



## A NEW ERA IN PARROT AVICULTURE

by Michael Reynolds  
*Hon. Director, World Parrot Trust*

It is ten years since I first contemplated the need for an international charity working for the parrots, two years since my fellow trustees and I formed the World Parrot Trust, and sixteen months since the trust was launched upon a largely apathetic world. It is true that around 500 memberships resulted directly from the colourful piece in 'The Mail on Sunday', but it must also be noted that this is one in 10000 of that excellent newspaper's readership of 5 million of Britain's more thoughtful and informed citizens. If the subject matter had been elephants, dolphins or pandas you can be sure that the response would have been at least ten times greater.

There is undoubtedly a 'concern gap' here, and one of the trust's aims must be to raise public awareness of the importance of the parrots as indicators of the health or otherwise of a variety of environments worldwide. A single mammal species may indicate what's happening in a part of Africa or China, but the plight of the parrots tells a story of global significance. With 320 species encircling the world, and 100 of these species listed as in danger of extinction, the parrots are arguably one of the most significant indicators of environmental decline. By means of our 'PARROT BUREAU' information service we will try to get this message through the media and into the hearts and minds of people everywhere.

Meanwhile, back at the parrot ranch, what's going on? Parrot aviculture goes from strength to

strength worldwide, partly because this order of birds is the most beautiful and fascinating of all, but also because this is a hobby which can be made to return a substantial profit. Think about it for a moment: can you name any other home activity where the object of interest is capable of reproducing itself and finding a ready market? I would like to hear any nominations from readers, provided they are respectable and legal.

It is because of this financial aspect that it is possible to arrange international gatherings of individuals and institutions interested in parrots. Can you imagine conventions of a thousand people assembled to discuss ducks,

pheasants, cranes, toucans, starlings, sparrows, or any other order of birds? A hundred or two devotees, maybe, but it takes the parrots to pull a large crowd, and their financial attraction is a two-edged sword. On one side, they attract the attention of trappers and traders, on the other, they justify the investment of money and time in parrot aviculture.

The World Parrot Trust takes the view that efficient aviculture is a costly and time-consuming activity requiring total dedication, and that without reasonable financial reward it would decline. This would be unfortunate at a time when so many species, endangered in the wild, can benefit from becoming established

in captivity. Zoos and bird parks can expect to subsidise their work from visitor receipts, and one or two private establishments are financed from one philanthropic source or another, but the average private aviculturist can look nowhere else to fund his activities but to sales of surplus stock. Having said that, the trust must also plead for a less commercial attitude on the part of many parrot breeders, and more concern for the well-being of parrot species in the wild.

In a previous 'PsittaScene' I've suggested we should PUT SOMETHING BACK to help the birds in the wild, and I make no apology for repeating this call. I'm still trying to come to terms with meeting a man



150ft x 24ft x 15ft Parrot Flight at Paradise Park, Cornwall, UK. 'Now that's what I call an aviary'

**Psittacine**  
(sit 'à sîn) Belonging  
or allied to the  
parrots; parrot-like



*The range of the green-winged Macaw has declined significantly. It is already extinct in Argentina and south east Brazil. Aviculture must give more attention to breeding this species*

recently who has 25 pairs of Hyacinth Macaws in 4 foot cube cages in a basement, never allows the birds to rear their own young, sells the offspring as pets, regards the whole thing as a great investment, and thinks this charity is a waste of time. As an exercise in cruelty, greed, ignorance and arrogance I think it is without parallel. Simply to keep so much precious genetic material in one place is irresponsible. The development of production line techniques in aviculture is well advanced, and may have a positive aspect where satisfying the demand for pets is the aim, but to use these techniques with a species of the importance of the Hyacinth Macaw where it is vital to maintain the birds' integrity as wild animals seems to me unjustifiable, and unforgivable when one considers the multiple deprivations the birds are suffering. This is not aviculture, it is cynical exploitation, and to expect its perpetrator to accept the need to PUT SOMETHING BACK is to expect too much.

Apart from excessive devotion to money, other human failings bedevil aviculture. We are all acquainted with sad cases of OCS - Obsessive Collector's Syndrome. This can occur on a small scale, for example where a parrot breeder assembles, say, a single pair of twelve different species, when he would be making a more valuable contribution to aviculture and conservation if he kept three pairs each of four species. OCS is even more alarming, however, when it reaches a grand scale involving thousands of aviaries, armed guards, extensive smuggling, bribery and other forms of manipulation, and even the coercion of officials. There is not much that any

force within aviculture can do about illegal activities, apart from demanding that the appropriate national and international authorities enforce the law, and that no responsible aviculturist should condone them.

Having discussed some key shortcomings, I must now address the title of this article: 'A new era in parrot aviculture'. At first sight, this is easily done, by referring the reader to the stated 'Aims of the World Parrot Trust' which are listed on the back page of this 'PsittaScene'. After almost a year and a half the trustees feel these aims are still valid and not in need of amendment. What I have in mind is to propose a commitment to a new E.R.A.: Enlightened, Responsible Aviculture. The idea of this rather heavy-handed slogan is to remind us that there is more to keeping and breeding parrots than money, prestige, or recreational pleasure.

It is an immense privilege to have these birds in our care, and we should never forget it. One way of acknowledging this privilege is to show practical concern for the survival of the parrots in the wild, and that means contributing cash to support the work being done in the field. The World Parrot Trust is doing this with your subscriptions, and other donations and receipts, but we are only scratching the surface of the task.

Other enlightened and responsible activities would include keeping proper records, being prepared to place birds with other responsible aviculturists on breeding loan, recording appropriate birds with studbook holders, striving to improve standards of bird-keeping in general and hygiene

in particular, sharing information, giving birds more space, etc. etc. The welfare of individual pet birds needs attention, and we must be alert to the quality of life we are providing for all our parrots. Animal rights are a live issue, and recent attacks on dealers' premises are only a short step away from the possibility of similar attacks on aviculturists.

What the UK publication 'Cage & Aviary Birds' quaintly calls 'the protectionists' (doesn't everyone who cares about birds want to protect them?) are moving steadily ahead towards securing a total ban on trade in wild birds. The World Parrot Trust has contact with the WWF, RSPB and ICBP, and naturally supports their general aim to protect and preserve birds in the wild; at the same time, we seek to differentiate between birds intended for the pet trade and those intended - in small numbers - for aviculture. We think it vital to establish this crucial point in the minds of the various authorities and bodies involved. The writing is on the wall for the mass shipment of wild-caught birds for the pet trade. It will cease within a couple of years, and we must try to negotiate a situation where very small numbers of birds may still be shipped 'to sustain and develop responsible conservation aviculture.' This category of importation could be subject to the approval of a committee including representatives of avicultural bodies.

This will not be easy to achieve, and it will be a lot harder if parrot aviculture, in particular, fails to improve its standing in the eyes of authorities with conservation responsibilities. Progress is being made, however, as is shown by the Joint Working Party and Bird Importations established in the United States involving the American Federation of Aviculture, the WWF and US Fish & Wildlife Service. The aim is to bring about an end to bird importations into the US within five years. In the United Kingdom, the National Council for Aviculture has made a joint statement with the Parrot Society and Avicultural Society in which it agrees that individual importations of parrots and other birds should be limited in number. Readers may remember that the World Parrot Trust put forward this suggestion in its October 1989 and January 1990 issues: we recommended a limit of 50 parrots per shipment, whereas the NCA's recommendation is for 250 'large parrots'. Although we still prefer our proposed limit, it is pleasing to have other organisations join us on the principle involved. We feel sure these friends and colleagues, and the majority of our readers, will also want to join us in declaring a new era of enlightened, responsible aviculture - starting today.

The World Parrot Trust does not necessarily endorse any views or statements made by contributors to *PsittaScene*.

It will of course consider articles or letters from any contributor on their merits.

# RECENT WORK ON THE ECHO PARAKEET

by Carl G. Jones

During the last year the conservation work on the Echo or Mauritius Parakeet has developed dramatically. Our tented camp in the forest has been expanded and a team of biologists now works out of here studying the parakeet, Pink Pigeons, and the native passerines.

The camp is set on a ridge above the Black River Gorges in a natural clearing called Plaine Lievre. Up to five biologists are based here more or less throughout the year. Conditions are basic but quite comfortable: the team lives in three tents and there is also a large storage tent and a lean-to kitchen area. Plaine Lievre was chosen as a release site for captive-bred Pink Pigeons several years ago but has proved to be a good camp-site for those working on other species. Echo Parakeets fly over the area almost daily and some forage very close to camp, sometimes even feeding on the trees around the clearing.

The biologists usually live in the tents for up to ten days or a fortnight at a time before returning to our main centre in Black River for a rest and to discuss the work. Black River is a four hour walk away or a rough hour's drive along forest tracks and country roads.

Life in camp is pleasant enough during the dry season (September to mid-December) and work progresses well, but during the rainy winter months (May to August) the work is often cold, wet and miserable. The worst time of the year for living in the field is from mid-December to April. This is the cyclone season, when torrential rain storms can disrupt work for weeks on end; every year we have to break camp during the worst weather. Last

season camp was flooded with everyone still living in it. Everyone had to sleep in flooded tents with the camp beds just inches above the water. One member of the team felt safer sleeping in a covered hammock strung between two trees at the edge of the forest. Luckily such discomforts are usually short-lived, but the disruption to work of having to break camp and commute into the forest during breaks in the weather may last more than a month. This year life should be a lot easier, since the Government has built us a two-roomed concrete building just outside the forest for our use during the worst weather.

The gift of a four wheel drive double cab pick-up truck is going to be the biggest help the project has had to date. This will make commuting and the provisioning of camp much easier. The parakeets live in about 50 square kms of forest and a four wheel drive is essential to get to many areas of their habitat. The truck is due to arrive any day. Up until now we have had only one trail bike and have had to share vehicles with our other conservation projects.

The work on the parakeets has progressed well, and we have continued to carefully monitor the birds during the winter. We were fortunate to have the help of a group of four students from the City of London Polytechnic who worked with us for two months. They positioned themselves at strategic lookout points throughout the parakeets' range for four or five hour watches at all hours between dawn and dusk. From their observations we were able to work out the movements and habitat preferences of the parakeets and add more details to our knowledge of their behaviour and ecology.

Jacky Mills, who did an excellent job last season, left us in May and has been replaced by Kevin Duffy and Sian Waters, formerly of Edinburgh Zoo. They have worked with captive parrots and are experienced in tropical fieldwork.

Kevin and Sian work with Steven Rault, a Mauritian fieldworker, and together they have kept a careful eye on the population. The wild population is thought to be about 12-15 birds with only three known females all of which are paired up. Fortunately there has been some reproduction in recent years and several of these birds are thought to be young.

At the time of writing, all three pairs of birds are showing signs of breeding and two pairs may be on eggs.

During the dry months we suspect the parakeets are short of food and it is then that they feed largely on leaves, since most of the fruit in the forest has been taken by introduced rats, monkeys, mynahs and bulbuls.

