Psitta scene

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CAPTIVE BREEDING THE ST VINCENT PARROT

Amazona guildingii

Ramon Noegel, Margaret Wissman, D.V.M. and Greg Moss

This article was written prior to the 1990 breeding season. Ramon Noegel and Greg Moss had reared seven St Vincent Parrots at their renowned breeding centre for endangered Amazon Parrots, iguanas and giant tortoises in Seffner, Florida. Up to mid June 1990 the breeding season had brought outstanding success with five more feathered young, plus more eggs being incubated. This is undoubtedly one of the most difficult of all parrots to breed in captivity: congratulations are extended for their latest successes which represent a landmark in the captive history of this uniquely beautiful parrot.

Sad to tell, as so often happens, success has also brought jealousy and those who were too ready to criticise... Ed.

Many names have been given this parrot, such as the "Rolls Royce" of amazons, the "most beautiful" of the island parrots, etc., but some names come to my mind that cannot be printed. If ever there was a bird to try one's patience in attempting to captive breed it, this is the one. We refer to them as "our chickens". This somehow seems to describe them.

There is also a curse that goes with owning *guildingii* that should rank on an equal with that of the Hope Diamond or King Tut's tomb. We have referred to it as the "St. Vincent Syndrome", a malady resulting in functional departure from mental integrity on the part of a few connected with this parrot. Its symptoms are best described as inordinate desire, rapacious eagerness, and lustful longing, which culminates in a consuming passion that will stop at nothing to gain control of the few existing specimens outside their native island. Those of us immune to its virulence are quite often targeted with invective innuendo by those afflicted. We were first apprised of the negative pain experienced by this derangement from the lips of those who had, in fact, kept this avian treasure but had avoided being infected by inoculating themselves with minimal doses of common sense. We were not made conscious of the magnitude or fury this disorder can unleash until we became custodians of ten of these amazons eight years ago. Until then, we happily captive bred West Indian parrots of equal beauty and, in some cases, far more endangered, without arousing such vehement anger and opposition.

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

Outside the Island

The 1989 studbook for St. Vincent parrots list only 59 *guildingii* having existed in ten collections scattered throughout the world over the past 20 years. Fourteen of these have died within this time frame. This leaves 45 living and registered outside of St. Vincent. Of this number, five were captive bred at Life Fellowship from 1982-1988. During the 25-year period prior to 1984, the St. Vincent Government acknowledged the issue of permits for only 20 birds to be legally removed from the island. (Low, 1984) Ten of these were our original *guildingii* we received from William T. Miller of Barbados, who acquired them as young birds in 1968-1970.

It required nine months of mind boggling paperwork from both the governments of St. Vincent and Barbados for us to establish these birds to be Pre-ACT, Pre-CITES status in order to satisfy both U.S.D.I. Fish and Wildlife Service, U.S.D.I. Law Enforcement and U.S.D.A. Quarantine before these amazons could be imported. This is pointed out because our collection of St. Vincents no doubt has more legal documentation than any other outside the island.

In spite of this proof of ownership, we have continually been pressured by at least one member of the St. Vincent Parrot Consortium to sign over our birds to them in order that all *guildingii* outside the island could be returned. This proposal was presented to us and other members of the consortium in August, 1988. We refused as did the majority of members, who had much invested in their birds. Those who agreed had no personal investment involved. It is hoped that more and more, zoos and private aviculturists will begin to look on their collections as floating habitats for endangered wildlife or as banks where endangered species are held in trust and propagated as a back-up measure against eventual extinction in the wild. The welfare of insular habitats is increasingly proving to be hanging on fragile threads of transitory reforms that could be broken by a political mood swing.

St. Vincent Parrots A. guildingii. Ages: 40 to 49 days as of June 5, 1990. Captive bred at Life Fellowship Bird Sanctuary, Seffner, Florida, USA. A total of eleven of this endangered Caribbean amazon has been reared here. The only viable programme outside the island of St. Vincent.

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Parrots Kept as Pets on St. Vincent

In 1988, conservationist Paul Butler was sponsored to educate the Vencentian people regarding the beauty and uniqueness of their parrot. The necessity of protecting them was emphasized. In the same year, a Government census was made of all pet *guildingii* on the island; a shocking total of 82 emerged and were banded for future monitoring. An additional 17 were being housed at the Botanical Gardens in a breeding program (Stone, 1989). Thus, a total of 99 of these amazons were in captivity on the island whose total wild population numbers only about 500 (a high estimate). Compare this 99 with the aforementioned 45 known to exist outside the island. How can such a number kept as pets justify the *return* of birds? These figures are interesting due to the fact that most writers mislead readers to believe there is a worldwide traffic in this Amazon, resulting in the decimation of the wild population. No plight of any parrot has been so grossly exaggerated. *Amazona versicolor* of St. Lucia has only about 250 birds, but how many have ever even heard of it? Almost every parrot lover has been in some way acquainted with the St. Vincent. Misleading writers, and a few fact-slanting conservationists, have capitalized on its popularity. The 45 specimens within the Consortium can be traced back to having originated in the wild during 1953-1975, or were captive bred, as were five of our 15 specimens. (1989)

Status in the Wild

If we accept the various estimates of reliable researchers from 1929 until 1988, there are no more or no less birds on the island than have been present for 61 years. The parrot's habitat in the rain forest is said to consist of 11,000 acres or 13% of the total island. It is just possible that 500 (plus or minus) birds is all this area can sustain. The balance of the island (87%) is volcanic rock or is cultivated, and therefore no longer parrot habitat.

In 1929, the noted Caribbean field ornithologist James Bond referenced several hundred. The Nichols' team in 1976 gave a breakdown of numbers recorded at various locations and arrived at a conservative figure of 525 birds. The ICBP/University of East Anglia followed a similar procedure, marking the areas to be inhabited by the parrots and noting the flora, etc. requisite to their survival. Their count yielded a possible 421 birds in 1982 (Low, 1984). The Government survey of 1988 listed about 500 (Stone, 1989). Allowing for periodic hurricanes and eruptions of Mt. Soufriere, St. Vincent's active volcano, both natural phenomena that wreak devastation on the parrots, this species would seem to have a resilience of recovery unlike any other insular amazon.

The primary threat would also appear to lie in the poverty of the island and in a growing human population, presently recorded at 110,000. When push comes to shove, more land will be cleared for commercial farming. In the April, 1989 edition of *ISLANDS An International Magazine*, Roger Stone sums up his article on *guildingii*, "How Saint Vincent's environment will fare without Butler's energetic leadership is anybody's guess. The island is poor, the bananas fetch a good price. Even though residents understand that heedless deforestation will bring about erosion and watershed problems as well as loss of species, the temptation to clear land for short-term gain is strong."

One of the island's leading citizens and prime movers for protection of the parrot expressed it best to Allen Monti, Greg Moss and I when we visited the island in 1983. "It's easy for you rich Americans and British to come here and tell us what should be done about our people keeping the parrots as pets but then you return home and we are left on a small island with an angry neighbor to face." As a former political figure, this very candid Vencentian put the problem into proper perspective.

Poor people have more to be concerned about than parrots. In the twenty years we have researched amazons in the Caribbean and Central America, *poverty has been the real and lasting threat to both flora and fauna.* This is clearly not understood by Americans and Europeans, who because of affluence can afford to place intrinsic values on wildlife. When will conservation address the major problem facing all insular life forms: that of human population growth.

