period and the disease seems to be spread by carrier birds which do not necessarily succumb to stress, but infect other birds when moved into a collection. Other birds may then die up to a year later. Consequently it may never be possible to decide which bird was responsible for introducing the disease. Once in a collection it cannot be eliminated by removal of carrier birds, although parents of affected chicks must be suspect, provided there has been no spread within the nursery. Infection is probably also spread indirectly by keepers as cases seem to crop up haphazard in a house rather than passing from one cage to the next. As no virus has yet been isolated there are no tests for carriers and no real treatment is possible.

Precautions against introduction of the disease include long quarantine periods, thorough knowledge of the origin of birds, X-ray examination of birds which become or remain thin during the quarantine period, and hygienic precautions to prevent spread between aviaries.

5. Internal papillomatous disease

Cloacal papillomas occur frequently in New World parrots, including Amazons, Greenwinged macaws and Hawkheads, and are usually recognised by the presence of fresh blood in the faeces or frank cloacal

prolapse. It is less commonly recognised that similar polyp-like lesions occur on the palate and glottis and even in the upper oesophagous. The disease appears to be transmissible, although no cause has been isolated, and is often spontaneously self-curing. Treatment by surgical removal of the papillomas can be difficult and damaging although the use of lasers looks promising. About 10 percent of affected birds have an associated pancreatic atrophy and bile-duct tumour, which is usually fatal. It is not clear how many affected birds may develop this sequel later in life, but the disease should obviously not be considered to be merely benign. Some liver function tests show promise in identifying such birds at an early stage. Transmission is believed to be by oral or venereal contact between birds and there is concern that breeding may be affected.

Incoming birds of susceptible species should undergo a thorough cloacal and oral examination as part of their general clinical check before entering the collection.

6. Chlamydiosis (psittacosis)

This disease of all birds is well-known in parrots, but much misunderstood. Emphasis tends to dwell on the potential infectivity for humans and frequently leads to overreaction in this regard, when the main threat is to the birds. The infectious agent is a primitive bacterium but, being cell-associated, has many similar features to viruses, including being very indestructible in its resting stage. It is susceptible to antibiotics, including tetracyclines and erythromycin, when actively multiplying, and there are tests for carriers, so the outlook is more promising than for most viruses. However, a life-time carrier state appears to exist, so this has to be included in the group of 'time-bomb' diseases. Infection is most often seen in newly imported New World parrots and losses can be massive in heavily stressed birds. The widespread illegal use of tetracycline antibiotics in quarantine frequently leads to suppression of the disease, so that the parrot falls ill on the next owner, when antibiotics are withdrawn and the stress of movement is added. Chlamydiosis is typically manifest at times of stress such as change of ownership, breeding, bad weather etc. The clinical syndrome varies with species – some, such as cockatoos, seem to be resistant, others like cockatiels and budgerigars may have persistent subclinical infection, whereas Amazons may develop severe hepatitis and die quickly. Australian parakeets tend to get mild eye disease and coryza. Some flocks may only suffer poor egg production and lowered hatchability.

Young Lesser Sulphur-crested Cockatoo suffering from a feather condition

Diagnosis is possible from clinical signs, but there are now very sensitive faecal tests for chlamydial DNA (Central Vet Lab, Weybridge) which can detect many carriers as well as clinical cases. Frequently the presence of the disease is only suspected when a human case occurs. Chlamydiosis is **not** notifiable (except in Cambridgeshire) and officials have no rights to dictate the management of infected birds, although there are Health and Safety implications in zoos. In any case, the response of officials is usually wrong. Positive cases should be isolated and **correctly** treated, tested after treatment is complete and then returned to the collection, or allowed to enter it, while carrying a "flag" against their name as a possible carrier (with low probability).

Incoming birds can be tested in quarantine, preferably twice, with a good likelihood of success as the stress should cause them to become shedders. There is **no** justification for random treatment or treatment of quarantine birds. Spread between cages seems to be low, but is high within cages. Frequently the only sign that a bird is a carrier is when the new mate to which it is introduced goes down with the disease. Because of widespread carrier states in parakeets, cockatiels, budgerigars and finches, large parrots should be kept well away from these species.

Conclusion

The foregoing should make clear that the maintenance of closed aviaries of parrots is the ideal. Of course, this philosophy is incompatible with joint management of species and the pairing of unrelated birds. Nevertheless, it appears that diseases like MWD are increasing exponentially in captive parrot populations and any established breeding collection would do well not to add to its numbers from unknown sources unless absolutely necessary and, in these cases, to quarantine and test incoming birds exhaustively. The expense of such procedures should be well repaid in time.

One alternative would be to set up a system of certifying collections as free of certain diseases. In the absence of definitive tests this can be difficult, but it should be possible to a limited degree if certain criteria are met:–

a. All parrots, chicks and eggs dying in the collection should be examined post mortem, by a competent laboratory with a knowledge of parrot diseases.

b. All sick birds and chicks should be examined clinically and an accurate diagnosis made (as far as possible).

c. All birds should be tested regularly for those diseases for which tests are available, and clinically examined for signs of others (e.g. beak and feather disease, papillomas) on an annual basis.

d. Records should be kept of offspring from the collection, their destination and eventual causes of death.

e. There should have been **no** incoming birds during the period covered by the certification.

It should then be possible to make up further breeding groups using offspring from certified collections which should, by definition, be free of the major infectious diseases. Such offspring would be prime candidates for reintroduction projects as, with the exception of beak and feather disease, we have no knowledge of these conditions among wild populations and cannot know the possible consequences of introducing them either to naive populations or virgin habitat. The ability of other carriers than the birds themselves, particularly visiting aviculturists and even veterinarians, to introduce disease accidentally should not be overlooked.

Infectious disease represents a major threat to the viability of captive parrot populations in a way that is probably unique in the zoo world. Tremendous efforts are being made to come to grips with these problems prompted, it has to be said, by the economic pressures of American aviculture rather than by the efforts of zoos. Nevertheless, complete success and security are clearly some way in the future and it is vigilance now which will ensure that we have breeding birds and offspring for reintroduction in the future.

THE CONSERVATION OF THE ECHO PARAKEET *Psittacula eques* of MAURITIUS

Carl G. Jones and Kevin Duffy

The World Parrot Trust has supported the conservation of the Echo or Mauritius Parakeet for three years and several articles and notes have appeared in *PsittaScene* about this highly endangered species. In this article we summarise the information which is to appear in a longer paper which has been submitted to the *Dodo, Journal of the Jersey Wildlife Preservation Trust.*

The Echo Parakeet is the last surviving native member of its genus in the Western Indian Ocean. Other parakeets existed on the Seychelles, Rodrigues and Reunion but became extinct in the last century.

The Echo Parakeet did not attract conservation attention until the 1970s. The local naturalists R. Chevreau de Montléhu and France Staub studied the parakeet in the early 1970s. Subsequently both were instrumental in helping to focus attention on this species and were able to provide much background data on the ecology and status of the species for the decade before the start of the conservation project.