To give the parakeets a helping hand during this time of shortage we have been placing food out in the forest for them. Food is hung up on branches so that it looks natural. We have tried virtually every type of fruit and vegetable that we can obtain and, although the parakeets have sampled grapes, chillies and apples, we have not yet been able to encourage them to take our food on a daily basis. The problem is simply that there are so many trees and so few parakeets, one has to put out large amounts of food before they chance upon it. Added to this, the food is rapidly eaten by the other fruit eating species in the forest. We have been experimenting to get around some of these problems by poisoning rats and monkey proofing trees. Fortunately the chillies which the Echo Parakeets most favour, have not been taken by any other species in the forest.

For several years we have been preparing for the day when we would have captive Echo Parakeets and have established a colony of Ring-necked Parakeet to use as

foster parents. Five breeding pairs are kept and they are very good parents. The nest boxes are fixed to the outside of the flights and are inspected daily. The nesting parakeets have been taught to be very tolerant of any intrusion and during the breeding season they will readily accept and rear foster babies of any age. Last season we harvested two fertile eggs from one nest and a baby from another. Three young were successfully reared.

The young Echos are quite different from Ring-necked Parakeets, far less excitable, but much more active. Echo Parakeets have shorter broader wings than Ring-necked Parakeets and are far more manoeuvrable in an aviary.

One of the captive reared Echos apparently had a metabolic problem and became obese despite careful dieting. Unfortunately this bird, although active and looking healthy, died suddenly. Post-mortem results have so far been inconclusive. The other two parakeets are doing very well, they are fed on fruits and vegetables and, since in the wild they are fruit, flower and leaf eaters, they are not fed many seeds.

The parakeets are kept at the Government Captive Breeding Centre in Black River. They are housed in two interconnecting aviaries, each unit is 8 feet high, 6 feet wide and 16 feet long. These units are raised off the ground so their droppings fall through the wire floor. It is hoped to harvest more eggs and/or young this year for captive rearing. Julie Dixon from Jersey Zoo, who used to rear the parrots there, now works for us and will be responsible for the rearing of any young Echos.

The future of the Echo Parakeet still looks critical, but it is now looking better than it has for over a decade, thanks to the help of the Government of Mauritius, the World Parrot Trust, Wildlife Preservation Trusts, Mauritius Wildlife Fund, Parrot Society and other organisations.

Carl G. Jones  
Project Director  
1st November 1990



Collecting eggs of the Echo Parakeet



Echo Parakeet at 7 days



Echo Parakeet at 48 days

# Appendix 1 profile: PRETRE'S AMAZON

by Rosemary Low

One of the least known of the Amazon parrots in aviculture is Pretre's or the Red-spectacled (*Amazona pretrei*). It is very closely related to the better known Tucuman Amazon (*Amazona tucumana*). The two are easily distinguished by the more extensive area of red in the wings of *pretrei*, and by the red feathers surrounding the eye. Pretre's is a small Amazon, measuring 30-31cm (12in) and weighing (in captivity) between 240g and 310g. Some authors have treated the two as being conspecific (belonging to the same species) although it seems more common these days to treat them as separate species.

## Distribution

The present range of this species encompasses only Rio Grande do Sul in south-eastern Brazil and possibly Misiones in Argentina. Formerly it was found further north in Brazil in southern Sao Paulo but its habitat there has either been destroyed or degraded. In the past it may have visited south-eastern Paraguay and northern Uruguay in search of food – but there is no evidence that it was a resident there. The distribution of this species is dependent on *Araucaria* pine, the seeds of which are its principal food for much of the year. (In contrast the Tucuman is an inhabitant of alder forest).

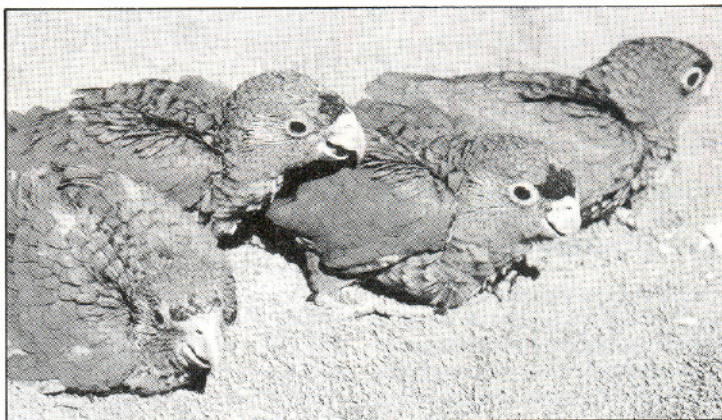
## Conservation status

Since the 1970's, the population of Pretre's Amazon has declined substantially. King (1979) stated: "In

1971, numbers at its only known winter roost in Rio Grande do Sul were put at between 10,000 and 30,000 but fell to 5,000 in 1972, after part of the roost had been destroyed by logging. In 1976 the roost was deserted for reasons unknown but a flock of about 2,000 began roosting in a *Podocarpus lamberti* grove, a few km away from the original site."

In 1975 the above-mentioned roost, at Esmeralda Ecological Station, was made a reserve – but by then it was deserted. Since then, some *pretrei* have again returned to roost in the area. The occupation of this roost had been a long-standing annual occurrence, lasting from April until July – until 1974. At the same time a steep decline in numbers was reported in other roosting areas, principally that 11 km (7 miles) north-east of Santana da Boa Vista where, in February 1976, an estimated 2,000 birds had been seen.

According to the ornithologist William Belton (pers comm, 1980) deforestation had been under way for a long time in Rio Grande do Sul, and the decrease of the early 1970s must have been due to some other reason than *Araucaria* deforestation. However, Flavio Silva, another leading ornithologist of the region, did not agree but stated that it was due to the "intense destruction of forests which has occurred during recent years" (Silva, pers comm) (Low, 1983). Belton thought that the heart of the problem was the insufficient number of suitable nest trees, which need to be relatively large. I believe that he is right about



Pretre's Amazon chicks at seven weeks – hatched at Palmitos Park

this. Lack of suitable nest sites is increasingly being found to be a major cause of decline of the larger species of parrots.

Trade has not been a threat to this Amazon which was virtually unknown in aviculture before the 1980s. It is on Appendix I of CITES.

## Captive history

Until the mid 1980s *pretrei* was virtually unknown and, at the beginning of the decade was represented only by three birds in a private collection in France. During the mid to late 1980s a few reached Europe; it is difficult to say how many, but perhaps in the region of 100. This species is well represented at Loro Parque, Tenerife, and at Palmitos Park, Gran Canaria, thus in the last four years I have come to know it very well. And to like it very much! In my experience, it is one of the noisiest and most active of the Amazons, and calls a great deal – probably to attract attention. All the birds I have known have been tame and inquisitive. Presumably they were all hand-reared – but nevertheless, many hand-reared Amazons do not retain such tameness, so perhaps they are almost naturally fearless and inquisitive – like their larger relative the St. Vincent. All those in the breeding centre at Palmitos Park whistle or call out in Portuguese when anyone passes. Often the males will display, dilating the pupil of the chrome yellow eye and holding the shoulders away from the body to show the extensive red carpal area.

## Sexing

Our birds were not surgically sexed as I believed that sexual dimorphism was pronounced enough to dispense with this. Males have more red on the forehead and have most or all of the primary coverts red and more extensive red on the carpal edge of the wing. In the female only some of the primary coverts are red. When the bird is in a resting position with the wing closed, only the extent of the red on the carpal edge will give an indication of its sex. The wing needs to be spread to examine the primary coverts for a comparison of

individuals. In young birds this will not be significant. Most females have noticeably smaller heads and beaks. They display less and are usually less aggressive than males, but in all these aspects there are exceptions!

## Immature birds

You have much less red in the wing: there is a little on the bend, little or none on the carpal edge and red on some of the primary coverts – but much less than in adults. The thighs are entirely green, whereas in adults they are partly red. The red on the forepart of the crown is less extensive and there is little or no red surrounding the eye. The iris is pale grey and the beak is ivory. In adults the beak is ivory tinged with orange on the sides of the upper mandibles.

## Diet

In my experience, *pretrei* eat (and I mean consume, not waste) more than other Amazons of a similar size. The diet must therefore be controlled to ensure the birds do not become overweight. I do not mean that the quantity of food should be rationed but that a balanced diet with plenty of fruits and vegetables must be offered, in addition to seeds and other items.

## Housing

These Amazons do equally well in suspended cages or walk-in aviaries, with a minimum length of 2.4m (8ft).

## Captive breeding

I believe that Pretre's Amazon was not bred outside Brazil until 1990 when it was bred at Palmitos Park and at Loro Parque. In the breeding centre at Palmitos Park a number of birds were flying together in a large aviary until February 1990. They were then paired at random and, during February and March, were placed in our standard Amazon aviaries which measure 2.4m (8ft) long, 1m (3ft 4in) wide and 2.1m (7ft) high. One side wall is solid but the other is constructed partly of welded mesh. On this side there is a space between the neighbouring aviaries in which hibiscus is planted. The birds enjoy nibbling this, without doing a great deal of damage but, more importantly, the



Pretre's Amazon – its population has suffered a serious decline in recent years

flowering shrubs create a pleasant environment. Part of the roof is of welded mesh but the aviaries are well protected from the often high temperatures and occasional strong winds of the mountain location.

Five females laid – the first less than five weeks after being paired up! It was no doubt coincidence that three females housed in walk-in aviaries laid four-egg clutches while the two families in suspended cages had only two or three eggs. The first female to lay proved to be an egg-breaker, thus her eggs were transferred to an incubator – but were infertile. Another of the four egg clutches was also infertile (all these females were probably laying for the first time) as was the three-egg clutch.

The female with the four fertile eggs was incubating in a nest-box measuring 29cm (11½in) square and 40cm (15½in) high. Inspection was carried out from the service passage in the next block of aviaries. When I tapped gently on the next-box the female would leave at once, so inspection was very easy. This was so in all cases except for the fertile pair in the suspended cage who are very aggressive.

On April 20, probably 25 days after the first egg was laid, a pip mark was seen. Early on the morning of April 22 there was a chick in the nest, and on the following morning there were two chicks. The third egg was pipping on the morning of April 24 and the chick had hatched by 3 p.m. the next day. The fourth egg was pipping on April 26 but a chick was not seen until the morning of the 29th, although possibly it hatched on the previous evening. It would therefore appear that the eggs hatched after 26 and 27 days.

Three of the four chicks were weighed on the day they were hatched. Weights were 11g (with a little food in the crop), 12g with the crop full and 10g with some food in the crop.

From hatching until about seven days *pretrei* chicks have quite dense white down on the back, but much

sparser down on the head (see the photograph in **PsittaScene** 2 (3): page 10). By the age of six days the back is darkening due to the growing feathers under the skin. By the beginning of May, the three eldest chicks had a grey appearance from the feathers growing beneath the skin; their eyes were still closed. Many of the wing feathers had erupted by May 13 in the eldest three young. The red forehead and carpal edge of the wing already distinguished the eldest as a *pretrei*.