Captive Breeding

The following recognized collections of *Amazona guildingii* existed in the United States as of the first of 1990: 0.2 at Houston Zoological Gardens (one of these having been captive bred here at Life Fellowship in 1986); 2.3 kept at St. Catherine's Island off Georgia, being under the jurisdiction of New York Zoological Society (one of these was bred at Houston Zoo 1972); 2.1 at Nichol's James Bond Research Foundation, Houston Texas; and 8.7 owned by Life Fellowship (five of which were bred here between 1982-1989).

The first St. Vincent Parrot to be captive bred was at Houston Zoo in 1972. This resulted from four zoos bringing together their individual specimens in 1970. No further breeding resulted.

William T. Miller, hotel owner on St. Vincent, began collecting young *guildingii* in 1968-1970. When he moved to Barbados in 1973, he legally obtained permits to remove his ten birds. Four offspring were realized from a single pair in 1975-1976. Due to heart surgery, he asked Life Fellowship in 1981 to accept his ten original parrots. We received eight in December of 1981 and two more in October of 1982. Following this transfer, Bill Miller acquired a female being kept on Barbados and paired it with one of his captive bred males. Each year, a single bird was bred from this pair for the years of 1983 through 1986, being a total of four offspring (Valier, personal commun.).

The original ten St. Vincent amazons we received proved to be five pairs. It should be remembered that in 1973, when Bill Miller removed these birds to Barbados, he had only his ability to sight-sex them. Today we take for granted feather follicle and laparoscope sexing. Fifteen years ago, we had it more difficult. Considering our results without such modern advantages, we did surprisingly well. Today there is an abundance of sexed stock, much of which is captive bred for the beginner to choose from. This almost guarantees instant success in breeding.

Bill Miller was formerly a U. S. Marine Biologist. His keen interest in this Amazon since 1968, coupled with his success in captive breeding it, places him in the position of one of the most knowledgeable keepers of *guildingii*. We have learned much from Bill that helped our captive program. He was the first to point out the diverse colour morphology that place this amazon in a unique position. He continues to be dedicated to this parrot. Like us, he has been severely attacked by those keeping *guildingii* but unable to captive breed it.

Our *guildingii* and those kept by Bill Miller on Barbados nest in April through June. We endeavor to hold the females back a few weeks so nesting will occur in May, allowing the male more time to come into condition. The clutch of eggs usually consists of only two and rarely three. We encouraged double clutches in most endangered amazons (Noegel, 1979), but this is seldom achieved in Guilding's Amazon. Incubation begins with the first egg and lasts for 25 days. Fertility is usually discernible after the third day into incubation. Smaller island amazons like the Cuban often require six days before fecundity is evident.

We have bred seven St. Vincent Parrots in eight breeding seasons. The first was bred in 1982. Two were reared from the old original female from Houston Zoo sent here in 1985 on loan. From this female "Vincent" and one of our males "Gus", one chick was reared in 1985 and another in 1986, the latter being sent to Houston when we returned its mother in 1989. An additional

four more *guildingii* were reared here in 1988 and 1989 from two pairs of our birds. Therefore, five (3.2) of the original ten birds received from Mr. Miller have proved out.

A total of 16 fertile eggs were laid from 1982 through 1989. About 28 infertile ones were candled during the same period. In 1982, there was no practical data available on husbandry or captive breeding *guildingii*. Our 25 years experience in captive breeding *Amazona* was of little use as this parrot is unapproached in behavior and quite unpredictable. The nests usually consist of two eggs. If fertile, the female was allowed to incubate one and the other eggs was fostered to another amazon species nesting at the same time. The incubation period is 25-26 days. In three instances, the St. Vincents killed their first chick when hatched. To test out the last pair producing fertile eggs, an egg from a pair of Yellow-shouldered Amazons was substituted and was hatched and fledged by its giant foster *guildingii* parents. On two occasions the other amazon foster parents either killed or suffocated the young by sitting too tight after hatching. The embryos of this parrot are quite sensitive and would appear to stop developing from incidents not affecting other amazon embryo development.

We feel we wasted considerable valuable time by placing on loan one of our males and accepting on loan three females from other facilities in order to activate their programs. This arrangement deprived our proven egg-laying birds of mates in order to accommodate St. Catherine's Island (Bronx Zoo) and Houston Zoo. We began with an equal sex ratio of 5.5 adult birds and had no need of outside birds.

The seven we reared were two males and five females. If hatched, *guildingii* is the strongest of chicks and will push other chicks aside in its eagerness to be fed. The most crucial period is after it is feathered but still being hand fed. Quite often, a chick stops passing its formula and unless swift measures are taken will die within 48 hours. Authoritative veterinarian analysis disclosed little to assist us in this decisive dilemma. We had similar experiences with hand rearing the first Red-browed amazons (*A. dufresniana rhodocorytha*) but in the latter's case this transpired when only four weeks of age. We finally realized we had to switch to an entirely fruit formula mixed with Nekton Lory diet added. Both of these amazon species appear quite different from the 29 other amazon species and subspecies we have successfully bred here for the past 25 years.

Due to eggs in a clutch being deposited three to four full days apart and the fact that incubation begins immediately, the first chick gets a good head start in growth over the second one. This may account for us being told by Dr. I. A. Earl Kirby of St. Vincent (1983) that seldom are two St. Vincent chicks fledged from each nest in the wild. Apparently the pair leaves with the first offspring fledged thus allowing the second to starve to death within four days of being fledged. Rosemary Low also references this strange infanticidal parent behavior (1984). This may be more common in other wild amazon species than is recognized.

They Are Intelligent as Well as Beautiful

The St. Vincent enjoys human companionship and adapts well in a captive environment (Low, 1984). A resort on Young Island (less than 200 meters from the main island) keeps five *guildingii*. One named "Sarna" has been allowed liberty for a number of years. This bird regularly showers with guests whose baths are partially exposed to nature, each cottage being semi-isolated amid a profusion of tropical foliage. There are tables down on the beach area under coconut palms where drinks are served. "Sarna" delights in a stealthful flight along one of the many paths that lead down the heavy foliated hillside to the beach. She is seldom 20 inches above the path and a quick swoop brings her up over the edge of one of the tables she has selected. She always lights with unerring accuracy on the table's edge furthest from the sitters. If there is food or an object of her interest, such as a camera lens cover, this she quickly absconds with during the brief astonishment experienced by those taken back with her arrival. Every afternoon we ferried to Young Island to watch this lovely sight. She often flew by us so silently that we would be startled by her swift brilliant colours suddenly beside us so close to the ground. We never tired of her antics. By dusk, she had crept down into a cavity located in an ancient West Indian almond tree, which well protected her from any high winds that might arise during the night. We have never witnessed an amazon *roost* in a tree's hollow before. This is one of St. Vincent's treasures that few visitors will ever see, simply because they do not visit Young Island. I think of the difficulty we encountered to see wild specimens through binoculars when here was one amid tropical beauty willing to be photographed while we sat as tourists enjoying her and our cold liquid libation. We dream of an enclosed tropical patio garden for the young we raise here each year. We consider this parrot to be one of the most intelligent of the amazons. Recuperating from a heart attack in June of 1985 allowed the senior writer lots of time to attend to monitoring the five pairs of St. Vincents whose aviaries surround "Tree Top House". At this time, the male "Gus" was doing his best to corner Houston's female "Vincent" with intent to murder. I would go downstairs and outside to spray him with a hose, resulting in him leaving her and retreating. After four days of this routine, we had merely to step out on the second story balcony facing this pair and say "Gus!" at which point he would beat a hasty retreat in order to avoid a supposed bath. They quickly learn every trick to avoid being netted. Once learned, they do not forget, though we seldom remove them from their aviary more than twice annually.