The conservation effort did not start until 1973 and initially was primarily aimed at the Mauritius Kestrel, and subsequently the Pink Pigeon and Echo Parakeet. The parakeet however received the least attention due primarily to a shortage of funding. Year around work on the parakeet started in 1987 and continues.

History of the Population's Decline

On pristine Mauritius the parakeet was probably found throughout the island and to judge from the relatively frequent mentions in the early accounts it was a common bird.

By the 1940s and 1950s it was limited to the south-west in and around the Black River Gorges extending as far as the centre of the island, a range of about 200km^2. The population at this time was not known but it has been suggested that in the 1930s and 1940s there were about 50-75 birds.

In the early 1970s there were estimated to be 30-50 birds. The 1986-1987 estimate was put at only 8-12 individuals with only three known females. Since then the population has increased, the wild population in March 1992 consisted of at least 16 birds: seven adult males (almost certainly more), a juvenile male, four adult females, a yearling juvenile (possibly more exist) and three recently fledged young. We suspect the population to be 16-20 individuals. During the latter half of the 1970s and throughout the 1980s the population has been limited to about 50 km^2 in and around the Black River Gorges.

Echo Parakeet photographed in 1972. Photo: L.R. Chevreau de Montléhu.

Habitat destruction

This has been the main cause of the parakeets decline. The island was once mostly covered in forest. During the 18th and 19th centuries as the human population increased the demand upon the forest grew, and areas of forest were cleared to make way for agricultural land. Between 1835 and 1850 the human population doubled and by 1860 it had trebled. It was during this same period, between 1835 and 1846 when more than half the remaining forests were felled. By 1880 only about 3.6% of the island was covered by primary forest.

In the 1940s areas were cleared for tea plantations, by 1972 54.6km^2 was under tea and most of this had been former parakeet habitat. At the same time other areas of parakeet habitat were being cleared for pine and other soft wood plantations. The most devastating blow for the parakeet was the clearing of key areas of dwarf forest on Plaine Champagne and surrounding areas between 1973-1981. This last project largely financed by the World Bank destroyed 30.6 km^2 of important foraging habitat. In 1973 at the start of this project there were probably 30 or more parakeets, by 1981 when this work was completed there were less than ten birds known.

Cyclones

These affect the parakeets by causing direct mortality during the storm and by post-cyclone food shortages and consequent starvation. Parakeet populations are badly affected by cyclones, following Cyclone Claudette in late 1979 the encounter rate dropped to 38% of the pre-cyclone figure. On the island of Puerto Rico in the West Indies the Puerto Rican Parrot population was halved by Hurricane Hugo in 1989, when the 47 or more parrots were reduced to no more than 23.

With the present population of parakeets at such a low level a bad cyclone hitting Mauritius in the next few years could kill all the remaining parakeets.

Disease and Inbreeding Depression

These are real but unquantified threats that may be affecting the parakeets. A c.21 day old chick rescued from the failing nest on 5 December 1991 was under weight, anaemic and had lesions in both ear orifices and in its nostrils caused by the burrowing of nest fly maggots. Without our intervention it is highly unlikely that it would have survived another day. There was the remains of a second younger chick in the nest that had succumbed a few days earlier.

The rescued chick was successfully reared in captivity but when between seven and eight months old it developed a condition similar to French moult where the tail and primary feathers broke off, the broken feathers having a shattered or chewed appearance at the base. This bird still survives in captivity but is unable to fly.

There is apparently a much lower survival rate among female parakeets. During the last two decades the population has been skewed to males with ratios of between 3-5:1 being recorded. Historically the sexes were probably equally represented.

Habitat Protection

The need to protect the habitat of the echo parakeet has always been a very high priority. Most of the parakeet habitat is State Land although much of this has been used for deer hunting/ranching and forestry. These and recreation, such as hiking and tourism, have been considered as the main uses for the land which is mostly too rugged for efficient agriculture. The idea to turn the area into a national park was first voiced by the late Sir Peter Scott in 1972 and the plan was later developed in 1975 in an official report. The plan was shelved until 1988 when it was resurrected as part of the World Bank environmental investment program for sustainable development. The Jersey Wildlife Preservation Trust acted as advisors to this program and were represented by John Hartley. The plans for the park have been drawn up. It is hoped that the park will be officially proclaimed in the next year.

The park will include the Black River Gorges and surrounding forests, encompassing all the contiguous state lands in the region

Macchabe forest, the last stronghold of the Echo Parakeet

and covering about 4,000 ha. The primary purpose of the park will be conservation.

Supplemental Feeding

Seasonal food shortages were first suggested as a problem in 1979 and the first attempt at supplemental feeding was in June and July of that year. Many different ways of feeding the parakeets have been tried. So far the most consistently successful means of feeding the parakeets is to provide food in simple rectangular wire-mesh baskets erected 6-8m above the ground. These are attached to a simple wooden frame so that the birds can easily perch on them to feed. This method has been successful since February 1991. It seems probable however that before many parakeets will take food out of the basket they have to learn to eat the food while hanging naturally in the tree or to learn from already habituated parakeets. Initially the parakeets fed on starfruit which they undoubtedly recognised, but have subsequently tried several other fruits and vegetables.

Baskets have attracted parakeets almost daily during the winter months. Three birds regularly visit our baskets but we have seen seven different birds in the area. The vast majority of food taken has been starfruit but other foods such as acorn squash, pear, apple and grapes have been sampled.

Most commercially available fruit and vegetables have been offered at one time or another but many are unsuitable for a variety of reasons. Grapes were often used because they resembled native fruits and the parakeets will eat them although they also attracted Mauritius Merles (Black Bulbuls) to the feeding stations. These are often aggressive towards the parakeets and chase them from feeding sites. Apple is also very palatable to Mauritius Bulbuls and is also a favoured food of rats. Most fruit and vegetables are palatable to monkeys and troops of these pass near the feeding stations quite regularly.

These studies illustrate how difficult it has been to get the parakeets to accept supplemental food. More work needs to be done to find out how to provision the whole population. We shall experiment further on rat and monkey proofing feeding sites and hope to construct feeding towers in the forest.

Supplemental feeding is potentially of great value to the parakeets and constant food availability may bring the birds into better breeding condition and help them overcome food shortages in winter or after cyclones. There is no evidence that the individuals who regularly use the feeding stations are totally dependent on the supplemental feeding. They continue to feed on a wide variety of naturally occurring plant species.

Although some parrots will readily take provisioned food, when we started we knew of no cases where supplemental feeding had been used to help a failing population of parrots. There are however several instances where parrots readily take provisioned food or exploit an artificial food source. In Australia many species of parrots including cockatoos, rosellas and lories visit bird tables to take food placed out for them. The galah has increased dramatically in numbers and distribution in Australia by feeding on wheat either in the fields or from animal feeds. In southern England the feral ring-necked parakeet population only survives because it feeds on bird tables during the winter months.