The chicks were closed-ringed when aged between 12 and 14 days with 9.5mm rings (internal measurement). However, 9mm would have been better, in which case ringing would be about three days later.

The chicks' crops were always bulging with food for the first month. After this it is normal for Amazons to feed their young less frequently. The rearing diet consisted of unlimited fresh corn (most of it grown on our premises), together with the normal mixed food which consists of sprouted sunflower seed, boiled maize and chopped greenfood, varied daily with other items such as rice cooked in the husk, cooked butter beans, peas, chopped carrot. They also received the rearing food made fresh daily from hard-boiled egg, non-fat soft cheese, carrot and wholegrain bread. Spray millet and a mixture of soaked small seeds (oats, canary and hemp) were also consumed.

By the end of May the three eldest chicks were fully feathered and the youngest nearly so. Immature plumage differed from that of the adults in that the red on crown and forehead was less extensive, and only one of the four had red feathers below the eye. The same youngster had the feathers of the forecrown green, margined with red, to give a pretty scalloped effect. In the others the feathers of the forehead were solid ruby red, perhaps even deeper than the shade of the adults (In the Tucuman Amazon immature birds have the forehead orange rather than brick



*Amazona p. pretrei* bred at Loro Parque

red as in adults.)

The amount of red in the wing varied in the four young. The alula is green, not red as in adults. (I think these pure red feathers are among the most beautiful of any parrot).

The young left the nest on June 9, 12, 13 and 21; however, I believe that the order they fledged in was second, third, first and fourth, after 53, 48, 49 and 55 days in the nest. As is usual with Amazons, they started to feed on their own within two or three days of leaving. I like to leave young parrots with their parents for several months if possible, as this period is important for them to learn behavioural patterns from their parents. The family was very compatible and the young were not removed until the end of September.

Our experience with this pair made the breeding of *pretrei* seem deceptively easy, but the other fertile pair seemed determined to prove the contrary. They were more excitable in temperament than the others; both were aggressive thus nest inspection was less regular. This was the last of the five pairs to nest, during the middle of April. Only one of the three eggs was fertile and hatched on May 13 (not a Friday – but a luckless day, nevertheless). Sadly, the chick was killed soon after it hatched. Next year, of course, this female's eggs will be fostered.

Our first experiences with this attractive little Amazon indicate that it nests readily and, I believe, will prove to be a good breeder – like the Cuban, for example. Although the number of *pretrei* in captivity is small, I am confident that this species will be established and, if well managed, might one day form the nucleus from which birds could be re-introduced to the wild. It is for this reason that our emphasis is on parent-reared young.

References cited:

King, W.B., 1979 *Endangered Birds of the World* (ICBP Bird Red Data Book), Smithsonian Institution Press/ICBP, Washington  
Low, R., 1983, *Amazon Parrots*, Basilisk Press, London.

## Pretre's Amazon also bred at Loro Parque

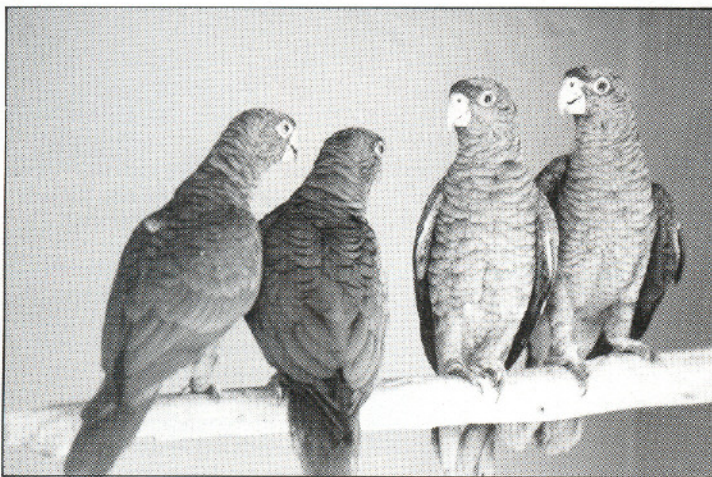
The photo illustrates a Red-spectacled Amazon *Amazona p. pretrei* hatched at Loro Parque during the 1990 breeding season. On hatching it weighed 8.8 grams and had a profuse covering of white down; its bill was pink. It developed initially very quickly and later at a slower pace, until at 99 days and a weight of 261.9 grams it was weaned. This chick is a male, its gender being apparent by the extend of the red feathering. Males have more red on the head and on the bend of the wing, carpal edge, alula and primary coverts; females have the colours reduced.

The Red-spectacled, a rare species in Europe, was little known in aviculture even in its native Brazil until recently. It is now kept by a number of breeders. This success at Loro Parque has shed much light on the progress of the young, and has augmented the data known on its nesting habits by contributing such information as egg weights and sizes.

The Red-spectacled is a declining species, which has been affected by loss of habitat, but most notably by the felling of the pine *Araucaria angustifolia* – an ever-green with horizontal branches, rather flat tops, thorny leaves and which produces a seed, which the parrots seek for food after the breeding season. It is a highly mobile species, which makes censusing its populations difficult. As an example, in 1971 from 10–30,000 were observed at a place subsequently designated the Estação Ecológica do Aricuri in Esmeralda Municipality. Three years later virtually no parrots appeared in the region but by 1983 some 10,000 were counted.

This breeding at Loro Parque has not only contributed to the knowledge of this species but will set the species on the road to becoming established in aviculture.

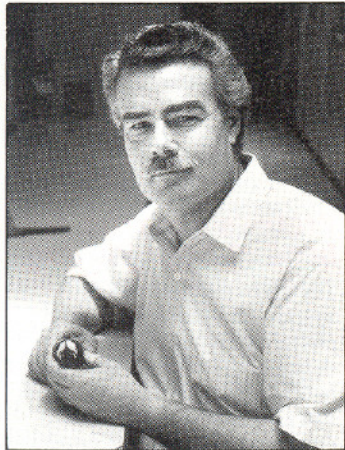
Tony Silva  
Curator of Birds  
Loro Parque



Four Pretre's Amazons, aged six months, parent-reared at Palmitos Park

# "If I could keep only one pair of parrots ..."

By John P. O'Neill



John P. O'Neill

I have been asked what psittacid I would keep if I could only choose a single pair of birds. Since the question was posed to me, I have thought quite a bit about my response. Since my main interest is in the Neotropics I decided that I would have to choose a species native to that part of the world. I then decided that I would want to work with a species that was little known in captivity so that my efforts would be rewarded with valuable information. Thinking more about my decision I would stick to a bird from my favourite habitat, the high, wet, and cold eastern slopes of the Andes, where a screeching flock of birds can come into view out of dense fog and disappear again in a fleeting moment. Since the Golden-plumed Parrot (or Conure), *Leptopsittaca branickii*, fits all of my

criteria, I would choose to work with it. Additionally, it is a bird that lives at the ecotone where the uppermost cold, wet, mossy forests give way to the often windswept, open *paramo* above, a habitat that is not yet under much human threat, and is probably still relatively common, at least in the Peruvian part of its range where I know the bird. It does seem to possibly be patchily distributed, but this may be because of the necessity of its ranging widely over large areas for fruiting food plants. The high, wet forests are biologically much less diverse than those at lower elevations, and thus food plants are probably less dense in numbers of individuals and in numbers of kinds.

Structurally and vocally the Golden-plumed Parrot seems to be related to small macaws (*Ara*) and conures (*Aratinga*), and would probably not be difficult to keep. Since, to my knowledge, no nest has ever been found, I should not say that they would breed easily in captivity. I have usually seen them in flocks of ten to more than 40, so they may have certain social requirements, such as vocal or visual stimulation, needed to get them to reproduce. They would probably suffer from heat, but should not have problems with cold. Since they do live at high elevations (around 3,000m), birds would have to be brought down to lower levels slowly, but even wild captured adults, given a good diet and handled properly, should acclimate fairly easily. The Golden-plumed

John P. O'Neill has more field experience with neotropical avifauna than almost anyone alive today, and is the world authority on the birds of Peru. He has identified more new species of birds than any other living ornithologist, the first while he was still a college student. In addition, he is an outstandingly talented bird artist who has sold over 300 paintings and illustrated various field guides. We are delighted to commence this regular feature with an ornithologist of such repute.

Parrot is little-known because it lives in a habitat that is very difficult of access, and in which it is difficult for a human to move quickly. Flocks of these birds may be in a tree over one's head and in a flash have flown several kilometers before perching again. The distance that they cover in minutes might take an observer several hours to traverse, and the birds would probably not be there when he or she arrived. To learn much about this bird will certainly necessitate someone who can radio-track them, and someone who wants to be freezing cold and soaking wet most of the time he or she devotes to the study! The challenge is there, but to bring them into captivity to attempt to breed them. With most of their habitat totally inaccessible to the average human (unless he or she can get the funds to go from one area to another

by helicopter!), the Golden-plumed Parrot remains very poorly known, but this isolation is also probably its greatest protection.

Since Blga. Irma Franke of the Museo de Historia Natural in Lima, Perú, Dr. Charles A. Munn of the New York Zoological Society, and I have the description of a new species of *Nannopsittaca* parrotlet in Press (Auk, Vol.111), I am sure many people would think I would choose a pair of it to keep, but this beautiful little bird is not as exciting to me as the Golden-plumed parakeet is in its cold, often cloud-bound habitat.

Since I don't think either of the two species of *Nanopsittaca* has been kept in captivity either, I'll leave that to someone else!

by John P. O'Neill, Ph.D., Staff Research Associate, LSU Museum of Natural Science, Baton Rouge, LA 70803, USA



Golden-plumed Parrot *Leptopsittaca branickii*

## REPORT FROM INDONESIA by John Taylor

At dawn and dusk the eerie wailing calls of the Moluccan Cockatoo *Cacatua moluccensis* carry far across the rain forest capturing the very spirit of "Manusela National Park". The park covers 180,000ha, roughly 10% of Seram's land surface where the species is endemic. The name "Manusela" means "Bird of Freedom", so the sight of over 30 of these beautiful Cockatoos crammed into a pathetic cage was viciously ironic as well as pitiful.

That sight was back in September 1987. As part of a

scientific expedition to Seram, John Bowler and myself had been studying the islands birds for over two months. Our survey was conducted in the northern half of "Manusela National Park" and land adjoining its northern border.

In 41 days spent in prime habitat, Cockatoos were observed on 54 occasions, but these only related to around 20 individuals. A terribly low number.

Aboard the ferry returning to Ambon we witnessed the trade first hand. The discomfort of the birds is

whose numbers were also at a dangerously low level.

Finally in October 1989 the Moluccan Cockatoo was placed on C.I.T.E.S. "Appendix One", of endangered wildlife.