Colour Morphs

Like William Miller, we recognize three colour morphs. If ever an amazon should have been named *autumnalis* it is *guildingii*. The extreme colour phase and the one that captures most artist's imaginations is what we refer to as orange to brown. Orange is very evident on the primaries, the secondary, and the primary coverts, the upper tail coverts and the upper third of all the tail feathers. Diffused orange often appears behind the crown colour (which varies from white to cream) and in some birds extends on the cheeks, throat, ear coverts and occiput. This colour tinges the breast and back brown feathers giving a bronze cast. The splashes of orange cause *this St. Vincent morph* to stand out. The standard brown morph has this colour only on the primaries and the upper portion of the tail feathers, which is concealed by the brown upper tail coverts.

The green morph may appear amazon green to brown or black-green on the wings, breast and back. The orange is greatly reduced and hidden as in the standard brown morph but even more so. This species is so obviously not complete in its evolution to produce a more orange or a more brown bird. In time, possibly two subspecies could emerge if Nature is allowed to finish her art work. No picture does any single colour phase justice but Forshaw's *Parrots of the World* gives an imaginative extreme of the orange to brown morph. Bill Miller refers to this colour phase as a red morph because during *prime* condition the orange may take on a reddish hue. There are numerous variations occurring between these three extremes. The casual beholder without an artist's background will see almost any colour and be somewhat correct in naming it. One we had on loan would often photograph out in purple cast when in the sun. The poor cameras were mistaken, or were they?

Longevity

The St. Vincent Parrot would appear to be very long lived under the proper conditions. One we have was given to Mr. Keith Frost, a Vencentian, as a wedding gift in 1953. Mr. Frost was also the first to call attention to the plight of the Lesser Antilles Parrots in an article printed in the British Avicultural Magazine in 1959 (Berry, 1976). Another Guilding's Amazon brought to the Bronx Zoo, New York, in 1954, expired in 1982 (age unknown). The majority of the aforementioned 14 deaths recorded in the St. Vincent Parrot Consortium would appear to have not been from natural causes. Since most of ours were collected as juveniles in 1968-1970, they would be in their best years for breeding.

Avian Medicine and the St. Vincent

With so many infants being born with Aids and other horrible diseases, it might be asked how can we justify so much concern over parrots. The answer is simple: somehow in this mad world that seems at times destined to fall to pieces, we need a centre of balance to maintain sanity. The therapeutic practice of aviculture grants this stabilization. It gives us a purpose we can do something about through captive breeding endangered and nonendangered species. It affords meaning and security in a world clouded with uncertainty.

Tom Ireland points to the fact that we have been willing to make changes and to *dare* new approaches whereas other keepers of *guildingii* seem to be gripped with a paralysis of fear where this bird is concerned. It certainly has proved to be one of the most challenging parrots we have ever kept at Life Fellowship. Since there is virtually nothing in print regarding the medical problems of this species, we have asked our veterinarian, Margaret A. Wissman, to present some of her findings.

"Examination and treatment of St. Vincent's Amazon parrots presents a challenge to the avian veterinarian. These unique birds are somewhat of an enigma. There is not a good accessible medical data base for the St. Vincent's, as of yet. These beautiful, strong birds have a tendency towards obesity, a dusty feather coat, and a high incidence of skin lesions.

Four of the birds in Life Fellowship's collection (2 males and 2 females) had skin lesions. The affected skin showed feather loss, ulceration, and scabbing. Most often, the lesions appeared lateral to the vent, over the abdominal skin, or on the dorsum over the pygostyle. These birds picked at these areas and further traumatized the skin and underlying tissue. Lesions similar in appearance had been observed in captive birds on

St. Vincent, according to Ramon Noegel.

A full work-up was done on the St. Vincent's with the worst lesion. The Gram's stain of the lesion around the vent showed Gram positive cocci, Candida (yeast), and Gram negative rods. The lesion was cultured. Radiographs were normal. Blood chemistries and a complete blood count were all within normal limits, extrapolating data from other Amazon species, since no normal blood values have, as yet, been published for the St. Vincent's. Thyroid levels were also considered normal.

Based on culture and sensitivity results, these birds were treated with injectable amikacin and oral 5-fluorocytosine at established avian doses for ten days. In addition, topical neomycin was applied to the lesions. It is exciting to report that six weeks post-treatment, the lesions on three of the birds have totally resolved, and the fourth bird's lesion is almost totally healed. If any lesions recur, they will be biopsied and cultured at that time.

My observation of these birds led me to suspect a possible nutritional condition, affecting thyroid function, since reproduction, metabolism, feather, and skin condition are controlled, either directly, or indirectly, by the thyroid hormones. Perhaps the sea salt, seaweed, and iodine (necessary for thyroid function) ingested by these island Amazons plays a role in maintaining their normal metabolism. We plan to investigate thyroid levels and blood chemistries of the St. Vincent's in the near future.

All of the St. Vincent's in Life Fellowship's collection were cultured in December of 1989. The choana and cloaca of each bird were swabbed and cultured for bacteria, fungi, and viruses. The parrots kept at Life Fellowship, in the Noegel cages, typically have "clean" cultures, meaning that no pathogenic organisms are usually found, and the St. Vincent's are no exception.

Seventy percent of the birds cultured out with Enterobacter sp. bacteria, 23% had hemolytic E. coli, 30% had non-hemolytic E. coli, and 1 bird cultured positive for Staphylococcus (coagulase negative), Streptococcus sp., and Salmonella sp. group C.

It is interesting to note that the birds with hemolytic E. coli and Salmonella were not the ones with skin lesions. It is suspected that the Salmonella came from contamination from wild birds on the property.

Fungal and viral isolations on all birds were negative.

Based on bacterial cultures and sensitivities, it was decided to treat all the birds with enrofloxacin in the drinking water for two weeks to eliminate potential pathogens prior to the breeding season. Only one bird in each pair carried hemolytic E. coli, and just one bird (who had a mate sharing a cage) had Salmonella. Cultures taken two weeks after treatment showed no hemolytic E. coli, no Staphylococcus, and no Salmonella.

I would like to add that any time I am working on rare, or endangered species, there is an element of the unknown that makes me very cautious. I have heard about and read of idiosyncratic drug reactions in certain species, so we always proceed with caution. I feel it is important to report what drugs and therapies have worked in different species, so that we may contribute to conservation, and work together to ensure the survival of these beautiful, enigmatic parrots."

THE SITUATION OF THE HYACINTHINE MACAW (*Anodorhynchus hyacinthinus*) in Continental Europe

Dr. Hubert Lücker
Curator, Tierpark Dortmund

Hyacinthine macaws are becoming increasingly endangered in the wild. A preliminary survey done in 1987 concluded that probably there are not more than 2,000 birds left in South America, most of them split into small, not viable populations (Patzwahl 1989, Roth 1988). Now a project to study the biology and ecology of hyacinthine macaws together with another survey is planned (Pitter & Christiansen 1990). The results will be both interesting and important.

A first quick survey in some zoos in continental Europe in 1988/89 showed that there were not many hyacinthine macaws in the collections and only two zoos were breeding them with success. This means that in those zoos one pair raised 1-2 chicks within the last 3 years. Breeding and rearing of chicks occurred in the last years but constant breeding success was rare (Bonifer 1985). In the ISIS-system of the zoos, which deals with the animal stocks of approximately 280 zoos in the world, 121 birds were mentioned in 44 zoos. 32 of them were captive born. Most of them were bred in 3 zoos and with one private breeder in the United States (IZY 1984-1987; ISIS Census 31.12.1989 Minnesota, USA). In Great Britain and Ireland 22 birds are kept in the JMSG and only one bird is F1, the rest are wildcaught (C. Bath, Paignton Zoo).