In recent years supplemental feeding has increasingly been considered as a safe and relatively straight forward management technique. Inspired by our work on the parakeet and other species, supplemental feeding is now used as part of the conservation effort for the Kakapo on Little Barrier Island. In 1991 these birds successfully raised two young birds, the first breeding for several years.

Nest Cavities and Nest Boxes

Echo parakeets nest in tree holes, either vertical or horizontal cavities. Some sites are used annually. We believe good nest sites to be at a premium, a view held by many workers in recent years.

The parakeets may be limited by a shortage of potential nest cavities due to competition with hole-using species. In the face of competition echo parakeets will relinquish their cavities to mynah birds and Ring-necked Parakeets. The single nesting attempts in 1980 and 1981 failed when the birds were displaced by mynahs. Further to these Black Rats, bees and White-tailed Tropic-birds also use parakeet nest holes. The high level of nest site competition is demonstrated by the fact that in 40 nest box years, 22 (55%) were occupied by alien animals. A former Echo Parakeet nest hole used in the 1989/90 season was occupied by Ring-necked Parakeets during the 1991/92 breeding season.

Black Rats have been recorded around all parakeet nest sites throughout the year, often living in the same trees that the birds nest in. Large species of native tree may produce cavities suitable for parakeet nests, but may have smaller cavities elsewhere in the tree that rats can use. Parakeet nests are often an easy target for rats. A failed nest in the 1990-1991 breeding season contained rat droppings and the broken remains of two eggs.

Good quality sites which are secure and of the correct dimensions are probably very scarce and potentially may be used for many seasons. In the Puerto Rican parrot some nest cavities may be used for 20 years or more.

Natural cavities are often destroyed in cyclones. The cyclone of 1975 destroyed 9 (38%) of the 24 known parakeet nest cavities. Since cavities may be in dead trees or limbs they often decay and become unusable after only a season's use. This has happened to two of the three cavities lost since 1987. Three cavities have been lost in 17 cavity years (18%). A higher rate of loss than the values quoted for other parrot species.

The loss of cavities in native trees is being offset by the production of new ones as the old forest trees die off or are damaged by cyclones. However, many mature trees are not being replaced, so in the long term the number of cavities available to the parakeets is declining.

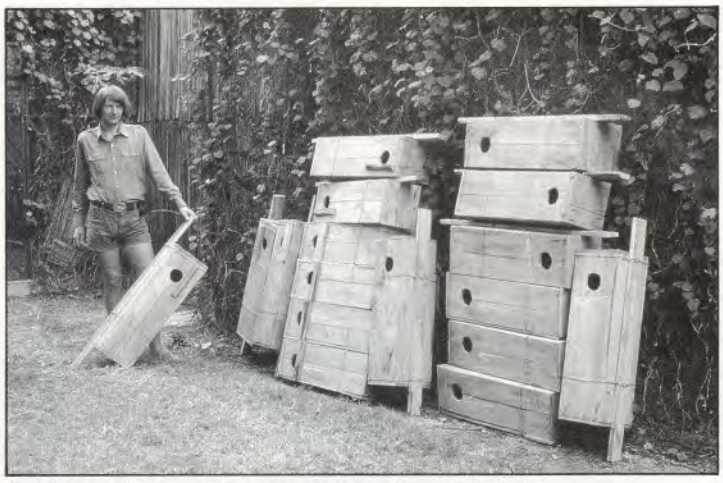
After cavities are lost or the parakeets are usurped by nest competitors the parakeets remain in the territory and appear to have difficulty in finding alternative nest holes even though some may be available. A similar phenomenon has been recorded for the Puerto Rican Parrot.

In an attempt to address the problem of few available nest sites, nest boxes have been placed in the forest since 1974. None of these nest boxes were ever used by Echo Parakeets but one of the first boxes ever erected was prospected by a pair.

It is probable that these boxes were not the ideal dimensions for parakeets or attractively positioned. Nest-boxes made of hollowed out seasoned pine logs are now being erected in areas where pairs of parakeets have been seen prospecting or are likely to breed. The dimensions of these are based on the measurements of parakeets nest cavities and are 24 x 24 x 45cm with an entrance hole 9cm in diameter. We are also making wooden boxes 22.5 x 22.5 x 50cm deep or if they are to be horizontal boxes, 70cm long. Substrate in these boxes is made of crushed termite nest.

The argument for continuing to provide nest boxes is very powerful. Studies on the Green-rumped Parrotlet have shown that by

Female Echo Parakeet leaving the nest, October 1975. Photo: L.R. Chrevreau de Montléhu.



Carl Jones and some nest-boxes ready to be placed in the forest

providing nest-boxes the number of breeding pairs increases. Nest-boxes also have the advantage that they can be made more secure than natural holes and birds nesting in them are more likely to fledge young and brood sizes may be larger.

Breeding Success

Breeding success in the Echo Parakeet is relatively poor. Between 1973 and 1983 less than half of the pairs attempted to breed in any year and of those that did try and breed only 40% succeeded in fledging any young (an average of 0.63 young/breeding attempt). Since 1987 breeding success has improved, and a larger percentage of the population has attempted to breed annually. Breeding was proven in ten out of 17 pair years. Productivity has also improved with an average of 1.3 young per breeding attempt.

The fertility and hatchability of Echo Parakeet eggs is good, out of 18 eggs 16 (89%) were fertile. If we exclude a fertile egg that was depredated then 14 (93%) of these 15 fertile eggs hatched. Fledging success is more difficult to put figures to since some of the birds have been harvested. However we can provide a reliable estimate, out of 12 eggs laid (11 of which were fertile) it is likely that six birds would have fledged.

The poor breeding success recorded in the Echo Parakeet population during 1973-1983 is probably attributable to the destruction of some of its main foraging areas during this period. The population is likely to have been severely food stressed. The recent improvement has probably been due to the population stabilising at a much lower level and the parakeet's exploitation of different food sources.

Improving Breeding Success

There are several options available for improving breeding success and to increase the productivity of egg laying pairs. It has been demonstrated that many species of birds will lay replacement clutches should their first breeding attempt fail. In the Echo Parakeet we have experimented by harvesting eggs and young for captive breeding and subsequently some of the birds have recycled.

Harvesting of clutches Echo Parakeets have produced clutches of 1-3 eggs, with a mean clutch size of 2.25. Complete clutches have been harvested twice and the birds recycled on both occasions. On one occasion they laid in the same cavity but on the second chose an unknown cavity and the replacement was not realised until the fledged young were discovered. The inter-clutch interval was recorded once. The clutch was removed on 4 November and the female started incubating her replacement clutch on 25 November. Since Echo Parakeets usually start incubation with the second egg we can assume an inter-clutch interval, from the removal of the first clutch to the laying of the first egg in the second clutch, of 18-21 days.

Harvesting of broods Complete, healthy, broods have been taken on four occasions. The first two were both of two young and were taken in 1974 and 1975. As far as we are aware the adults were not monitored to see if they recycled. On the two occasions where the pair were followed after the removal of the young one pair recycled. This recycling was not detected until after the chicks had fledged, but by back-dating using known incubation and fledging times the period between the removal of the brood and the start of the replacement clutch was similar to the inter-clutch interval recorded above. The pair that did not recycle nested late in the season.