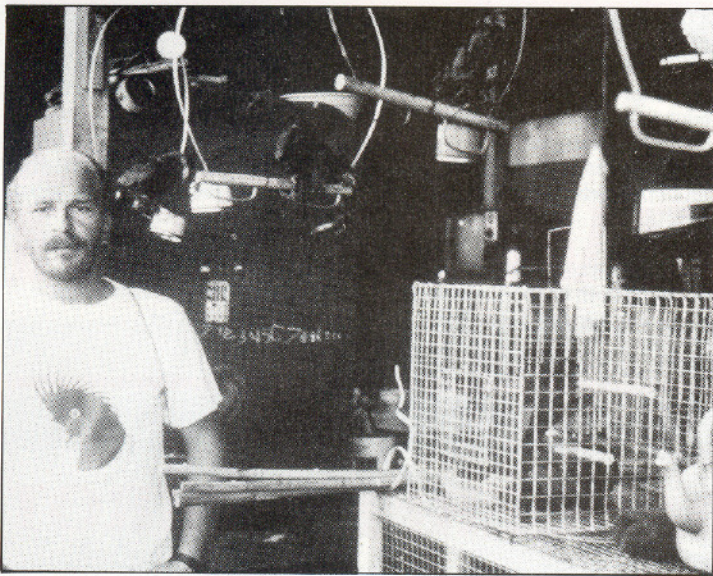
I returned to Seram in August 1990 with the main aims being to assess the status of the Moluccan Cockatoo and to assess the level of trade, in it and Seram's other parrot species.

The route used in 1987 was followed, surveying the same areas and visiting all the sites where the

plain to see, a rice sack placed over the cage for shade is also the only protection from the elements. This on a journey of 28 hours.

From the results of the research it was quite clear that the species could not sustain the trade that was being imposed upon it, a trade that had seen a total of 54,000 birds legally exported from 1981-87.

We recommended that all trade be banned immediately, and the species be closely monitored, along with the Purple-Naped Lory *Lorius domicella*, another Seram endemic

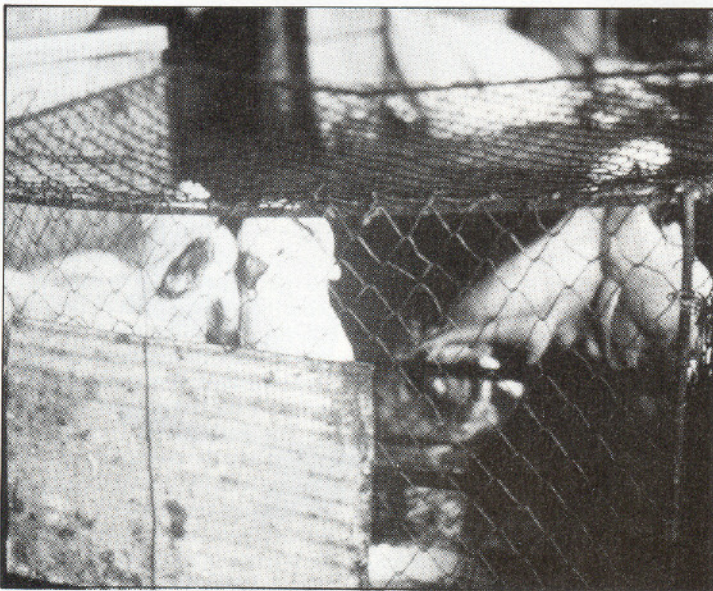


John Taylor (wearing World Parrot Trust t-shirt) in the bird market in Jakarta

species had been observed. The species was present at all but 3 sites, and was observed in 2 new locations. 23 days were spent in prime habitat but only 35 observations were made relating to a minimum 15, and to a maximum 19 individuals. As in 1987 the maximum observed together was 2, and again the majority of observations were before 9:00 a.m. and after 5:00 p.m. At these times the birds are active and very vocal. Calls are varied from soft muted squeaks to long drawn out wails and screams, that can be heard from over a kilometre away. The birds return to the same roost each evening, and with the noise they make it's easy for trappers to locate the roost tree. Nylon loops are tied around the branches and the birds become entangled, or a trapper will simply climb the tree with a torch and dazzle the birds before taking them from their perch. Local information given was that up to 10 birds roost together, but the most common answer was up to 4.

Local people also gave information on breeding, most stating courtship was in July and August with young birds in October. On August 1st 1987, a pair were observed displaying. Both birds perched in the open at the top of a large tree, uttering a variety of calls, loud and soft. one bird broke off several small twigs and dropped them. The display continued for over 15 minutes, occasionally one or other would fly out a short distance and then back to the tree. The display ended with dusk approaching, the birds flying off in different directions, both calling loudly. Calling never continued long after dark. The flights during the display, and others we observed on some occasions consisted of three or four shallow beats and then a short glide with loud calls during the flight.

The birds were observed up to an altitude of 1100m in Primary Forest, Secondary Forest, Village Gardens and two observations from very degraded dry scrubby forest.



Moluccan Cockatoos, facing an uncertain future

From all the observations on both surveys the Cockatoos were never observed feeding, apart from the calling in early morning and late afternoon the birds appear to be shy, quiet and secretive.

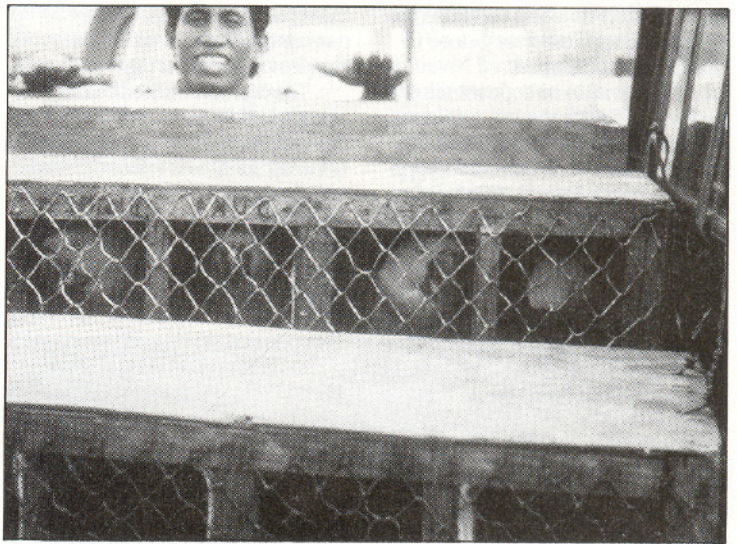
The results from the last survey indicate that in the area surveyed the population has not suffered a significant decline in the last three years. However with the low number of individuals encountered the status must remain the same: rare and endangered.

Trade in the Cockatoo appears to have declined. Local people informed me they had ceased trade on the instructions of PHPA officials and indeed on the latest visit only one bird was seen to be exported from the island, and it was kept out of sight unlike other parrot species which were on open display. More birds are obviously smuggled in in this manner, as small numbers were observed in Ambon market and the birdmarkets in Jakarta. Although the

PHPA are helping to impose the ban, realistically any decline in trade is due to the wild stock being severely depleted over the last 10 years by the trade itself.

Like the Cockatoo there is still a cause for concern on the status of the Purple-Naped Lory. This species is restricted in range, all observations from both surveys were between 400-1000m. These observations coming from both Primary and Secondary forest. During the last survey a mere 7 observations were made, an alarmingly low number. Although it is a very brightly coloured species it is well camouflaged when sitting quietly in trees. it is easily overlooked when not calling and may not be as rare as the number observed suggests.

Because of its colour and sweet voice it is highly prized, many are kept as pets by local people. The numbers kept do not pose any overall threat to the species, but one village had 10 birds. A number



Great-billed Parrots in transit

like this could well threaten localised populations.

Little evidence was found on the export of this species and numbers observed outside of Seram were small, but to ensure the conservation of both the Purple-Naped Lory and Moluccan Cockatoo a ban on trade must be continued, further to this both species need to be closely monitored throughout Seram. This would help identify any noticeable change in the current populations, at the same time more would be learnt of their ecological requirements.

With trade appearing to have declined in Cockatoos it has now turned its attention to other species and there has been an increase in the export of the Red-Lory *Eos bornea*, Rainbow Lorikeet *Trichoglossus haematodus* and Great Billed Parrot *Tanygnathus megalorynchos*.

From Seram many birds are taken by ferry to Ambon, some are sold in the city's market, 11 species

from Maluku and Irian Jaya were observed here. Others continue on to other destinations.

In the Bird Markets in Jakarta 24 species from all over Indonesia were openly on sale. Apart from parrots, species representing some 29 families were available in these markets.

Business is booming. It is an immense problem and extremely difficult to contain. Nonetheless the Indonesian Government is trying. Articles in the Jakarta Post in October 1990 spoke of a new body represented by various government offices including the Dept of Forestry, which would "regulate the trade of rare and protected animals, mainly birds, throughout the capital". "The supervisory team would also launch an information and education campaign".

It is very easy for us in Western countries to sit back and demand that birds and animals be left alone, but alternatives must be offered. Many people in Seram and on other

Indonesian islands depend on the trade as a source of income, it is part of their economy and they cannot be blamed for the decline of any species.

Indonesia needs the support of western countries, from our Governments, Companies and Conservation Organisations, for research, education and finding economically viable uses for the rainforests where so many of the endangered species live.

If support is not increased trade will continue, sustained by those few people whose greed and selfishness has most recently brought the Spix's Macaw to the brink of extinction.

Our "powers that be" should remember that birds, wherever they live are part of the world's heritage and as such the responsibility for their welfare belongs to everyone.

I would like to thank the following departments for granting

permission to carry out the research.

"Lembaga Ilmu Pengetahuan Indonesia" (L.I.P.I.) Indonesian Institute of Sciences.  
Direktorat Jenderal Perlindungan Hutan Dah Pelestarian Alam (P.H.P.A.).

Thanks also to the following for providing both financial support, advice and support in the field.

The World Parrot Trust - Hayle, Cornwall  
Birdworld - Farnham, Surrey  
The Coalbourn Trust Fund C/O The British Ecological Society - London  
Zoologische Gesellschaft Fur Arten- Und Populationsschutz - Germany  
AZ - Gruppe Bietigheim - Bissingen - Germany  
Whitley Animal Protection Trust - Telford, Shropshire  
Mr John Bowler - Ornithologist  
Swaletreks - London

## MEXICO'S MOST ENDANGERED PARROT

Which Mexican parrot has the most restricted range, is the least numerous, the least studied - and the nearest to extinction? It is the Maroon-fronted Parrot (*Rhynchopsitta terrisi*) which unfortunately qualifies for these titles. This species is very close to the Thick-billed Parrot (*R. pachyrhyncha*) in appearance and behaviour. Unlike the latter, it is totally unknown in captivity and little is known of its natural history.