Very soon I had the impression that most of the birds in the EEP might be rather old. The species is on the CITES-lists and legal import from the wild into the European community is nearly impossible since the early eighties (Nilsson 1989). The last large and legal import of this species to Germany was in 1978! After that only single birds were legally imported, and of course quite a lot of them illegally. That led to the effect that most birds in the zoos must be at least older than 8-10 years. Therefore the Zoo of Dortmund made the proposal to form an EEP (Europäisches Erhaltungszuchtprogramm = European Programme for the Breeding of endangered species) for the hyacinthine macaw. This was agreed to in 1989 and the EEP of the hyacinthine macaw started in May 1989. I asked 75 zoos and private owners to participate. 40 (38 zoos/Birdparks and 2 private owners) joined the EEP, 22 did not keep the species and 13 (all private owners) refused to participate.

There are 144 birds in the EEP, 55.44.45 (February 1990). The number is greater than I had expected. However, only 6 birds are captive-bred, the rest are wildcaught (Fig. 1). All captive-bred birds are in F1-generation, none in F2! Some zoos gave the information that their birds are of unknown origin but in those cases one can be sure that the birds are wildcaught.

44 birds have been for more than 10 years in a zoo or with a private holder which means that they probably are older than 13-14 years. Most of the birds were adult at the time of their capture in Brazil so that they would be older than 3-4 years. 71 birds have been longer than 7 years in captivity = they must be at least 10 years old.

Three participants have breeding pairs which rear chicks. In 1989 only two of them survived. In 5 more zoos and with one pair of a private owner egg-laying occurred in 1989, a hopeful indication for future breeding seasons.

Confiscated birds are another problem. There are 15 birds which were confiscated by the government or the customs. Here the question of availability with regard to transfers during pair-formation (see below) is important. As long as a final decision by the jurisdiction is still missing those birds can't be integrated into projects. It can also happen that those birds are given back to their previous owners as was done in 1990 (2 birds). If these birds pair with a not-confiscated partner problems will arise. At the moment the EEP can only count these birds but cannot work with them.

Despite those problems a good co-operation between departments, customs, and the EEP is essential. It still happens that people try to smuggle these macaws and are caught at the same time. As in many other endangered species the customs and departments are always looking where to place the birds in case of a confiscation. The government departments in Germany and Switzerland made a good co-operation with the EEP and the birds confiscated in 1989 were given to EEP-participants.

What are the aims of the EEP?

1) The first aim was to convince private owners and zoos in continental Europe to participate and send the data of their birds to the studbook-keeper. This was

not a problem with zoos but turned out to be a big problem with private owners. I was told by them that they want to participate only when they can get surplus birds out of the EEP-stock. Furthermore I was told by several people that they are willing to breed but that they want to sell the birds because the prices are very high. This is of course not the aim of the EEP and only in two cases out of 15 was it possible to convince people. Now they participate.

2) It is important that all participants are sure of the sex of their animals. They are asked to make a surgical sex determination and to mark their animals. Until now 1/3 of the EEP-stock is unsexed but that will change quickly. A sex-determination by means of external characteristics or by behaviour is not definite: birds of equal sex may behave like a pair and the external characteristics (size of bill and head, figure) vary too much.

A good marking method is tattooing. In Dortmund zoo we tattoo our birds in the wing. To detect the sex of a bird more easily we tattoo additionally a small black dot in the naked skin around the bill: Males on the left side, females on the right side. If two macaws in a group show interest in each other it is easy to tell if they are really a pair or not.

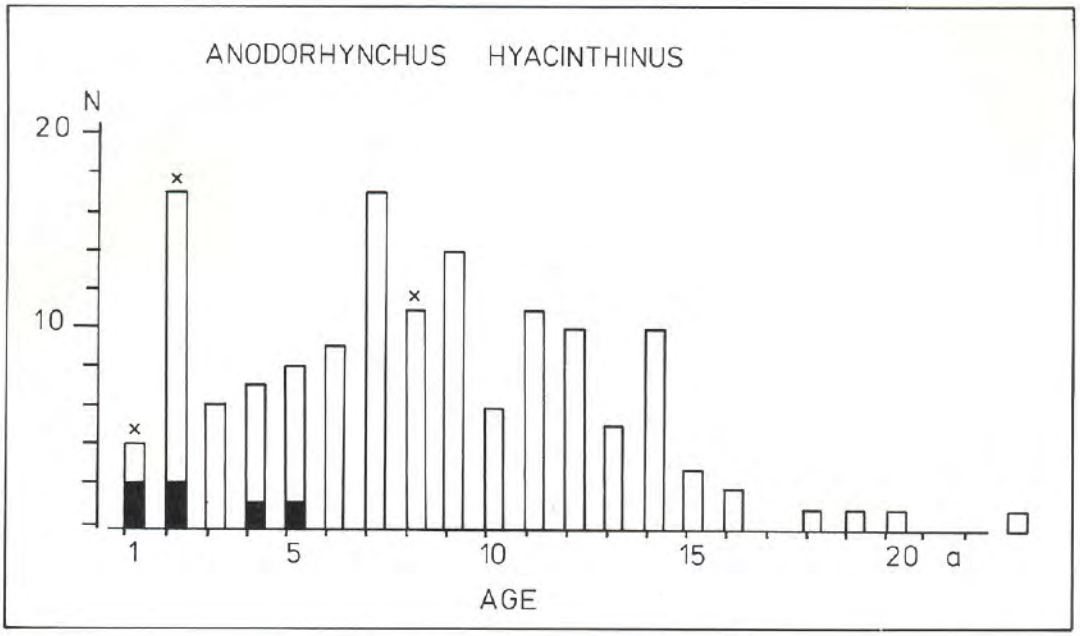

Fig. 1:

Time since arrival at first recorded location in captivity. Since nearly all birds were adults you should add at least 3 years to the staying time.

***Black bars:** Birds in F1.*

***Stars:** confiscated animals involved; x (1): 2 animals; x(2): 11 animals; x(8) 2 animals. The last decision by the jurisdiction is still missing.*

Therefore those animals are only counted. We can't work with them. With the exception of 2 animals it is impossible to tell the age of the birds. Some of them may be rather old already.

3) Birds which are sexed and have a partner but do not show courtship display shall be exchanged with a bird or birds from other participants to achieve as many sexually active pairs as possible. One very good method is to bring at least 8-10 birds together into a big aviary and let them choose their partners. This was done already with remarkable success: one pair raised a chick last year and two more are active this spring. All three pairs are the result of one trial with 12 birds. This type of pair formation will be repeated. One problem arises: a newly formed pair may become very aggressive towards conspecifics. Therefore it is important to watch a group closely and to separate a newly formed pair as soon as possible.

4) Birds which are bred in the EEP-stock shall remain in the EEP and not be sold to non-participants.

5) In the far future a reintroduction project like that for thickbilled parrots (*Rhynchopsitta pachyrhyncha*) or the Puerto Rico Amazon (*Amazona vittata*) may be achieved but that is only a dream. At the moment the poachers in Brazil are too active and the destruction of the natural habitat seems to be too severe (Roth 1988, 1989).