Since 1987 brood size has been recorded 7 times in the nest or at fledging and was 1-3, with a mean brood size of 1.86.

Eleven young have been reared under foster ring-necked parakeets and the nestling period was 48-69 days.

These studies illustrate that there is plenty of scope for developing different management techniques. If the opportunity arises we shall use proven good parents to raise eggs or chicks from less successful pairs thereby insuring that all the pairs continue to be genetically represented in the population.

Multiple-clutching has rarely been tried with wild parrots and we have been unable to find any documented cases. This technique has been widely used in captivity by parrot breeders, but has yet to be used very intensively. Some experiments have been done to increase the egg production of captive Puerto Rican and Hispaniolan Parrots by double clutching and egg pulling. One female Hispaniolan Parrot produced a total of 21 eggs in a single season during a sequential removal experiment.

Captive Breeding

Captive breeding has long been regarded as one of the best options for the survival of the parakeet. In the late 1970s and early 1980s the situation for the Echo Parakeet looked very grave and captive breeding was viewed by most as the last hope for the species. A resolution passed at the ICBP World Conference on Parrots held in St Lucia in 1980 recommended that all the remaining Echo Parakeets be captured for captive breeding. The adult birds proved difficult to catch and the harvesting of eggs and young is the best hope for obtaining stock for captive breeding.

The parakeets used to be fed on a standard parakeet diet high in seeds, including sunflower, canary, millet, pine nuts and peanuts. The parakeets became very fat on a seed diet. All of these are now excluded and they are fed entirely on a fruit, vegetable and leaf diet. High energy foods are not fed, favoured foods include, starfruit, bilimbi, badamier, ochra, fresh peas, green beans, apple, orange, cabbage, lettuce, pomegranates and acorn squash.

Echo Parakeets are able to readily convert carbohydrates into fats. This may be an adaptation to the dry winter months when the parakeets feed on leaves, unripe fruits and other low energy food. The parakeets seem to have an ability to utilize a high percentage of the nutrients present in the food and in captivity if fed on high energy foods they become obese.

To overcome the problem of obesity we are planning to build a large L shaped aviary 200ft long 15ft wide and 12ft high with smaller breeding units built off it. This will allow us to keep the birds together as a flock which we feel will enhance normal pair formation and social behaviour.

Ring-necked Parakeets have been maintained at the Government Aviary Since 1979 where they have been used as model species on which to practice management techniques and for foster parents. The harvested eggs and six of the young were reared by these foster Ring-necked Parakeets. Model species have been used in other captive breeding projects and Hispaniolan Parrots were used as models for Puerto Rican Parrots. The Orange-bellied Parrot project personnel first practiced extensively with Rock Parrots and Blue-winged Parrots and subsequently used Rock Parrots as foster parents for Orange-bellied Parrots. The value of closely related models in any captive breeding project for endangered species can

A pair of Echo Parakeets courtship feeding, October 1975. Photo: L.R. Chrevreau de Montléhu.

Our forest camp from where the Echo Parakeet work is conducted

An adult male Echo Parakeet in a Calophyllum parviflorum bush, July 1979

not be overstated.

Although Ring-necked and Echo Parakeets are closely related, the Ring-necked Parakeets are far easier to manage and more hardy.

Some Final Thoughts

The conservation of the Echo Parakeets has been hampered by a lack of data on the biology of the bird and a lack of information on the management of parrot populations. With the increasing rarity of a large number of parrot taxa there is a very real need to rapidly develop sound management practices for this group in the wild and captivity. A review on the management of wild parrot populations needs to be compiled. Studies on maximising productivity by egg pulling, double clutching and fostering need to be conducted.

It is encouraging to note the parallels between the Echo Parakeet project and the Puerto Rican Parrot and the Orange-bellied Parrot conservation projects and how there has been a convergence of ideas on the way to manage these critically endangered parrot populations.

It has been suggested that the Echo Parakeet is in imminent danger of becoming extinct. Findings in recent years seem to show that this may not necessarily be the case. It is worth commenting on the fact that many island bird populations may exist for many generations at a very low level. There are several examples from New Zealand, West Indies, Hawaii and the Mascarenes showing that even very small populations are often restorable and no population, provided there are still males and females surviving should be regarded as beyond salvation.

Acknowlegements

The project is a joint one between the Conservation Unit of the Ministry of Agriculture Government of Mauritius and non government conservation organisations. We would like to thank the Wildlife Preservation Trusts, Mauritius Wildlife Appeal Fund, World Parrot Trust and The Parrot Society.

Postscript

Interested in a job in parrot conservation?

Kevin Duffy who does the field work on the parakeet leaves us in March 1993 at the end of the breeding season, following nearly three years working on the project. We are looking for someone between the ages of 25–30 who would need to start with us in August 1993 at the beginning of the breeding season, and will remain on the team for eleven months with the option of renewing their contract. Interviews for this post will be held in Britain in June or July.

Finding a replacement for Kevin will be difficult since we are looking for someone with a wide range of skills. We require a first rate fieldworker who is physically fit, a good tree climber, and who possesses some avicultural skills. Duties will include careful fieldwork and monitoring of the wild birds, the provisioning of the wild birds with supplementary food, providing and maintaining nestboxes and poisoning rats. A four wheel drive vehicle is provided for fieldwork.

The successful applicant will be expected to live in the field in a tented camp shared with 3-5 other fieldworkers/students working on other projects. Being part of a team means that the successful applicant will need to be able to take on camp duties including cooking and camp maintenance.

The job is not in the least bit glamorous and not very well paid. Camp is at 2,000 feet, during winter it rains a lot and temperatures may drop to 7-10 degrees C. In summer it is hot and we may get cyclonic rains, humidity frequently reaches 100% for days on end. The camp floods nearly every summer season.

Working as part of a team in a developing country means that you have to be pleasant, diplomatic and with a good sense of humour. There is definitely no room for free-spirits or *prima-donnas*.

If you feel that this is the job for you and possess these skills then write with a full c.v. to Carl G. Jones, Project Director, La Mivoie, Tamarin, Mauritius, Indian Ocean.

INTERNATIONAL NEWS ROUND-UP

AUSTRALIA

In 1992 the first legal parrot shipment was imported into Australia via the Spotswood Quarantine Facility in Victoria. It included 60 Macaws from the UK. We heard that the birds were making so much noise on the flight into Australia that the captain threatened to dump them in Singapore as they were annoying the multi-million dollar racehorses which happened to be on the same flight! Fortunately, he did not carry out his threat.

BENELUX GROUP

Our Benelux Group has received official recognition of their charity status in the Netherlands. They recently recruited a total of 26 new members, largely due to the efforts of Mr Tom Morrell of Belgium. This month we were delighted to receive the sum of £1000 which represents donations collected by Dr Koen Brouwer of Rotterdam Zoo for the Goffins Cockatoo appeal. Members who live in the Netherlands are invited to contact Mrs Juim Fiege, telephone number (31)88 595 5038 if they wish to become more involved with members and fund raising activities in their areas. In Belgium, please contact Tom Morrell on (32) 646 9410.