The editor has recently been corresponding with a young Mexican who is very concerned about the survival of the Maroon-fronted Parrot. He is Dr Miguel Angel

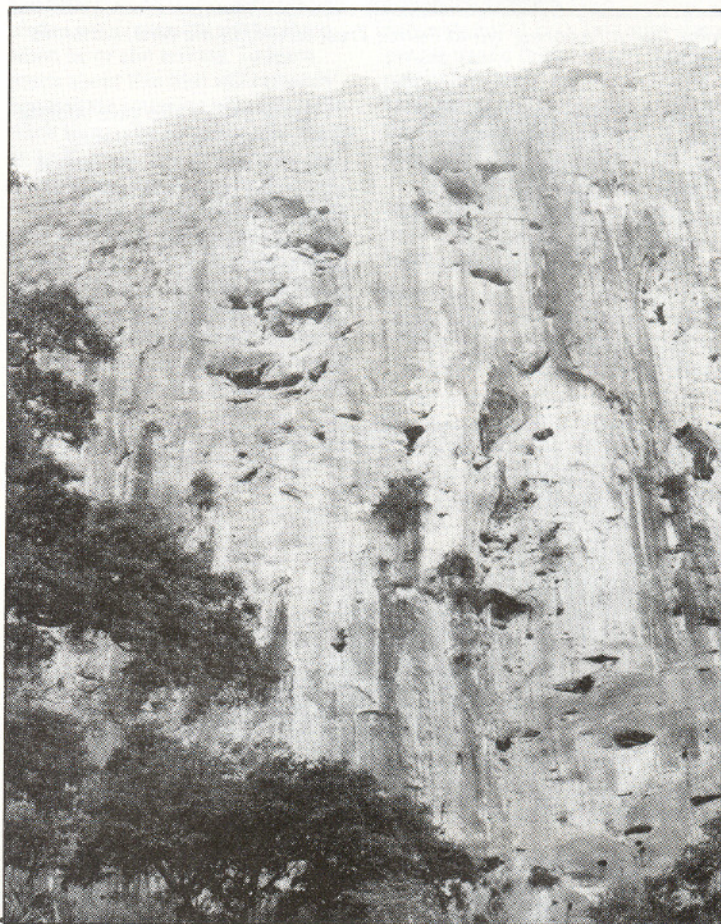
Gómez-Garza from Monterrey. He has informed us that the major threat to its survival is habitat destruction. The national park, Cumbres de Monterrey, that includes a large part of the range of this species, is being severely damaged by human activities. Hundreds of trees are cut each year.

The Maroon-fronted Parrot occurs only in the Sierra Madre Oriental mountains of Nuevo León, between 300m and 1,500m. It feeds mainly on various species of pines and on the nectar of agaves. Its nesting sites are not trees - there are few large enough within its range - but natural cavities within



Maroon-fronted are the least numerous and the most endangered of all Mexico's parrots

Photo: Miguel Angel Gómez-Garza



Maroon-fronted Parrots nest within rock cavities

Photo: Miguel Angel Gómez-Garza

the rocks. The breeding season commences in July, when two or three eggs are laid. Young fledge at the end of October to coincide with the major availability of pine seeds.

Dr Gómez-Garza considers that the following steps should be taken to preserve this highly threatened species:

1. To try to buy the breeding area of the species, known as "El Condomino", to prevent access by cows, goats, dogs, etc, and to have a permanent warden living nearby.
2. To start a captive breeding programme. He has a suitable piece of land for such a project in pine forest similar to the natural habitat.

He has estimated that he would need \$12,000 to construct the aviaries. The cost is high because of the steep inclination of the terrain. It would be necessary to make a cement base and "ladder". Because this species is noisy and conspicuous, its numbers have been over-estimated. Few realise how serious is the threat to its survival.

The World Parrot Trust is looking into the possibility of working with Dr Gómez-Garza and the Mexican conservation authorities to assist the survival of the Maroon-fronted Parrot. Please contact Michael Reynolds if you are interested in helping.



# BOOK REVIEWS



## BEHAVIOURAL ECOLOGY OF THE GALAH

Book-length scientific studies of single species are so rare that, whichever the species studied, it must be of interest to the serious aviculturist. This is certainly the case with *Behavioural Ecology of the Galah* by Ian Rowley. (Galah is the Australian name for the Roseate or Rose-breasted Cockatoo, *Eolophus roseicapillus*). Between 1969 and 1977 the CSIRO Division of Wildlife Research embarked on a programme of research on this species at the request of the Department of Agriculture of Western Australia. The results of the study are detailed in this 188-page book.

Chapters are devoted to Study area and methods, The Environment, food resources and pest status, Behaviour, Vocalizations, Social behaviour, Behaviour of the breeding pair, Social organization, Breeding biology (two chapters – eggs, nestlings) and Productivity and survival. The chapters on breeding behaviour and biology should prove to be of especial interest to aviculturists for the wealth of information, much of which can be related to the birds in our aviaries. From studying a small number of birds in captivity we can sometimes reach the wrong conclusions but the large numbers of birds whose records contributed to the data in this book ensures genuine results. For example, hatchability in the eggs under observation was 82.6%; 1816 of 2198 eggs hatching.

Aviculturists are fond of blaming the weather for poor breeding results – and the study suggests that there is every justification for this. For example, in 1976 the winter rains were small and very late. Although the males' behaviour indicated that they were ready to breed, the females were not. When

the rains did come, late in August, the females were ready to accept the attention of the males. However, by this time some of the males had lost interest and, although the pair bond remained intact, many pairs did not breed that year.

Varying incubation periods in one species is not only a feature of birds in captivity. The specific incubation period is best measured as the time between the laying and the hatching of the last egg in the clutch. Twenty such last eggs hatched after an average of 23.4 days but some extreme results were obtained. The first egg in one unusually large clutch of eight hatched after 36.1 days but the most bizarre result was that in a clutch of five laid in two periods, three weeks apart. Each egg was numbered and only one hatched – after 45 days!

Co-ordination of hatching is achieved by the parents postponing regular incubation until three or more eggs have been laid. Of 146 eggs that hatched at a known time, 72 hatched within the first 24 hours and 48 within the second 24 hours, thus 82% of hatching occurred within 48 hours in each nest.

This book is illustrated with colour and black and white photographs and with numerous graphs and tables. It is published by Surrey Beatty and Sons (43 Rickard Road, Chipping Norton, NSW 2170, Australia) and the CSIRO. As yet we have been unable to discover who the UK distributor is but copies can be obtained at Foyles, London, price £20.

This book obviously cannot be classified as fireside reading – but for the serious student of parrot biology it is essential reading.

– ROSEMARY LOW

## DIE AFRIKANISCHEN GROSSPAPAGEIEN

Anyone interested in African parrots should be aware that, during 1990, two books were published on this subject in German, from different publishers. Their format is similar. *Die afrikanischen Grosspapageien* by Volker Wagener and Werner Lantermann is published by Natur Verlag. The title means large African parrots, ie, the Lovebirds are excluded.

Each species of *Poicephalus*, *Psittacus* (Grey Parrot) and *Coracopsis* (Vasas) is covered in detail, with descriptions of all sub-

species, range and status, distribution maps, care and breeding. There are chapters on quarantine, purchase, accommodation, feeding, etc. An excellent bibliography spans 11 pages.

Fourteen pages of colour photographs illustrate most of the species, two pages of paintings show other forms. The photographs are good, the paintings less so. Most useful is the page of photographs of three sub-species of the Senegal Parrot. On page 125 a Lesser Vasa is incorrectly captioned as a Greater.

## PRACTICAL INCUBATION

by Rob Harvey

Many aviculturists have read articles on monitoring weight loss in eggs being artificially incubated. Not a few must have reached the conclusion that not only was there much more to owning an incubator than merely placing the eggs inside, but that it was much too complicated for them. While the first part of the assumption is quite correct, the second part is not – provided that they are armed with a copy of *Practical Incubation* by Rob Harvey.

Rob is known to many people in the UK as a member of the Harvey family who own and operate Birdworld, near Farnham, one of the largest and most successful bird parks in Britain. The book has therefore been written as a result of his own knowledge. He quotes experiences with a wide range of species – parrots, softbills, guineafowl, partridge, etc. His straightforward and explicit style of writing makes it easy for every reader to understand. No longer do you need a degree in mathematics to appreciate the principles of weight loss during incubation. (An egg must lose a certain percentage of its weight or it will not hatch. The weight loss can be corrected and this can increase hatchability.)

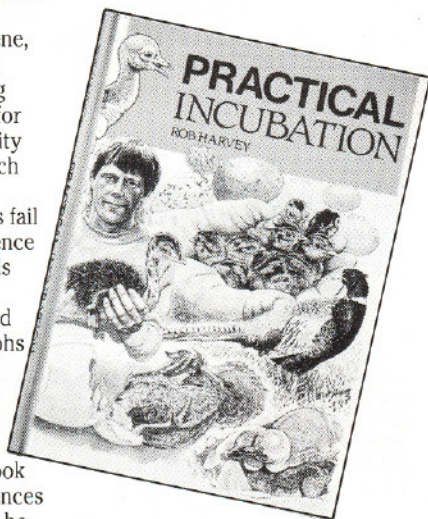
The book is divided into four sections. "Before you start" covers all you need to know about buying an incubator and installing it. "Basic incubation" describes very important aspects such as hygiene, thermometers, turning eggs and cleaning incubators. "Monitoring your eggs" explains techniques for measuring weight loss and density loss. Section four touches on such subjects as storing eggs, using bantams and detecting why eggs fail to hatch. Finally there is a reference section giving incubation periods for many species, addresses of manufacturers of incubators, and clear black and white photographs of daily development of the embryo of domestic fowl, taken from different angles.

Everyone who owns an incubator will learn from this book and from the interesting experiences the author relates. For example, he describes his experiments with macaw eggs. Of ten incubated on tilting trays that take one hour to slowly turn from one side to the other, nine failed to develop properly and only one hatched. The next two clutches of macaw eggs were laid on their side and hand-turned seven times daily. All hatched! Similar results were obtained with eggs from spoonbills and night herons – although the eggs of most species did hatch when tilting trays were used. The author came to the conclusion that this was

because the eggs of these species have small yolks compared with those of other birds.

The book is printed on excellent quality glossy paper and well illustrated with colour photographs, also graphs and tables. The graphs are interesting. One, for example, illustrates excessive weight loss in an Eclectus egg. It was placed in an incubator at maximum humidity but was still losing too much weight, so the weight loss was further adjusted by adding nail varnish to the shell and, much later, the egg was moved to an incubator with lower humidity.

My only criticism of *Practical Incubation* is the section of 23 pages of incubation periods. I believe that there should have been a note that the days given are a guide only as incubation periods, for the same species – and even the same pair – can vary according to different conditions. It should also have stated whether the periods relate to eggs in an incubator or incubated in the nest. Under optimum conditions (some incubators) the period is shortened. There are mistakes in the incubation periods. For example, that for the Papuan Lorikeet is given as 21 days while its sub-species, the Stella's, is given as 26-27 days. In fact, 27 is likely to apply for both (longer than other lories).



No book is faultless – but this one is excellent and I recommend it most highly. It is published by the author, price \$17.95 including postage. In the UK it is distributed by Owls Nest Bookshop, Birdworld, Farnham, Surrey GU10 4LD, and in the USA and Canada by Silvio Mattacchione and Co, 1793 Rose Bank Road, Pickering, Ontario, Canada.