One of the hyacinth macaws in the U.K. studbook

Summary :

An EEP for the endangered hyacinthine macaw (*Anodorhynchus hyacinthinus*) was founded in 1989. In February 144 birds in 40 zoos, birdparks, and private owners were counted. The average age of the EEP-population may be rather high. Breeding occurs already with three participants, egg-laying with 6 more The aims of the EEP are: First of all we must establish a breeding population, than we must enlarge the population in Europe and interact with the JMSG-population in Great Britain and Ireland, managed by Paignton Zoo, and the population in North American zoos. The aim is to build up at least 20-30 breeding pairs in continental Europe. The first results are promising. Second: The EEP-population shall be able to make its own way and not be dependent on imports (legal or confiscated) from the wild.

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HYACINTH FUND

This new World Parrot Trust fund will be launched at the International Parrot Convention on Tenerife in September.

The aim is to create a substantial fund to be used for the protection and preservation of the Hyacinth Macaw (*Anodorhynchus hyacinthinus*), arguably the most remarkable and spectacular of parrots and now highly endangered.

Latest estimates by field researchers suggest that only about 2000 of these birds remain in their natural habitat, compared with perhaps 100000 twenty years ago.

The main cause of this decline is massive trapping for the pet trade; it has been estimated that around 5000 birds are now held in the USA. The majority of these are kept simply as pets, although some are used for breeding purposes. Other threats to the birds in the wild include loss of nest sites, and killing for food and feathers.

The initial target is to raise £100000 to be used to assist the protection of the remaining Hyacinth Macaws in the wild, and for their preservation as a species through captive breeding. Thus the World Parrot Trust's two main objectives – habitat protection and successful captive breeding of endangered species – will be pursued on behalf of one of the world's most noteworthy parrots.

Support for this 'flagship species' – the avian equivalent of the Giant Panda or the Elephant – will undoubtedly bring conservation benefits for other species which share its habitat. If circumstances allow, the fund may also be used to assist other endangered macaws such as Scarlet, Buffon's, Lear's and Spix's Macaw.

Contributions are sought from interested individuals, groups, associations, corporations, and other charities. Please note that *no administrative or fund-raising expenses whatsoever will be charged to this fund.* All donations will go direct to help the Hyacinth and other endangered macaws.

THE TAMBO YARAPO MACAW PROPAGATION, REHABILITATION AND RELEASE PROGRAMME

by Leigh Anne Cooley Stennett (Florida)

LEIGH ANNE COOLEY STENNETT is the former curator of birds at Sunken Gardens, St Petersburg, Florida. There she achieved outstanding success, with her late husband, Edward Cooley, with the macaw breeding project which they set up. Within seven months of its inception, they had produced 12 Scarlet Macaw chicks. Passionately interested in the conservation of macaws, Leigh Anne determined to use her practical experience to benefit macaws in the wild. She is now director of a programme to rehabilitate and release macaws in Peru.

The Tambo Yarapo Reserve, formerly known as "La Reserva Cumaceba-Paraporoto" is located in lowland rainforest between the tributaries Cumaceba (confluent of the Yarapo) and Paraporto (tributary of the lower Ucayali). The Reserve encompasses 40,000 hectares (100,000 acres). Access is by boat only via the Amazon to the Yarapo tributary, via the Ucayali to the Paraporto. Our boat trip took 16 hours, covering approximately 80 to 100 miles, starting from the port of Iquitos, Peru, to our compound facility. On a map of South America our compound location would be 4.5° S. and 73.3° W.

The purpose of this field trip was a feasibility study of the area for setting up a permanent macaw propagation, rehabilitation and release facility. Five species of macaw are known to be endemic to the Tambo Yarapo Reserve; Blue and Yellow (*Ara ararauna*), Scarlet (*Ara macao*), Greenwing (*Ara chloroptera*), Chestnut-fronted or Severe (*Ara severa*) and Red-Bellied (*Ara manilata*). These species were either seen by myself or by ornithologist David Michael. Total species of birds sighted and catalogued between October 7 1989 and October 29 1989 was 350 species.

Tambo Yarapo Macaw Propagation, Rehabilitation and Release Project participants accompanying me on this field trip were Harold Albers, D.V.M., project veterinarian, Sylvia Taylor, D.V.M., U.S.D.A. liaison and Paul Beaver PhD, project sponsor. Other members of the Tambo Yarapo project are: Bran Ritchie, D.V.M., avian research, Bob Siebels, release protocol consultant, Mike Wallace, Macaw release telemetry consultant, Greg Harrison, D.V.M., avian medical nutritional consultant/A.A.V. (Association of Avian Veterinarians) liaison and Tony Silva, international protocol consultant.

The project is concerned with the five species listed above. The only macaws used in this programme will be birds that have been confiscated by the Peruvian government police force as they were being smuggled out of Peru, handicapped macaws viable for breeding but not release, macaws with long term history as pets and voluntarily donated to the Tambo Yarapo project by Peruvians and in the future macaws donated from zoos and institutions in the United States and other countries wishing to participate. We feel that this will eliminate any misunderstandings that the project will involve macaws removed from their natural habitat only for participation in the programme.

The ultimate goal of the Tambo Yarapo project is the eventual release into the reserve of any offspring propagated by the breeding stock. This would necessitate parent-raised chicks and an additional pre-release compound to acclimate weaned young macaws prior to release.

The area is lowland rainforest with zero human population; approximate base population surrounding the reserve is 300 to 600 people. Access to the compound site is by boat only. Due to the rise and fall of the Amazon, accessibility is even more limited during the dry season, from June through November. The rainy season is December through May; highest water occurs in March and April and nadir September and October.

The sights and sounds of the Amazon rainforest are truly awe-inspiring. I undertook this "expedition" with all the expectations of a child entering Disneyland, albeit with a purpose; still I was not disappointed.

My first sight of a free flying macaw was actually a joke on me. There flying right through our camp site was a glorious Scarlet macaw. I caught my breath and then laughed out loud. This macaw was speaking Spanish and said "hola! hola!" (hello, hello) to me. I later found out that Alfreda had been part of a previously rehabilitated group of four Scarlets two years ago. After release, Alfreda had returned to the camp and had become the best friend to a young Peruvian child whose mother cooked for the camp. It was interesting to me that this Macaw would fly into the camp kitchen, eat fish, rice and beans and whatever else she could find and then also fly off and forage in the jungle surrounding the camp. I saw her day after day eating all the budding fruit off a small mango tree.

Alfreda's three other Scarlet companions would fly over the camp in the morning calling to Alfreda to join them and then back again into the jungle behind the camp at dusk. In trying to follow these Scarlets by ground I would lose sight of them in the upper canopy of the trees and have to listen for their sounds. It's amazing how these colourful Scarlets blend right into the leaves and flowers and become almost invisible. I can see now why aerial telemetry devices on the released macaws for a range study would be the only way as the terrain is impassable in areas due to the dense vegetation; visibility high in the canopy is nil.

On one particular morning we took a motorboat down the Cumaceba and quite a way into the

Tambo Yarapo Reserve. there I had the experience of watching a flock of 12 Blue and Yellow Macaws feeding and playing. The destruction of the trees in this area would indicate that this was a well used macaw gathering place. In total, 52 Blue and Yellow Macaws were seen that day. Every turn in the bend of the tributaries that we travelled produced wildlife. In total 350 species of birds were seen.