Goffin's Cockatoo

BOLIVIA

We hear from Charles Munn that in August 1992 he located a population of *Ara glaucogularis*, the Caninde or Blue-throated Macaw. He reports: 'In one Bolivian site, WCI is now studying and photographing four nests and other mated pairs of this previously unstudied species. Although certainly a few rural Bolivians may traditionally have known about the existence of this species, never before has an ornithologist reported a confirmed sighting of this bird in the wild. Also, WCI has obtained information that should allow us to locate several other populations of the species in the next few months.'

Blue-throated Macaws at Paradise Park UK.

CANADIAN WPT

Our Canadian group has just obtained official charity status in Canada. Desiree Wyant and Leslie Reissner are forming a small committee to plan future strategy. Members in Canada are invited to contact Desiree, telephone number (416) 383 8671 if they wish to become more involved with members and fund raising activities in their areas.

FRENCH POLYNESIA

We are indebted to Cyndi Kuehler and Alan Lieberman for this very interesting account of a translocation programme.

The ultramarine lory, *Vini ultramarina*, is one of the least known and most threatened of all the insular lory species. Known only from the Marquesas archipelago, it is a species of special concern for the Marquesan islanders as well as the Office of Environment for French Polynesia. Its distribution included the islands of Nuka Hiva, Ua Pou, Hiva Oa and Ua Huka, being extirpated from all but the latter island. A special expedition in November, 1991, co-sponsored by the Office of the Environment (F.P.) and the Zoological Society of San Diego (ZSSD), found no lories on Nuka Hiva or Ua Pou and a population of between 1,000 and 1,500 individuals on Ua Huka. Although this population is fiercely protected by the Ua Hukan islanders, its future is of much concern due to the prospect of the construction of a wharf to be built in 1993. Such development will allow the docking of large cargo ships which will lead to the potential

The first Ultramarine lory, Vini ultramarina, peeks out from its traveling crate to inspect its new surroundings.

invasion of exotic rat species and further anthropogenic activities, i.e. industry, agriculture, and urban development. Such factors, in addition to cats, a large goat population, possible presence of avian malaria and the introduction of the common mynah and great horned owl have led to the extinction of the ultramarine lory on all of the other islands.

In accordance with the draft recommendations of the ICBP/IUCN/CBSG Parrot Action Plan for *V. ultramarina*, the Zoological Society of San Diego undertook the first step of an experimental translocation of this lory species from Ua Huka to Fatu Hiva, the most southerly of all the Marquesan Islands. This decision was based on the prehistoric evidence of the presence of the ultramarine lory in Fatu Hiva and the pristine nature of the island, having few of the environmentally negative features of Ua Huka; i.e. no wharf, introduced rat species, no introduced avian competitors or predators (mynah, owl, harrier), and a controlled goat population which has allowed the island to maintain good primary and secondary forest cover. In addition, Fatu Hiva has many of the plant species known to be food plants for the lory, including kava, banana, coconut, coral tree, "ahaian", mango, "tamanu", and Tahitian mango.

In August, 1992, ZSSD staff, accompanied by personnel from F.P. Office of the Environment and the rural Economy Service, travelled to Ua Huka and spent 10 days mist-netting ultramarine lories. Hampered by the unseasonable rains caused by Hurricane Omar, the total capture was seven lories. These birds were kept for six days before being transferred by boat to Fatu Hiva. In Fatu Hiva the inhabitants of Omoa visited the birds while still in their holding cages and learned about the translocation program. The birds were released in a foothill valley above Omoa, in an area rich in food plants, especially coconut and banana. All the birds were released at first light and began to feed on coconut flowers within minutes. Within one hour the birds' foraging activities took them high into the hills and out of contact with the human observers.

The birds will be monitored in the future by an employee of the Rural Economy Service who will make field observations, as well as collect data from other island residents. This translocation program will continue on an annual basis to provide enough founder birds to establish this species on Fatu Hiva.

This translocation project is just one component of a comprehensive joint conservation program between the government of French Polynesia and the ZSSD, which includes field research, continuous monitoring of endangered bird populations, translocations and captive-rearing.

Submitted by:
Cyndi Kuehler
Curator of Zoology, San Diego Zoo

Alan Lieberman
Curator of Birds, San Diego Zoo

Cyndi Kuehler, releases one of the seven Ultramarine lories (Vini ultramarina).

MEXICO

The centre for the conservation of Mexican Parrots founded by Dr J.P. Ehrenberg has now been incorporated under the name of Amerycop, A.C. It is now in a position to sign an agreement with the local government to obtain the property for the Centre's headquarters. Recently a community-based theatre project in environmental education was submitted. Also, Olivia Newton-John, the well-known singer, will give a concert in Mexico City in aid of the centre. A "live parrot museum" is planned which will be part of a tropical park and a regional arboretum.

NEW ZEALAND

Dear Mr Reynolds,
Enclosed is the latest saga of the smuggling attempts in New Zealand. There was a short footage on television which revealed the birds to be two pairs of Yellow bibbed Lories and two pairs of Maroon bellied Conures. Both these species are breeding well in New Zealand.

Because of the attempted smuggling of the Yellow-bibbs it has now become urgent that world wide recognition be given to our Patron of the New Zealand Avicultural Society Inc, Mr Fred Rix. Mr Rix has had Yellow-bibbs since 1953 when they were legally brought into New Zealand (along with Chattering Lorys) by a Mr Farnsworth in the Bay of Plenty. This gentleman was not managing the birds at all well and Mr Rix was asked to help him. This he did and from that time on Mr Rix has had the Yellow bibbs.

Over the years he did not have very much success with them – just maintaining his number. There was another member of our Society with the odd couple of birds and he and Mr Rix kept the species alive between them.

It was during an Australian Avicultural tour to Europe and United Kingdom in the early 1970s that Mr & Mrs Rix visited George Smith. Here they learned the art of hand rearing and since that time Mr & Mrs Rix have hand raised most of their Yellow bibbs (and a large number of other parrots in his collection). With the addition of the above extra birds this gave Mr Rix 6 breeding pairs. Over the past 5 years he and his wife have hand raised a large number of Yellow bibbs and they are well established here in New Zealand.

For the past two years several pairs of these birds have legally been exported to Europe and elsewhere. Since the uncovering of the smuggling I wrote to you about in July, Geneva has disallowed our Department of Conservation to issue export permits as they believe that the Yellow bibbs have been raised from eggs smuggled into New Zealand. Despite assurances from our Department and Customs authorities, Cites still are not convinced all these birds are aviary bred in New Zealand.

It is a pity that none of the breeders (excluding myself) close ring their birds. If they had done this, there perhaps would be evidence that they were aviary bred, but it would still not overcome the problem that Cites still say the eggs were smuggled.