– ROSEMARY LOW

## LIFETIME REPRODUCTION IN BIRDS

Newton, I (Ed) 1989, *Lifetime Reproduction in Birds*. pp 479  
London: Academic Press £42.50  
ISBN – 0-12-517370-9

As expected from Academic Press this publication is primarily aimed at the professional biologist. Edited by Ian Newton and sandwiched between his introduction and synthesis the volume contains detailed accounts of field studies on 23 bird species ranging from Blue Tits to Barnacle Geese. An additional chapter considers the evolution of life-history strategies in birds. No parrots are considered and this reflects the paucity of long term studies of wild parrot populations, a situation which hinders any real assessment of how parrots are now coping with changes in their habitat and hunting pressure.

Studies of lifetime reproductive success also show how survival and reproduction may change with age. It was previously widely assumed that mortality rates in adult wild birds are fairly constant and independent of age. Recent studies show this to be wrong with senescence in old age leading to a decreased annual survival. With respect to reproductive success in a number of species, including Snow Geese and Sparrowhawks it has been shown that birds perform progressively better in each succeeding year of their early life. Experience of breeding itself, and after loss of a previous partner their experience with the new mate, appears to be most important for long-lived species. Obviously different species vary in their biological characteristics but it would seem reasonable to consider that for parrots experience also plays an important role in their

reproductive lives. Another question posed by studies of lifetime reproductive success is whether reproduction itself increases senescence through physiological costs associated with breeding. To put it simply can you "burn a bird out" by encouraging it to produce extra clutches or broods? If so what are the greatest drains on the hen birds; egg-laying or rearing chicks? Those are the unanswered questions posed by studies of lifetime reproductive success, of theoretical interest to students of population biology but of practical importance to parrot aviculturists.

Another question posed by students of lifetime reproductive success is: do "good breeders" produce "good breeders"? Information is more readily available for short-lived birds with short generation times, e.g. Collared Flycatchers, and here it was perhaps not too surprising that heritability of lifetime reproductive success was found to be close to zero. However even for the potentially long lived Red-billed Gull the researcher found no significant correlation between the productivity of parent birds and that of their offspring as measured over five breeding seasons. Most of the variations between individuals appeared to be due to environmental factors such as food supplies over which with captive birds the parrot breeder can exert some control.

The book is excellently and attractively produced but at \$42.50 only recommended to those with an academic interest in avian population ecology for whom it is indispensable.

– DR. ROGER WILKINSON  
CHESTER ZOO

## LANGFLÜGELPAPAGEIEN

by Dieter Hoppe & Peter Welcke

The title of this book refers to the German name for the genus *Poicephalus*. The authors are Dieter Hoppe and Peter Welcke and the publisher is Ulmer (Wollgrasweg 41, 7000 Stuttgart 70 (Hohenheim), Germany). Almost the same subjects are covered as in the previous title, except that only the one genus is described.

There are 14 pages of colour, the full-page illustrations of the various species being especially good. There are also contrasting habitat shots and a painting showing the two

species which are unknown (or virtually so) in captivity, *flavifrons* and *crassus*. This is a paperback, costing DM36 (about £12). It would be a pity if neither title is published in English as both would be useful additions to the library of parrot enthusiasts

– ROSEMARY LOW

*We invite members to submit brief reviews of books which are published in languages other than English.*

# INTERNATIONAL NEWS ROUND-UP

## TAKING OF WILD BIRDS FOR THE PET TRADE

Resolutions from the IUCN Conference in Perth Australia November 1990

This important information was sent to us by Peter Them (Parrot Data, Emmerich Alle 4, 2791 Dragor, Denmark) We will discuss it in the next issue of **PsittaScene** – May 1991, and would like to include any comments or contributions from readers.

RECOGNIZING that the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an appropriate mechanism for regulating international trade in wild animals and plants;  
EMPHASIZING that CITES Article IV provides a mechanism for ensuring that international trade in wild animal and plant species is not detrimental to their survival;  
NOTING that both the CITES Parties in 1976 (Res. Conf. 1.6) and the IUCN General Assembly in 1978 (Resolution 25) have called for appropriate restrictions on the trade in live animals caught in the wild for use as pets, with the objective of eventually limiting such trade to those species which can be bred in captivity;  
CONCERNED that, despite such resolutions and the requirements of CITES Article IV, trade in some species continues at levels not justified by scientific non-detriment findings, as evidenced, for example, in the CITES/IUCN report "Significant Trade in Wildlife";  
FURTHER CONCERNED that the live animal trade, in particular that in wild birds, remains largely unregulated and has been documented to be causing the decline of many species;

RECOGNIZING that some countries have not yet adopted CITES implementing legislation, and in particular have not adopted enforcement programmes adequate to protect wild birds and to distinguish systematically between legal and illegal trade;  
CONCERNED that many wild birds suffer injuries or die as a result of capture and transport methods that are inhumane or otherwise do not take into consideration the physiological needs or behavioural traits of the species involved;  
RECOGNIZING AND ENCOURAGED that CITES has established a committee to develop guidelines for live animal transport;

The General Assembly of IUCN at its 18th Session in Perth, Australia, 28 November – 5 December 1990:

1. ASKS the parties to CITES to request their Secretariat in consultation with the Parties, to review implementation of CITES Article IV, particularly as it pertains to the live bird trade;
2. ASKS the parties to CITES to request their Secretariat to submit a report at the next meeting of the Parties in 1992 on the results of that review, with recommendations for resolving the problems;
3. STRONGLY URGES all CITES Parties, IUCN members, and countries involved in the wild bird trade to review the adequacy of their domestic legislation and, where necessary, adopt new legislation for the purposes of:
  - a. fully implementing Article IV of CITES;
  - b. monitoring and regulating the bird trade at both national and international levels and its impact on wild populations;
  - c. regulating the holding and transport of live animals, with the guidelines of the International Airline Transport Association (IATA) to be adopted as minimum requirements;
4. ENCOURAGES the continuation and expansion of research on the status of wild bird populations, particularly for species popular in trade, on the effect of trade on such populations, and on techniques for captive breeding, reintroduction and recovery of declining species;
5. URGES the governments of all CITES Parties and IUCN members to implement CITES Conference Resolution 1.6 and encourage the commercial captive breeding of birds, through cooperative programmes, as an alternative to the taking of birds from the wild;
6. FURTHER URGES all countries to prohibit import and export of captive-bred birds unless marked by seamless leg bands or other techniques in order to ensure their proper identification and to minimize illegal trade in wild birds;
7. FURTHER URGES that mechanisms be developed through CITES or other international agreements to ensure that developing countries receive financial assistance in implementing Article IV of CITES and this resolution;
8. REQUESTS the Director General of IUCN, within available resources, to report at the next IUCN General Assembly meeting on the progress made in implementing this resolution; and



9. REQUESTS the Director General, unless he has previously determined that substantial progress has been made in implementing CITES Article IV and this resolution:

- a. to prepare a resolution, for introduction at the 19th Session of the General Assembly of IUCN, urging the Conference of the Parties of CITES and all countries to prohibit international trade in all species of wild birds by 1 January 1996, except for approved purposes of zoological exhibition, bona fide scientific research and co-operative captive breeding programmes; and
- b. to recommend additional restriction on the trade in wild birds for the purpose of improving implementation of CITES Article IV and this resolution.

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### 1st INTERNATIONAL LORIINAE SOCIETY CONFERENCE

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Sponsored by LORIINAE EUROPA  
Friday June 7th, Saturday June 8th  
and Sunday June 9th, 1991  
will be held at  
LÜISENHÖHE HEIDJENGRILL  
Directly across from VOGELPARK  
WALSRODE

A Conference dealing with Lories and Lorikeets with speakers from around the world. REGISTRATION FEE will include the Conference, a visit to Vogelpark Walsrode, the Welcome Cocktail Party and the Saturday Evening Banquet. Talks will be translated from German to English and from English to German. Proceedings will be available.

Internationally known speakers from Europe and the USA include the following, in order of programme appearance: Nigel Collar (Deputy Director, ICBP) on Threatened Parrots of the World, Steffen Patzwahl (Curator, Vogelpark Walsrode) on Breeding Lories at

Walsrode, Trevor Buckell on Identification of *Lorius lory* and *Trichoglossus haematodus* subspecies, Rosemary Low (Curator, Palmitos Park) on Breeding Lories, Roland Wirth on Trade in Lories in Indonesia, J.R. van Oosten on Census and Stud Books, Dr G. Kaal on Mycosis, Anton Spenkelink on Maintaining the Smaller Lories and Friedrich Bauer on the Biak Project - Field Work with Lories.

#### FOR MORE INFORMATION CONTACT:

In England  
Alison Ruggles  
I.L.S. Conference Coordinator  
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Hartfield, Sussex TN7 4HG  
Phone: 034 282 2373  
or  
in Europe  
Lars Loventlow  
Jettesves 25  
8220 Brabrand, Denmark  
Phone +45 862 55303

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### BRAZIL

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The distinguished ornithologist, Prof Dr Helmut Sick of the Academia Brasileira de Ciencias, is seeking information of an unusual nature. He believes that Hawk-headed Parrots emit a different smell when they are in breeding condition. He is not referring to the typical slight odour from the plumage. He asks whether anyone can confirm this or has noticed it in other parrot species. Will anyone who has any information on this subject please write to Prof Sick at Rua Das Laranjeiras 210, Apto 1304, 22240 Rio de Janeiro, Brazil.

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### AUSTRALIA

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The Avicultural Society of Australia recently celebrated its 50th anniversary, having been founded on October 7 1940 by a handful of enthusiastic aviculturists. The founder members had no idea that their fledgling association would develop into the largest avicultural

society in the English-speaking world. The membership constantly hovers around the 4,000 mark. During its 50 years the society has held monthly meetings in Melbourne, the gracious and vibrant capital city of Victoria. Attendances at these meetings fluctuate between 150 and 200.

As a special feature of its 50th year, the society invited four interstate guest speakers - Greg Wightman from Queensland spoke on the Gouldian Finch, Barry Hutchins from South Australia on the *Polytelis* Parrakeets, Graeme Phipps from Sydney on "Looking to the future" and, on the 50th Anniversary itself, the society's patron, Harry Butler, the renowned naturalist from Western Australia, on "A Celebration of Fifty Years". There was a record attendance of 350 at the Anniversary meeting, including Ray Murray, the 83 year old foundation president.



Are you interested in Australian avifauna? If so, you must often have wished that you could see such birds as Red-tailed Black Cockatoos, Varied Lorikeets, Hooded Parrakeets, Gouldian Finches and Spinifex Pigeons. Participants in a combined bird-watching and avicultural tour will be able to see these species and many more from June 15th to 29th 1991, led by the well-known ornithologist Len Robinson. Further details can be obtained from him at P.O. Box 178, Carnegie, Victoria 3163, Australia. Highlights of the tour will include Pearl Coast Zoo, boat trips in Gelkie Gorge National Park and the Katharine Gorge National Park.