Another day I had been to the village of Porto Miguel; while visiting the natives I had looked up and there flying overhead were a pair of Blue and Yellow Macaws. This caused no excitement to the villagers but gave them much merriment to see that I was so excited and from then on I was called Senora de la Guacamayo (lady of the macaws). These very friendly people come from the two tribes of Indians inhabitating the area, formerly known as the Cochimilla and Cocama Tribes. Due to tribes relocating and new tribes coming into the area there is now a mixture of other blood lines. These people are very atuned to their environment out of necessity for survival and also culturally. On yet another day a flock of 10 to 12 Chestnut-fronted or Severe Macaws flew overhead making quite a racket as they flew. This was during a visit to the village of Libertad on the Ucayali river. We also had the added exhilaration of watching a silky anteater ascending a tree.

Construction of another aviary had been started before my arrival and during my stay I participated in gathering more materials needed for the enclosure. On returning to the camp with our materials many hours later I thought of the advantages of rolls of aviary wire, clips, hammers and nails and how quickly aviaries could be put together. On checking in the town of Iquitos I found these items to be exceedingly expensive and in short supply. Iquitos also was our supply depot for rice, beans, canned milk, coffee and bottled water. We ate fish caught from the river and chickens that had been raised by the villagers. In most cases, once a week our supply boat would arrive from Iquitos and by this time we were usually running very short of needed supplies specially bottled water. At times this caused me consternation as I was feeding two Blue and Yellow Macaws approximately 8 months old. These birds had been hand raised by villagers on green bananas that had been put into a fire to soften them, then chewed by the natives with the banana mush being fed directly into the chicks mouth from the villagers mouth. The macaws were well past that stage but with clipped wings and hardly any tail feathers their capacity to forage for themselves was limited.

Peruvian child with "Alfreda", a rehabilitated Scarlet Macaw

I envisage a bird like Alfreda being used as a "teacher" to show inexperienced macaws the ropes when foraging in the jungle but for the time being the Blue and Yellow Macaws ate what I ate, mostly beans and rice.

The unsettling thought crossed my mind concerning cage after cage of breeding macaws and no food to feed them. This would have to be resolved before exposing birds, animals and people to months of living and working in this remote area. Self sustaining agriculture for the project would not be feasible as the soil aptitude for the Tambo Yarapo Reserve is only 6.13%.

My conclusions from this field trip were as follows:

Release Site. I consider the Tambo Yarapo Reserve to be an excellent location for the release of rehabilitated macaws and parent-raised birds conditioned for release, propagated from the macaw project. The zero settled human population within the reserve, the remoteness of the area and the plentiful food supplies for the wildlife certainly fulfill the necessary requirements of a desirable release site.

Permanent Propagation, Rehabilitation and Pre-Condition Release Facility Site. In choosing a location for the installation of a permanent macaw project facility, critical thought should be given to the distance between the compound site and the supply depot of Iquitos, Peru. Inaccessibility is desirable for the macaw release site but only adds to the existing problems of day to day survival in an unfamiliar environment for us such as the Amazon rainforest. The permanent macaw compound site should be chosen primarily with this in mind.

I will be returning to Peru this summer (1990) to visit new areas within the Tambo Yarapo Reserve. The base camp will be in a different location, closer to Iquitos. While there I intend to visit previously observed macaw feeding sites for comparison purposes, such as increased vegetation destruction. I intend to identify, collect and return with seasonal macaw food stuffs for analysis by Dr Tully, Louisiana State University and propagation in South Florida for dietary supplementation of captive macaws.

We hope to also collect crop content samples and fecal matter for analysis at L.S.U. from wild macaws. Little is known about their diets, food conversion efficiency, metabolic rates, normal gut bacteria, digestive enzymes, blood value levels etc. Hopefully we will be able to improve diets for captive macaws as a result.

Macaw aviaries under construction in the Tambo Yarapo reserve

THE WORLD PARROT TRUST

– a progress report

Parrots have flown the Earth for at least 30 million years. The World Parrot Trust was launched 250 days ago. The question is, can a new human endeavour do anything much to help such successful survivors as these hookbilled birds?

Let's review their survival assets: proven ability to diversify into over 300 species to fill niches worldwide; above-average intelligence; long life-span; good flying skills; adaptable diet; practical breeding arrangements (hole-nesters, many species multiple brooded); ingenious overall design (powerful bill that doubles as a third foot!).

I'll admit that some species let the team down. The Kakapo – ground-nesting single parent – seems bent on extinction, and the breeding biology of the large macaws leaves a lot to be desired.

On the whole, however, this robust family of birds has risen above the hazards of the millennia up till today, when we find that around a third of its species are in danger of extinction. The fact is that it doesn't matter how smart or adaptable an animal you are, you can't cope with an upstart species (yes, that's us, only been walking upright for a fraction of parrot existence) which destroys your living space in a single century – a twinkling of an eye in parrot history.

I've been trying to think of a man-made ecological disaster which has been reversed, so I can give you an inspiring example of what might be done to save the parrots. I can't think of one off hand, so I'd appreciate any nominations. The best I can do is refer you to the tidal wave of human concern about all ecological issues that has risen up in recent years. The World Parrot Trust must harness this concern to the cause of the parrots, for their own sake and for the sake of their habitats and for the sake of the millions of species that share their homes. The parrots can do this better than most species because they are, as virtually every reader of **PsittaScene** will know, special.

So in the light of that rather portentous background, what has the World Parrot Trust achieved in its 250 days? It has been joined by almost a thousand members worldwide, raised £40000, selected and given financial support to six parrot-related projects in Brazil, the Caribbean, the Moluccas and Mauritius, established friendly relations with parrot and avicultural societies around the globe, introduced itself to many relevant international bodies, produced four issues of PsittaScene, supported avian research, addressed various meetings of parrot people, published a leaflet aimed at the welfare of pet parrots, been asked by HM Customs to take care of confiscated parrots, and has recently appointed an administrator.

The trust has been greatly encouraged by the breadth and warmth of the support it has received, and the generosity of so many individuals for whom parrots are a special cause.

Negative reactions have been very few. An old avicultural friend asked me what the gimmick was, and I could only say there was none. Only a desire to get something started to try to save parrot species before it is too late.

One leading bird publication jumped to the conclusion that we might be a threat to its commercial well-being and refused to report our activities or allow us to advertise. We'll keep you posted on that one.

Over the past few months it has become clear to the trustees that fund-raising is a desperately serious, competitive and professional field of activity. We have a lot to learn before we will be able to raise the significant sums needed to make substantial impact on the problems facing the parrots. In particular we are some way from being able to make a start on item 2 of our stated objectives: 'Action to protect and preserve the natural habitats of parrots worldwide'. Nevertheless, we are currently evaluating several 'habitat protection' projects and expect to concentrate our attention on whichever scheme seems to offer the most value in parrot protection.

Later in this issue of PsittaScene I hope members of the trust and other readers will be encouraged to see reports of two developments which will assist our fund-raising. These are, first, our newly produced 'HELP SAVE THE PARROTS OF THE WORLD' boards, and second, the introduction of 'THE HYACINTH FUND'. This fund will feature the spectacular Hyacinthine Macaw *Anodorhynchus hyacinthinus* as a 'flagship species' to draw attention – and funds – to the plight of the macaws in general.

In our last issue we highlighted the forthcoming International Parrot Convention at Loro Parque, Tenerife, September 13 to 16 1990. The trust will be well represented there and will have a booth in the convention hotel, the Semiramis. We will look forward to meeting many members there and making new friends who will help us pursue the trust's objectives.