Mr Rix is now the only breeder in New Zealand breeding Hooded Parrots. He has 4 breeding pairs who reared 5 chicks last year and this year he has already hand reared over 10 chicks. He also is one of the few here with purebred Browns Rosella. Unfortunately there are many hybrids around through thoughtless breeders just throwing birds together.

Please feel free to publish any of the above. Officials from our Customs and conservation Department have agreed that I go ahead with trying to have Mr Rix's breeding achievements acknowledged. I also have Mr Rix's approval.

Yours sincerely,

Elaine S Ashton (Miss)
Albany, New Zealand

★ ★ ★

Ship search nets birds

NZPA Dunedin

Customs officers seized eight exotic parrots, believed to be valued at more than $10,000, from the Union Rotorua container vessel at Port Chalmers yesterday. The Department of Conservation confirmed last night that it was the first seizure of birds protected by the Convention on International

Trade in Endangered Species from a vessel in any domestic port since New Zealand signed the convention in 1987. The Dunedin collector of customs, Mr Murray Anderton, said it was the first case of illicit bird exports detected by Dunedin Customs in the past 20 years.

The brightly coloured birds, of species native to Argentina, the Solomon Islands and South-east Asia, might have been bred in New Zealand and intended for export to Australia, authorities said. It was unclear where the birds had been placed on board the ship and investigations were continuing. Mr Anderton said the Union Roturua had arrived at the Port Chalmers multipurpose berth from Lyttelton at 11pm on Thursday and was due to leave for Sydney at 10am yesterday. Shortly before then a senior customs officer, Mr Peter Wilhelmsen, had given the vessel its final clearance and was taking a last walk around the ship when he heard the sound of birds. A full customs team was immediately called on board, and officers found four cages containing a pair of parrots concealed in the ceiling of a disused sick bay.

(New Zealand Herald 24th October 1992)

UNITED KINGDOM

Report supplied by RSPB, RSPCA, EIA

GOVERNMENT REPORT SHOWS THOUSANDS OF BIRDS STILL DYING

MAFF (Ministry of Agriculture, Fisheries and Food) today released figures for imports of birds into the U.K. While imports fell from 175,967 in 1990 to 129,490 in 1991, mortality rates (on arrival and during quarantine) had risen from 12.32% to 14.81% during the year.

But the EIA/RSPB/RSPCA who launched a campaign to end the wild bird trade in May 1991, welcomed news that imports fell by 50% in the six months following the campaign launch. However, 19,178 birds still died in air transport or during quarantine in 1991 with thousands more dying prior to leaving the exporting country.

For the fourth year running the data shows that mortality during air transport and quarantine is only significantly reduced in shipments involving less than 100 birds. Shipments can be as large as 4,000 at present.

The organisations have been delighted at the response from airlines – by the end of 1991, 41 airlines had stopped carrying the wild birds. Yesterday a director of Kenya Airways appeared on Kenyan TV to announce that the airline would become the one hundredth airline with a wild bird embargo, following lobbying from campaigners. According to exporters the trade worldwide has fallen to around a half of former levels due to the embargos.

As a result of the Euro-wide campaign the European Parliament passed a resolution calling for a ban on the trade. Last month President Bush signed "The Wild Bird Conservation Act". The Act requires a moratorium in one year on most of the half million annual wild-caught bird imports to the U.S.

Dr. Arthur Lindley of the RSPCA said, "We are delighted that numbers of birds imported and mortality rates dropped in the second half of the year due to the campaign. But the evidence clearly shows that the Government must severely limit shipment size if it is to reduce mortality."

Peter Knights of EIA commented, "MAFF have done their homework. Now they must act to save thousands of birds and to set an example for Europe and the rest of the world."

Paul Hannon of the RSPB stated, "As President of the Community, John Major should follow ex-President Bush's lead by guaranteeing better protection for wild birds in the current review of EC wildlife laws."

EDITOR'S NOTE:
Since 1989 The World Parrot Trust has been campaigning for individual shipments of parrots to be limited to 50. We have once again written to the Minister to advocate this limit.

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From Department of the Environment – Exotic Wildlife Division

13 November 1992

PROPOSED EC REGULATION ON THE WILDLIFE TRADE

Discussions have been continuing under the UK Presidency of the EC on the proposed EC Regulation on the Wildlife Trade. I hope you will have seen Lord Strathclyde's letter of 14 September to Lord Moran of Wildlife Link, which set out the Government's approach to the proposal in the light of the many representations received during our initial consultation exercise earlier this year.

EC Environment Ministers discussed the Commission's proposal for the first time at the Environment Council meeting in Luxembourg on 20 October. The following summary of the discussion was recorded in Hansard, in a reply given by our Secretary of State who chaired the Council meeting.

The Council considered for the first time the Commission's proposal for a revision of controls on the wildlife trade (the "CITES Regulation"). Other Member States joined the United Kingdom in supporting a significant strengthening of current controls, while emphasising that any extension of controls beyond those species covered by CITES must be on a scientific basis. The Council agreed that any harmonised controls within Member States must be sharply focused; that the Community must avoid needless bureaucracy; and that it was important to ensure that Member States retained an appropriate level of discretion in operating the controls. Ministers invited the Committee of Permanent Representatives to continue their work on this issue.

A further meeting of the Council Working Group is due to take place on 17 – 18 November, at which officials will aim to make further progress in particular in fleshing out the ideas expressed by EC Ministers. After that meeting we hope to be in a position to report back progress to those with an interest in the UK.

USA

Communication received from Ann Michels of EIA (Environmental Investigation Agency) Washington:–

Dear Mike,

Writing to let you know that the U.S. Wild Bird Conservation Act passed the U.S. Senate this past Thursday and is due to pass the U.S. House of Representatives sometime this weekend. All that will be needed is for the President to sign the bill shortly after. Following is a fact sheet describing what this bill will do (its a compromise bill supported by all conservation, environmental and animal protection organizations, the zoological community, the pet industry and a large number of avicultural organizations – no final word from the AFA yet). I'll drop you a copy of the legislation in the mail.

The Wild Bird Conservation Act:

- Places an immediate moratorium on importation of ten of the most heavily traded and known threatened bird species in trade.
- Allows the Secretary of the Interior to place an immediate moratorium or quota on CITES-listed species if trade is detrimental and might be necessary for the conservation of the species.
- Enacts an import moratorium on all CITES-listed bird species, at the end of one year.
- Allows the Secretary of the Interior to establish a moratorium or quota on bird species from a country which has not implemented a management program that ensures both the conservation and the humane treatment of the birds.
- Gives the Secretary of the Interior the power to require marking and recordkeeping for any species that are smuggled in large numbers.

The Wild Bird Conservation Act allows importation of:

- Wild-caught birds for zoos, scientific research and cooperative captive breeding.
- Wild-caught birds for which a scientifically-based management plan is in place which provides for the conservation and humane treatment of the birds; the plan must also ensure that trade is not detrimental to the survival of the species, as required by CITES.
- Birds captive-bred from foreign facilities approved by the Secretary of the Interior.
- Birds exclusively bred in captivity for the pet trade such as cockatiels and budgerigars.