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### UK Studbook for Hyacinthine Macaw

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The importance of studbooks for rare and endangered animals and birds cannot be overemphasised. This is especially the case when there are a good number of individuals in captivity yet only a small number of these are breeding, as with the Hyacinthine Macaw (*Anodorhynchus hyacinthinus*). A studbook pinpoints single and non-breeding birds - and while there are still good numbers it is much easier to locate partners for these. Long-



*Yellow-tailed Black Cockatoo*

term, it also prevents in-breeding.

There are undoubtedly more Hyacinthines in private collections than there are with zoos - but unfortunately, it is not easy to persuade private individuals to participate. In the UK, Colin Bath, Curator of Birds at Paignton Zoo, keeps the Regional Studbook for this species. However, he is very discouraged from the lack of participation from private owners. He had hoped to publish an updated version of the Studbook in the near future - but this will not be possible unless he receives more response. The World Parrot Trust urges everyone in the UK who holds this species to contact Colin Bath at Paignton Zoo, Totnes Road, Paignton, Devon TQ4 7EU. Your co-operation is urgently needed - not only to ensure the future of this magnificent bird in British aviculture, but to demonstrate to critics of bird-keeping that aviculturists are responsible people who realise that if they keep rare species, certain moral obligations have to be met...

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### USA/GUATEMALA

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It is pleasing to note that one of the aims of the newly founded Macaw Society of America is "To discourage the practice of hybridisation." If it succeeds in this aim, in a country where more macaw hybrids are reared than anywhere in the world, it will indeed be a force to be reckoned with. In most cases of macaw hybridisation, at least one of the parents is an Appendix I species. (How can aviculture gain credibility as an important means of conservation when birds which are endangered or threatened are used to produce hybrids?) Further information regarding the Macaw Society can be obtained from the president, Robert Francis, P.O. Box 90037, Burton, Michigan 48509-0037, USA.

The society is to issue six



*Blue-streaked Lory (Eos reticulata)*

newsletters per year. Issue no 2 contains an article of particular interest on the proposed re-introduction of the Military Macaw (*Ara militaris*) in Guatemala. It became extinct there as a breeding bird during the late 19th or early 20th century. The author of the article, Kevin Clubb, director of the Avicultural Breeding and Research Centre in Florida, writes: "The Military Macaw represents the quintessential "missing" component in the highlands of western Guatemala. It was the region's first documented vertebrate extinction in historical times and, for its absence, the people and the cloud forests of the western highlands are poorer."

The initial release is to include 12 birds bred at ABRC, one to two year old birds from eight bloodlines. The birds will be held at the release site for six months and provided with food for some time after they are released. Their security will be monitored by staff of the Fundación Interamericana de Investigación Tropical, by municipal patrols and by Guatemalan armed forces. The birds will be equipped with state-of-the-art long range radio transmitters and will be monitored via telemetry for six months following release.

This project represents something of a landmark in parrot conservation. As Kevin Clubb commented: "ABRC is breaking new ground in a new era of aviculture, an era of active participation in the conservation of psittacine species as private aviculturists, not government or society funded."

The World Parrot Trust wishes this venture every success. More information regarding it can be

obtained from Kevin Clubb, Director, Avicultural Breeding and Research Center, 1471 Folsom Road, Loxahatchee, Florida 33470.

## COLOMBIA

In 1911 Arthur A. Allen and Leo E. Miller collected a small parrot in Colombia, below the snow-capped volcanoes of Tolima and Santa Isabel. It proved to be new to science and was named the Azure-winged Parrot (*Hapalopsittaca fuertesi*), the only member of the genus in the Central Cordillera of Colombia. Later some taxonomists considered it to be a sub-species of the Rusty-faced Parrot (*H. amazonina*). However, *fuertesii* has never again been collected and was feared extinct until a decade ago when observation of a *Hapalopsittaca* (unidentified) led to the belief that it was extant. Now a new sub-species of *amazonina* has been named (Graves and Restrepo, 1989), *Hapalopsittaca amazonina velezi*. It differs from other sub-species of *amazonina*, from *H. pyrrops* and from *H. fuertesii* in having the hindneck and nape golden olive, contrasting sharply with the bright green mantle.

If *fuertesii* is still extant, then the two occur sympatrically, thus the latter and *pyrrops* (from southern Ecuador and northern Peru) are raised to species level.

The existence of *velezi* makes it seem less likely that *fuertesii* is still extant: the unidentified birds were probably *velezi*. There have been no verified records of *fuertesii* for 75 years.



Plum-crowned Pionus Parrot (*P. tumultuosus tumultuosus*)

## BOLIVIA

The name John P. O'Neil is known to all those interested in neotropical avifauna. He is featured earlier in this issue in the first of our series "If I could keep only one species of parrot...". He is a bird artist of renown, who has illustrated a number of books, an ornithologist and research associate at the Museum of Natural Science, Louisiana. Recently, our Editor, Rosemary Low, received a letter from him, describing a survey of the birds of the "rather new" Noel Kempf Mercado national park. The survey has been continuing for three years. The park is based upon a large Brazilian shield plateau, about 200 km in length and 80 km wide, on the Bolivian side of the Rio Iténez. He writes: "The most common parrot is *Pyrhura rhodogaster*\* the Crimson-bellied Conure - probably the prettiest of the New World Parrots, at least for me! We often saw 50-60 per day, even trying to not count certain flocks more than once. Macaws are also fairly common. The Green-winged (*Ara chloroptera*) is the rarest of the three common big ones, and Hyacinth macaws have been seen in flight a few times."

### Reference cited:

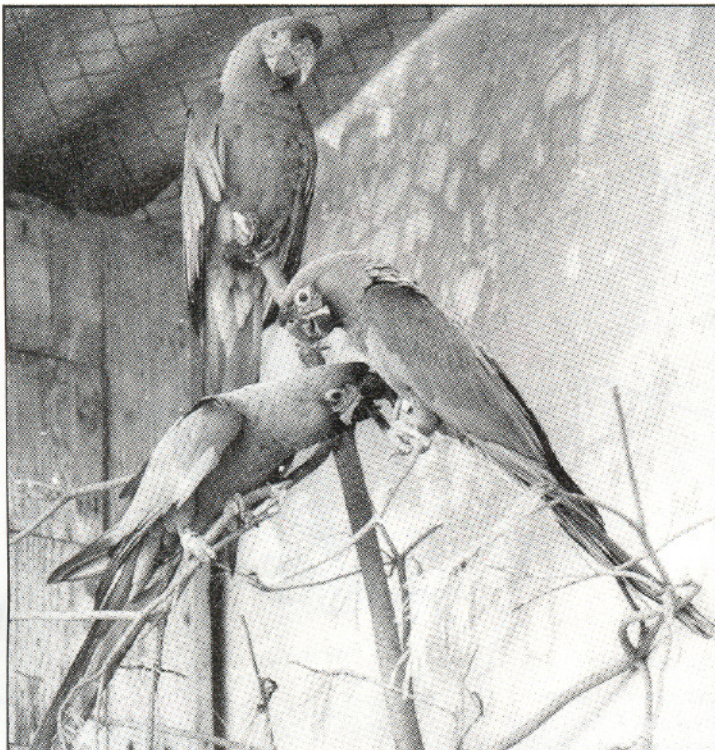
Craven, C.R. and D.U. Rostropo, 1989. A new allopatric taxon in the *Hapalopsittaca amazonina* (Psittacidae) superspecies from Colombia, *Wilson Bull* 101(3): 369-376.

\* Now more correctly known as *Pyrhura perlata perlata*

## USA

The work of the Pionus Breeders' Association has previously been mentioned in these columns in respect of Massena's Parrot (*Pionus tumultuosus seniloides*), a very rare species in captivity. The PBA is trying to locate all the specimens in the USA to ensure that all are paired up. Now Paul Gildersleeve, vice-president of the Association, informs me that the PBA is setting up a breeding programme for the nominate race (*P. tumultuosus tumultuosus*), almost equally rare in collections. The birds will be owned by the PBA, thus assuring the ability to transfer birds as needed for the furtherance of breeding and expanding the gene pool. More females are urgently needed for this programme. Anyone able to assist or participate should contact Mr Gildersleeve (Box 507, Oyster Bay, NY 11771, USA) or the editor of the Association, Bill Arbon (P.O. Box 540, Johnson City, Texas 78636). Mr Arbon told me that although he knows of Paris in the USA which have reared young, he believes that there has been no successful reproduction for more than two years.

The PBA maintains a studbook for each Pionus species which already has more Pionus registered than ISIS. However, there are countless owners of Pionus, whether they are breeders or pet bird keepers, who have yet to register their Pionus with the studbook keeper, Mr Gildersleeve. He appeals to everyone to do so, especially European breeders. Through the studbook many breeders have already been assisted to sell or exchange their Pionus.



A prolific pair of Military Macaws at Lora Parque, with one youngster

# MONEY



I know it's uncouth, but let's talk about money.

The World Parrot Trust has raised around £75000 in just sixteen months. Pretty good going, most people say, and I'm certainly not complaining. The trust has been able to assist parrot projects in Mauritius, Brazil, Central America, Indonesia and the Caribbean, and now has new opportunities to help in Australia, New Zealand, Brazil again, and probably Indonesia again. A total of \$47200 has been spent or is about to be, and in addition we have issued six quarterly PsittaScene newsletters which cost about \$2500 per issue to print and mail.

We have clearly demonstrated that there is a place for an international charity working exclusively for the conservation and welfare of the parrots. The need is there, and the support is there, at least from 1500 individuals around the world who have signified their concern for the parrots by joining the trust.

Where we have not yet made any serious progress is in corporate sponsorship. We have not tried very hard, since we felt we should put together a body of achievement before approaching the hard-nosed types who are employed to ensure that business sponsorship is rewarded with real commercial benefits.

The time has arrived when we have an impressive track record, and an urgent need for increased funding. We now receive letters every week asking the World Parrot Trust to support worthwhile projects. I could name half a dozen excellent causes I'd like to write cheques for immediately: the Maroon-fronted Parrot *Rhychopsitta terrisi*, described in this issue, is a case in point. We must lift our fund-raising on to a new plateau in order to keep the trust moving forward, and capable of meeting the challenges to parrot survival. Here is a list of ways to help the trust raise the cash it needs:-

**1. Corporate Sponsorship.** Many of our members must work for major companies - why not bring the trust to the attention of the Chairman or Corporate Affairs Manager? Point out the PR benefits which will accrue to the first company to 'adopt' the parrots, unquestionably the world's most charismatic birds.

**2. Payroll Giving.** Several members have started to pay their membership in this way. If you need more information about this, write to our administrator Judith Venning.

**3. Recruitment of New Members.** Still the easiest and best way to help the trust, and it doesn't cost you a cent! Once again, we've included one of our membership leaflets to help you to help the parrots.

**4. Renew your own membership.** We are now dealing with many membership renewals every month, and the rate of renewal is over 90%. We are told this is very good, and indicates high satisfaction with the trust. When you renew, consider making an additional donation, either to the World Parrot Trust in general, or to THE HYACINTH FUND. Also, ask us for a *Covenant Form* if you'd like to make things easier for both you and us, and also increase your contribution at the expense of the tax man.