Michael Reynolds
Hon. Director

OUR 'HELP SAVE THE PARROTS OF THE WORLD' BOARD

The trust has been working on this board for several months, and now it is being distributed to zoos, bird gardens, and other locations where it will collect much-needed funds for our various projects, both current and projected.

The splendid illustrations have been done by Malcolm Ellis, and the overall design was by Cathal Caulfield – our thanks to them both. Twenty boards have been produced in the first production run, and have already been placed in various major institutions. Further boards are now in production.

The boards are supplied complete with a rugged cashbox, and we request that these be emptied regularly by a responsible person and the funds remitted to the trust monthly. Trial runs with less attractive boards at Windsor Safari Park and Paradise Park have shown that members of the public are very willing to make donations to help the parrots. Moreover, any institution putting this board on display demonstrates its concern for wildlife conservation of the most practical and far-reaching kind.

We look forward to hearing from any zoo, in the UK or elsewhere, which may be able to use one of these boards. Foreign language versions may be possible if sufficient boards are requested.

INTERNATIONAL NEWS ROUND-UP

BAHAMAS

An organisation entitled FRIENDS OF THE ABACO PARROT has been formed to conserve the Bahama Amazons (*Amazona leucocephala bahamensis*) on Abaco, one of only two islands in which this Amazon survives. Its future is threatened by loss of habitat and by cat predation – because, uniquely, this Amazon nests in rocks underground. Its status on Abaco is grave, with a population numbering about 1200 birds.

Since 1985 Rosemarie Gnam of the American Museum of Natural History has been studying this Amazon on Abaco. Conservation efforts include controlling nest predation by cats, protecting the nesting areas and establishing a new population on Little Abaco. Funding is urgently needed to continue this work. Donations should be sent to Friends of the Abaco Parrot (a/c no. 1074526), Barclay's Bank, Marsh Harbour, Abaco, Bahamas.

PsittaScene will be publishing more information on this Amazon in a future issue.

BELGIUM

Loriidae Europa was launched on March 17 in Belgium with an exhibition of lories and hanging parrots. This new society will cater for enthusiasts of these birds, plus Fig Parrots, in Europe. Its aims are to exchange knowledge about this group of birds, within and outside Europe, to found self-sustaining captive populations of as many species as possible and to make an annual census of the various species in Europe. A meeting will be held at Vogelpark Walsrode, next year, May 25-26 1991. Several speakers will be present to discuss Lories and other species. Membership of the society costs DM20 per year. Further information can be obtained from the chairman, Lars LoventLow, Jettesvej 25, 8220 Braband, Denmark, telephone 45 8625 5303 (English and German-speaking); Heino Kuck, West Germany, telephone 49 420 8731 (German); Danny Cox, Belgium, telephone 32 1164 2532 (English and German); Lars Bengtson, PL 1815, S-26041, Nyhamnsläge, Sweden: Vincent Guionnet, 116 rue des Ponts-de-cé, Residence de Lattre-de Tassigny, F-49000 Angers, France; Andrew Blyth, 77 Rectory Road, Sutton Coldfield, West Midlands B75 7AR, England.

GERMANY

The plight of the Purple-capped Lory (*Lorius domicellus*) has been spotlighted by the Zoologischen Gesellschaft für Arten- und Populationsschutz. Although this species is said to occur on the Moluccan islands of Ceram, Amboina and Buru, its presence can now be confirmed only on Ceram where it is rare. Amboina is now extensively deforested and it may never have occurred naturally on Buru. In the autumn of 1989, Dr Martin Jones from the University of Manchester visited Buru, together with several students, English and Indonesian, to find out the situation on Buru. Their findings will be published soon. The project was supported financially by the zoological society mentioned above and by Armin Brockner, one of the few breeders of this species worldwide.

This lory has never been common in captivity because its

The Abaco Parrot is a sub-species of the Cuban Amazon (above), which it resembles very closely.

population is small – but there has been a small international trade for many years. This was derived from birds trapped in the Manusela National Park. However, its captive population has been estimated at only about 30 pairs: 12 pairs in Holland, 10 pairs in Switzerland, two pairs at Loro Parque, Tenerife, and several birds including young in the collection of Armin Brockner in Germany. To my knowledge, this species is also in Singapore.

The Purple-capped Lory will almost certainly die out in aviculture without a co-ordinated breeding programme. This is the aim of the Zoologischen Gesellschaft. If you are the owner of a Purple-capped Lory or know of additional specimens to those listed above, please contact Armin Brockner, Säntisstr 13, D-7996, Meckenbeuren. W. Germany.

Your assistance could be of vital importance to the breeding programme.

So far there has been little co-operation among European breeders; American breeders are more willing to co-operate and it is hoped to exchange two males from Europe for two females in the USA.

PUERTO RICO

One of our members asked for news of the Puerto Rican Parrot (*Amazona vittata*). Like many of us, he was most concerned at the effect of Hurricane Gilbert on the wild population for this is one of the most highly endangered birds in the world. Information was difficult to obtain – but news has now been received from Marcia Wilson of the Puerto Rico Research Station. On May 1 she wrote to Rosemary Low:

"The hurricane hit the east side of the Luquillo Mountains really hard, but the west side was not damaged that extensively. The aviary and captive population are fine. Unfortunately, there is a lot of misinformation going around about the wild flock. As with any parrot counts, there has been a considerable amount of variation which is exacerbated by the change of behaviour of the wild parrots. The birds have been secretive and apparently appeared in parts of the forest which we cannot physically monitor regularly, for logistical reasons. We have just counted at least 22 to 26 birds. Because this is not a "normal" year (ie, food resources were late) we may not obtain an accurate count until later on this year or even next year after a more "normal" breeding season. Fortunately, none of the five cavity trees used last year were lost. Therefore, all of us working with the wild flock are extremely optimistic about the wild population."

PERU

Have you ever wished that you could buy up acres of tropical rainforest with the express purpose of conserving the parrots and other forms of wildlife? And sadly dismissed the idea as being out of the question? But now you can do just that – you can help secure pristine rainforest in Peru for only 75 cents an acre in an area where parrots abound. Charles Munn, the American ornithologist who for five years has been carrying out important research work on the natural history of macaws in the Manu National Park, has advised us of the organisation called Friends of the Peruvian Rainforest, founded in 1989. FPR was established to provide direct support to conservation and development projects in Peru. There, numerous opportunities still exist to preserve large areas of pristine rainforest before an influx of landless migrants occurs and external development pressures repeat the tragic scenario now occurring in Brazil.

Pretre's Amazon chicks at Palmitos Park aged 7, 6, 4 days and day hatched. (Photo: R. Low)

One of the projects which FPR can develop if the necessary financial support is forthcoming is to make a reserve in Peru which will protect 75,000 acres of primary tropical forest from colonisation and from timber extraction. With an estimated cost of $10,000 over two years, this represents land preservation at only 75 cents an acre. FPR also aims to form locally based groups as an effective force to resist the pressures of inappropriate development. Similar organisations in other parts of Peru have succeeded in educating local communities.

If you would like to make a donation to this most worthwhile project please make your cheque payable to Friends of the Peruvian Rainforest and send it to 668 Public Ledger Building, Philadelphia, Pa 19106, USA. To obtain further information please send a self-addressed envelope to the above address or to Rosemary Low, Palmitos Park, Apto 107, Maspalomas, 35200 Gran Canaria, Spain, with an international reply paid coupon.

CANARY ISLANDS

During June, four young Amazons left the nest in the breeding centre at Palmitos Park – of a species which may not have previously reared young outside Brazil. they are Pretre's or Red Spectacled Amazons (*Amazona pretrei*) – an endangered species which is rare in aviculture. A full account of this breeding will occur in a future issue of **PsittaScene**.