New York and New Jersey have passed state laws banning the sale of wild-caught birds. H.R. 5013 will not pre-empt state laws.

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LATEST NEWS

The hope for survival of some of the world's most beautiful and threatened exotic birds grew stronger today as President Bush signed into law the Wild Bird Conservation Act of 1992.

The law is designed to restrict the import of wild-caught birds, primarily parrots and parrot-like species, as pets. The United States is the world's largest importer of these birds, with imports totalling nearly a half million each year.

"The Administration is very concerned about the conservation of exotic bird species and the depletion of wild populations due to trade," said Secretary of the Interior Manuel Lujan. "I am gratified by the broad-based support this legislation received."

Mike Hayden, Assistant Interior Secretary for Fish and Wildlife and Parks, said, "President Bush's signing of the Wild Bird Conservation Act shows that this country is determined not to contribute to the loss of the native wild birds of other countries."

ACTION PAGE

Give your friends A PALM FOR A PARROT

The Lear's Macaw, one of Brazil's spectacular blue macaw species, may soon be starved into extinction as its principal food, ripened nuts from licuri palm trees, becomes increasingly scarce. The World Parrot Trust, in cooperation with Wildlife Conservation International, is mounting an expedition led by Dr. Charles Munn and Carlos Yarnashita to investigate the potential for a palm tree regeneration scheme. The project will begin by conducting thorough biological and ecological studies of the birds and their feeding behaviours. Palm experiments will follow to determine the best strategy for ensuring the survival of the Lear's Macaw.

For just £10.00 you can help us mount this urgently needed project to save the Lear's Macaw by buying **A Palm for a Parrot**, an unusual gift available exclusively from the World Parrot Trust. You will receive an attractive A5 certificate, suitable for framing, which confirms the preservation of a palm in Brazil. Inscribed with your name or the name of the friend or relative to whom you wish to give the "palm" on the front, the story of the Lear's Macaw and its struggle to survive is described on the back of the certificate.

Although most people think of parrots in rainforests, the Lear's Macaw lives in thorny scrubland in the Brazilian state of Bahia. Reduced to just 65 birds in the wild, the Lear's Macaws leave their roosts before dawn to fly distances of up to 20 miles to reach feeding grounds. There they visit as many as five palm trees, consuming 350 palm nuts each day.

Scientists suspect that the licuri palm trees so vital to the macaws' survival cannot, even now, meet the parrots' dietary needs in the dry season. Worse, the palms are rapidly disappearing as pasture lands are cleared for the free range cattle farming on which the local economy depends. The cattle also graze on *unripe* palm fruits, which means not only that there are fewer fruits left to ripen into the hard nuts the parrots require but also that the palm trees are not regenerating in areas used by the livestock.

As the palm trees gradually become old and unproductive, the Lear's Macaws seem to fly further and further from their roosts in search of new feeding grounds. The macaws make long, exhausting flights over open ground, perch in predictable palm trees and even forage for palm nuts on the ground. This makes them easy targets for hunters who may shoot the birds for food or capture these valuable parrots for sale to the pet trade.

Will you help us save the Lear's Macaw? Buy "palms" for all your friends.

A PALM FOR A PARROT
from The World Parrot Trust
Only £10.00 by cheque, Visa, Access or Mastercard

Please use the Priority Order Form enclosed with this issue.

New World Parrot Trust Funding Projects

The Trust has agreed to make a contribution of $1000 towards a new study and survey to be carried out by ICBP (International Council for Bird Preservation) in Brazil. This survey will seek to establish the current status of Amazona pretrei and Amazona vinacea, both of which are thought to be in a perilous condition. We will advise members of the results in due course, in a future issue of 'PsittaScene'.

When Hurricane Andrew devastated South Florida on August 31st, the Trust was very concerned about the damage and distress which would clearly be suffered by the extensive avicultural community in the area. The problem was to see a way to give some help, and there did not seem to be a practical method available. Now, however, we have read in the AFA (American Federation of Aviculture) 'Watchbird' magazine of their Disaster Relief Fund. The trustees have agreed to send $1000 to this fund as an indication of their support for aviculture. We feel sure our membership will approve of this donation.

Membership Drive

We think it likely that virtually every member of the Trust must know one or two parrot people who would be sympathetic to the Trust's stated objectives. Like every charitable membership organisation we need to increase our membership, and we are therefore including a return form with this issue which asks for names and addresses of potential members who might like to receive a copy of 'PsittaScene'.

We hope that many members will help us in this way – it hardly costs anything, but could be of great benefit to the parrots of the world. Thanks.

WORLD PARROT TRUST LEAGUE TABLE OF ENDANGERED PARROTS

The Trust is constantly looking for ways to focus attention on endangered parrot species. This first attempt at a kind of league table of endangerment may seem frivolous, but if it should attract media attention it will help to educate the general public, and that will be worthwhile. Comments, corrections and new information are invited.

	Species	No. in wild	No. in captivity	Total
1	Echo Parakeet (Psittacula eques) Mauritius	16	2	18
2	Spix's Macaw (Cyanopsitta spixii) Brazil	1	30	31
3	Kakapo (Strigops habroptilus) New Zealand	40	2	42
4	Lear's Macaw (Anodorhynchus leari) Brazil	61	8	69
5	Imperial Amazon (Amazona imperialis) Dominica W.I.	80	1	81
6	Black Parrot (Coracopsis nigra barklyi) Praslin, Seychelles	100	0	100
7	Orange-bellied Parrot (Neophema chrysogaster) Australia	150	35	185
8	St Lucia Amazon (Amazona versicolor) St Lucia W.I.	250	12	262
9	Red-necked Amazon (Amazona arausiaca) Dominica W.I.	300	5	305
10	St Vincent Amazon (Amazona guildingii) St Vincent W.I.	500	104	604
11	Maroon Fronted Parrot (Rhynchopsitta p. terrisi) Mexico	700	2	702
12	Bahamas Parrot (Amazona l. bahamensis) Bahamas	1500	0	1500
13	Blue-throated Macaw (Ara glaucogularis) Bolivia	1500	200	1700
14	Night Parrot (Geopsittacus occidentalis) Australia	2000	0	2000
15	Ground Parrot (Pezoporus wallicus) Australia	2500	1	2501
16	Red Fronted Macaw (Ara rubrogenys) Bolivia	2000	1500	3500
17	Golden Conure (Guarouba guarouba) Brazil	2000	2000	4000
18	Moluccan Cockatoo (Cacatua moluccensis) Indonesia	1000	4000	5000
19	Hyacinth Macaw (Anodorhynchus hyacinthinus) Brazil, Bolivia, Paraguay	3500	3000	6500
20	Palm Cockatoo (Probosciger aterrimus) New Guinea, Australia	6000	1000	7000

Action in Paraguay and Brazil

The Trust's Honorary Director, Mike Reynolds, recently visited Paraguay to discuss the possibility of creating a 'Conservation Bus' there, similar to those we have sent to the Caribbean. He also spent a week in Belo Horizonte, Brazil, to attend workshops on the conservation of Brazil's endangered macaws: Spix's Lear's, and Hyacinth. A full report will be made in the next issue of 'PsittaScene'. Incidentally, Mike has been looking for an opportunity to explain that the term 'Honorary Director' simply means that he does the job for no payment. Some overseas members have gained the mistaken impression that he is some kind of grandee – not so!