While on the subject of donations, bear in mind that a company or individual (in the UK) making a 'one-off' donation of £600 or more will now benefit the trust to the tune of \$800 or more - a 33<sup>1</sup>/<sub>3</sub>% tax bonus.

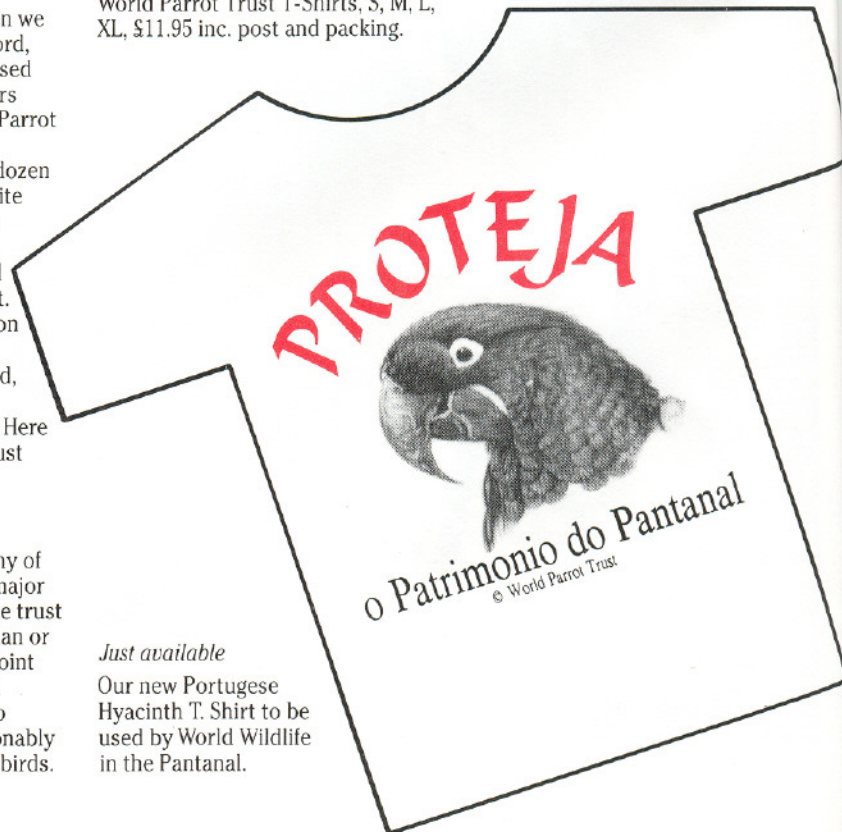
**5. Buy our merchandise.** There's not a lot of choice at present, but it's all good quality: Hyacinth Fund or World Parrot Trust T-Shirts, S, M, L, XL, \$11.95 inc. post and packing.

(US\$ 25.00 inc. post & packing.) Our Hyacinth limited edition print is \$118 or \$210 inc. shipping.

**6. Have a PARROT PARTY.** Several of our members did this last summer and raised very useful sums for the trust. One member sent us alarming recipes for Cockatoo Punch and Barbecued Budgie; you'll be glad to hear this featured quail, not the real thing.

We've run out of ideas for the moment, but we'd like to hear some of yours. In our next issue (May 1991) we aim to print some readers letters, so let us have your views and suggestions.

Michael Reynolds.



*Just available*  
Our new Portuguese Hyacinth T. Shirt to be used by World Wildlife in the Pantanal.

## ATTENTION MACAW OWNERS

### SPECIAL NOTE FOR ZOO READERS

This is the sixth issue of 'Psitta Scene' sent free of charge to 400 zoos world wide. It is also, regrettably, the last. Please understand that we can't afford to continue to divert our hard-won funds from the parrots to institutions which may not be interested in the trust's activities.

We hope, however, that you may decide to join the trust - all we need is a single membership, i.e. £10 in the UK, or \$25 or equivalent overseas.

We will of course continue to send 4 issues of Psitta Scene each year to all **paid up** members.

Now you have the chance to "do your bit" to help these magnificent creatures in the wild.

In Panama these beautiful birds are captured and killed purely to obtain their feathers for decoration by the natives who then use them for a local folk dance in the central part of the country.

For the past few years the Panamanian section of I.C.B.P. (International Council for Bird Preservation) has been collecting tail and wing feathers in good condition from the Scarlet Macaw (*Ara macao*), Blue & Gold (*Ara ararauna*) and the Green Wing (*Ara chloroptera*).

By collecting these feathers

they can then be passed on to the dancers without further depletion of the wild population, but they **DESPERATELY** need more.

If you have any of the above mentioned feathers which you would like to donate to the I.C.B.P. I will collect them and pass them on. Please send them to Mrs Sue Armitage, Ty'r Ywen, Mamhilad, Pontypool, Gwent, NP4 8TT.

**IMPORTANT:** to meet CITES requirements it is essential that you provide proof that the feathers come from English-bred birds. Please quote a ring number if possible.

Brian Byles Esq.  
Editor  
Cage & Aviary Birds  
Prospect House  
9-13 Ewell Road  
Cheam  
Sutton Surrey SM1 4QQ

8 February 1991

Dear Mr. Byles

I was very interested to read your article in your February 9 issue, headed 'Research needs a regular income', and referring to your Avian Research Fund which made grants of £2,000 during 1990. Your article closes by saying: 'Isn't it time that the National Council for Aviculture, the Avicultural Society and specialist societies in all sections of bird-keeping gave research more thought and at least some money on a regular basis?'

You are absolutely right, of course, and your article prompts me to give you the following information on the grants made, and further sums committed by this new charitable trust during its first 17 months.

Mauritius: to assist the work of Carl Jones with the critically endangered Echo Parakeet. A total of £17,000. The major part of this went to purchase a new 4-wheel drive vehicle, and our friends at The Parrot Society contributed £2,500 towards this vehicle.

Brazil: (a) to assist the financing of the work of two Danish biologists studying the Hyacinth Macaw, £800; (b) part cost of an expedition to establish the current wild status of Spix's Macaw, £2,000.

Indonesia: a small contribution towards the cost of John Taylor's investigation into the continuing decline of cockatoos, £500.

Central America: a donation to help pay air fares for delegates to a workshop on the conservation of macaws, £600.

Caribbean: (a) provision of posters and badges for an educational campaign relating to the St. Lucia Parrot, £2,500; (b) cost of purchasing and converting a secondhand bus to become a conservation bus for St. Lucia, £8,000 (£1,000 of this provided by The Parrot Society). This gives a grand total of £31,200 raised and expended. We also hold just over £10,000 in our 'Hyacinth Fund'; some of this is already committed to an important Hyacinth Macaw research project recently arranged with Dr. Charles A. Munn of Wildlife Conservation International, and also with WWF to provide educational material in the Pantanal. We also have a \$6,000 commitment to assist a very worthwhile research project involving the Red-tailed Black Cockatoo in South Australia.

This means that within our first eighteen months we will have provided £47,200 to be spent directly on a broad range of parrot-related projects around the world. Expenses have been kept to an absolute minimum, and The World Parrot Trust has only one part time member of staff. The trustees and others involved meet their own expenses, and many of the staff of the trust pursue its objectives. In particular, David Woolcock and Martin Ballam have raised over £20,000 during our 'Eagles of Paradise' flying demonstrations.

I do hope you will feel able to share this information with your readers. I am sure they will approve of our activities and achievements, and perhaps they will be inspired to help us or other charities working for the parrots.

Yours sincerely,

Michael Reynolds  
Hon. Director  
cc: Martin D. Roper Esq., Chairman, The Parrot Society



Glanmor House, Hayle, Cornwall  
TR27 4HY, United Kingdom.  
Tel: 0736 753365 Fax: 0736 756438

### 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. Holders of Buffon's Macaw (*Ara ambigua*) are especially asked to contact David Woolcock at Paradise Park.

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

**MOLUCCAN COCKATOO \*R\***  
*Rob Colley, Pencynor 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

*It is very unlikely that this letter to 'Cage and Aviary Birds' will be published in that magazine, for reasons we will explain in our next issue. In the meantime it is a convenient way to update members on the work of the Trust.*



# HOW YOU CAN HELP

## *The World Parrot Trust*

1. Please communicate. Let us have your comments on 'Psitta Scene', the objectives of the World Parrot Trust, and any other parrot-related matters. Let us know of any projects we might be able to consider.
2. Articles and news items would be appreciated. Send them to Rosemary Low, Editor, 'Psitta Scene', World Parrot Trust, Glanmor House, Hayle, Cornwall TR27 4HY, U.K.
3. The trust aims to establish support groups worldwide. If you can help with this, write to Michael Reynolds, Hon. Director, World Parrot Trust.
4. Members are very welcome. Please consider joining the trust, and recruiting friends and associates.

## 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.

This objective will be pursued in the following ways:

- a By educating the general public worldwide about the threat to parrot survival, and seeking their interest, concern and support.
- b By action to protect and preserve the natural habitats of parrots worldwide.
- c By gathering and disseminating information on the status of parrot populations in the wild and in captivity.
- d By advocating effective controls on the international trade in wild-caught parrots, and its replacement by captive-bred birds.
- e 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.
- f By promoting high standards in the keeping of parrots as pets.
- g By encouraging research projects, i.e.: the veterinary care of parrots, and the preservation of genetic diversity.
- h By any other means that may be appropriate.

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



## YES I WANT TO BE A PARROT CONSERVATIONIST

Helping the **SURVIVAL** of all parrot species,  
and the **WELFARE** of every individual parrot.

Name Mr/Mrs/Ms \_\_\_\_\_

Address \_\_\_\_\_

Postcode \_\_\_\_\_

### SUBSCRIPTION RATES (please tick)

- Single £10     Family £17.00     Fellow £100     Overseas  
\$25 US Dollars  
(or equivalent)

Additional donation £ \_\_\_\_\_  
If you can afford to give more than the basic subscription rate, your money will help us fight harder to save the parrots.

I enclose cheque/P.O. for £ \_\_\_\_\_ payable to  
or The World Parrot Trust

Please charge my \_\_\_\_\_  
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Card expiry date \_\_\_\_\_ Amount £ \_\_\_\_\_ Date \_\_\_\_\_

Signature \_\_\_\_\_

OR better still, please sign this Banker's Order

### BANKERS ORDER

To: The Manager \_\_\_\_\_ Bank

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Postcode \_\_\_\_\_ Sortcode \_\_\_\_\_

Please pay The World Parrot Trust, the sum of £ \_\_\_\_\_  
every month/year, starting on \_\_\_\_\_ (date), and  
debit my account no. \_\_\_\_\_

Signed \_\_\_\_\_

Pay to The World Parrot Trust, A/C No. 91144022,  
Midland Bank plc, Exmouth, Devon EX8 1HF.

Please send to The World Parrot Trust, **NOT** to your bank.

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