Ms. Rosemary Low,
Editor,
'Psitta Scene'.
World Parrot Trust,
Glanmor House
HAYLE, CORNWALL TR27 4HY. U.K.

Dear Rosemary,

Congratulations on "Psitta Scene". I am most impressed with your ongoing efforts at parrot conservation.

On 22nd September we are planning to host in Sydney a Scientific Day of the Royal Australasian Ornithologists' Union and the topic will be "Parrots; their research and conservation". We intend to have invited research papers in the morning session and then look at updates and new ideas on management options. I will let you know about the outcome of this scientific day, but perhaps readers who happen to be in Australia at that time might care to come.

Kind regards,

Graeme Phipps
Snr. Curator of Birds
Taronga Zoo

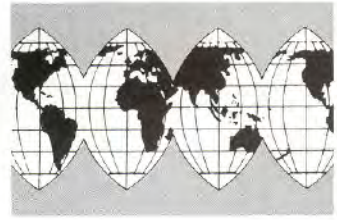
AUSTRALIA'S ENDANGERED ORANGE-BELLIED PARROT

Currently there is a study and captive-breeding programme being carried out in Australia on the very rare and endangered Orange-bellied Parrot (*Neophema chrysogaster*). Regular monitoring indicates that the wild population is less than 200 individuals.

If any readers have any references to or records of Orange-bellied Parrots being kept and/or bred anywhere outside of Australia, such information will be greatly appreciated. Information on housing, diet, provision of nesting facilities and details of any breeding successes or breeding attempts are sought. The source of information will be kept confidential if requested. Any historical information of early records of them being kept in the UK, Europe, USA or elsewhere is also sought.

Likewise, similar information on the Paradise Parrot (*Psephotus pulcherrimus*), which is possibly extinct, will be greatly appreciated.

Please forward reprints or photocopies of original references to Len Robinson, P.O. Box 178, CARNEGIE, VICTORIA, 3163, AUSTRALIA.



ACTION PAGE

OPPORTUNITIES AND NEWS FOR MEMBERS

Posters for St. Lucia

On Thursday 28th June 1990 British Airways flight 255 from Gatwick to St. Lucia carried a special consignment from the World Parrot Trust – 5,000 posters & 7,500 badges depicting the St. Lucia Parrot.

The badges and posters are spearheading the "RARE" campaign to preserve St. Lucia's forests – home not only to the St. Lucia Parrot, but to a multiplicity of other animals and plants as well.

In a recent letter, to the World Parrot Trust, John Guarnaccia the Executive Director of "RARE" had this to say:

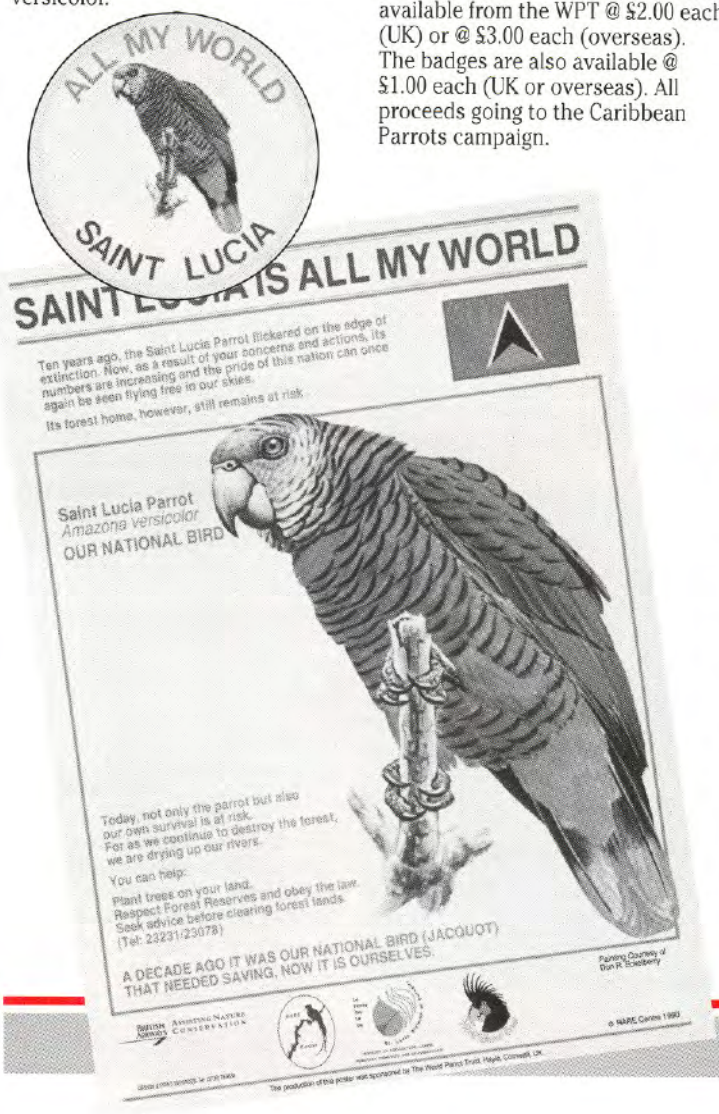
"I am delighted with the St. Lucia Parrot posters and badges, which arrived while I was gone on a long fund raising trip with Paul Butler in the Western United States. They are easily the nicest looking materials produced to date for any of our campaigns. Thank you for your considerable help, which will make a big difference with Amazona versicolor.

Your dedication to parrot conservation in the wild is exemplary. I wish I could accomplish as much as quickly as you.

Thank you for all the great things you are doing."

There is a special thank you from the World Parrot Trust to the two individuals who between them arranged to transport the posters and badges from the WPT headquarters in Hayle to St. Lucia FREE OF CHARGE.

CHRIS MOYSE – Manager of ROCKWOOD INTERNATIONAL, Plymouth; who arranged for the consignment to be taken by lorry from Hayle to the airport.
and
ROD HALL – Principal Co-ordinator of BRITISH AIRWAYS ASSISTING NATURE CONSERVATION; who saw the consignment safely onboard British Airways flight 255 from Gatwick bound for St. Lucia.
Ed's Note.
Copies of the Full Colour poster are available from the WPT @ $2.00 each (UK) or @ $3.00 each (overseas). The badges are also available @ $1.00 each (UK or overseas). All proceeds going to the Caribbean Parrots campaign.



Parrot Studbook Keepers

In the last **PsittaScene** we promised a list of Studbook Keepers. This is it. All readers holding these species would do well to register their birds with the relevant studbook keeper.

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, Penscynor Wildlife Park, Cilfrew, Neath, Glam., S. Wales.

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

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

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

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

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

R = UK REGIONAL STUDBOOK
I = INTERNATIONAL STUDBOOK

STOP PRESS

And it's good news. You may recall from the previous '**PsittaScene**' that we were seeking a total of $10000 to purchase a four wheel drive vehicle for the Mauritius Echo Parakeet project. We have provided $5000, the Parrot Society gave $2500. We have just heard from Rosemary Low that Mr. Klaus Paulmann, owner of Palmitos Park on Gran Canaria, has decided to donate the final amount needed of $2500.

I'm sure all our members will join us in thanking Mr. Paulmann for his generosity, and I know that Carl Jones and his team on Mauritius will be knocked out.

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.

YES I WANT TO BE A PARROT CONSERVATIONIST

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