The Goffin's Cockatoos: an update

In the August 1992 issue of 'PsittaScene' we reported our concern about 535 Goffin's Cockatoos being held by a dealer at Saumlaki on the island of Yamdena in Indonesia. Strenuous representations have been made to the Indonesian government, through their embassies in London and Washington, and directly to PHPA in Jakarta, the government body responsible for wildlife conservation. We have also sought the help of WWF TRAFFIC, CITES, and ICBP.

We have now heard from PHPA that they will do all they can to resolve the problem, and this assurance is welcome. Meanwhile, however, the birds, a few of which have died over the past few weeks, remain at Saumlaki. They have been moved to a farm belonging to a chinese family, where unfortunately they have been kept close to poultry.

A representative of ICBP has now also visited them, and he feels that the birds would represent a disease threat to the wild population if released.

This is very bad news, as the cost of quarantining these birds and ensuring their freedom from disease would run into tens of thousands of pounds. We don't believe any organisation has funds available for such an operation; certainly The World Parrot Trust does not.

We are advised that there is little possibility of the Goffin's Cockatoos entering the international market now they are listed on Appendix 1 of CITES, but there is every likelihood that they may be absorbed into the Indonesian domestic market. This would be legal, though highly regrettable. The only possible alternative would be for the Indonesian government, through its PHPA authority, to decide to accept the disease risk and authorise the release of the birds. We'll keep you informed.

In the meantime our Benelux Chapter has raised over £1000 for our Indonesia Parrot Fund, and other donations will ensure that we can raise our contribution towards ICBP's planned survey of Yamdena to £2000.

Parrot Studbook Keepers

Once again we publish a list of Studbook Keepers. All readers holding these species would do well to register their birds with the relevant studbook keeper. **The development of these vital studbooks is being seriously damaged by the non-participation of leading aviculturists. If they are as conservation-minded as they pretend, they will register their birds right away.**

BLUE-EYED COCKATOO *R*
PALM COCKATOO *R*
Dr. Roger Wilkinson, North of England Zoological Society, Chester Zoo, Caughall Road, Upton-by-Chester, CH2 1LH.

GREEN-CHEEKED AMAZON *R*
LILACINE AMAZON
Mark Pilgrim, North of England Zoological Society, Chester Zoo, Caughall Road, Upton-by-Chester, CH2 1LH.

MOLUCCAN COCKATOO *R*
Rob Colley, Penscynor Wildlife Park, Cilfrew, Neath, Glam., S. Wales.

GOFFIN'S COCKATOO *R*
SCARLET MACAW *R*
BUFFON'S MACAW *R*
RED FRONTED MACAW *R*
David Woolcock, Paradise Park, Hayle, Cornwall TR27 4HY.

THICK BILLED PARROT *R*
David Jeggo, Jersey Wildlife Preservation Trust, Les Augres Manor, Trinity, Jersey, Channel Islands.

HYACINTH MACAW *R*
Colin Bath, Paignton Zoological & Botanical Gardens, Totnes Road, Paignton, Devon.

GOLDEN CONURE *I*
Alan Lieberman, San Diego Zoo, PO Box 551, San Diego, California, 92112-0551 USA.

GOLDEN CONURE *R*
RED-VENTED COCKATOO *R*
BLUE-STREAKED LORY *R*
c/o The Parrot Society, 108b, Fenlake Road, Bedford MK42 0EU.

R = UK REGIONAL STUDBOOK

I = INTERNATIONAL STUDBOOK

AIMS OF THE WORLD PARROT TRUST

The objective of the trust is to promote the survival of all parrot species and the welfare of individual birds.

1 By educating the general public worldwide about the threat to parrot survival, and seeking their interest, concern and support.
2 By action to protect and preserve the natural habitats of parrots worldwide.
3 By gathering and disseminating information on the status of parrot populations in the wild and in captivity.
4 By advocating effective controls on the international trade in wild-caught parrots, and its replacement by captive-bred birds.
5 By encouraging co-operation in the breeding of parrots by aviculturists and zoological institutions, and better liaison between the captive breeding community and conservation bodies, with the aim of creating self-sustaining populations of endangered species.
6 By promoting high standards in the keeping of parrots as pets.
7 By encouraging research projects, i.e.: the veterinary care of parrots, and the preservation of genetic diversity.
8 By any other means that may be appropriate.

THE WORK OF THE TRUST: A BRIEF REVIEW

Hyacinth Fund
This special fund, launched in 1990, has provided over £13,500 to help conservation measures for both the Hyacinth and Lear's Macaw. Current work focusses on our 'Palm for a Parrot' campaign.

Caribbean Buses
The 'Jacquot Express' was sent to St. Lucia in 1991, the 'Sisserou Express' was sent to Dominica in 1992. We are now about to send the 'Vincie Express' to St. Vincent. This unique 'conservation bus' scheme is remarkable value for money.

Indonesian Parrots
Many Indonesian parrots are under threat, and with the particular help of our Benelux Chapter we are doing all we can. Currently we seek the release of over 500 Goffin's Cockatoos held by traders, and we are supporting an ICBP survey of Yamdena.

Amazons in Brazil
The Trust has been invited by the Brazilian government to help with the conservation of all its parrot species. We have recently contributed towards a new survey to establish the status in the wild of two Amazon parrots: A. pretrei and A. vinacea.

Black Cockatoos in Australia
The Trust provides half the cost of a four year programme to assist the survival of an endangered sub-species of this spectacular cockatoo in Victoria. Cost : £8000

Echo Parakeet
This is the world's rarest parrot, as only about 17 still exist on Mauritius. The Trust has provided continuous support for this species, including supplying a four wheel drive vehicle, a computer and other equipment, and helping with training and diets.

Other Activities
The Trust has supported and attended parrot conservation workshops and conventions in Brazil, Paraguay, Honduras, Holland, Spain, UK and the USA. It has contributed towards hurricane relief for aviculturists in South Florida. It is researching ways to improve the conditions in which pet parrots are kept. Through its 'Parrot Bureau' it seeks to inform the public about parrot conservation and welfare. Principally through this publication, 'PsittaScene', it sets out to inform parrot aviculturists about developments in conservation. The World Parrot Trust aims to represent the interests of enlightened, responsible aviculture in its contacts with national and international bodies and authorities. In all its work, the interests of the parrots themselves come first.

Michael Reynolds

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/$400
- ☐ Overseas Airmail £25/$40
- ☐ Overseas Surface Mail £18/$30
- ☐ Additional donation of £ _____

Name _____

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Please charge my Access/Visa Ac/No.

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Expiry date _____ Amount £ _____

OR:
I enclose cheque payable to World Parrot Trust

Signature _____

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Psitta scene