Psitta scene
PROMOTING HIGH STANDARDS
IN PARROT CONSERVATION
AVICULTURE AND WELFARE
The World Parrot Trust
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World Parrot Trust Plans UK Parrot Sanctuary

By Mike Reynolds

As our members will know, The World Parrot Trust summarises its aims as follows: 'The survival of parrot species in the wild, and the welfare of captive birds'. As members will also know we have made considerable strides in pursuing the first aim, with 23 threatened species of parrot helped in 19 countries. Our work for the welfare of captive birds has tended to take a lower priority, no doubt because of the urgency we all feel when considering the needs of parrots in the wild.

Despite this, we have some welfare achievements to record. Firstly, we arranged the release back into the wild of 300 Goffins Cockatoos, being held by dealers in Indonesia. Second, we funded and arranged the construction of a large aviary to re-house a group of Hyacinth and other macaws at Asuncion Zoo, Paraguay. Third, we have printed and distributed to pet stores and elsewhere 150,000 copies of our leaflet 'Who's a lucky boy , then?'. This leaflet gives novice parrot owners useful and 'parrot-friendly' advice , including a warning not to buy wild-caught birds. Fourth, we have published many cases where people have been convicted of smuggling parrots, since this practice almost inevitably means that birds are cruelly treated, and many die. Evidence presented in the Tony Silva case (see latest news on page 12) gives appalling examples of brutality and a complete lack of concern for the death of many Hyacinth Macaws.

> **"psittacine**
> (sit´à sîn) Belonging or allied to the parrots; parrot-like"

Fifth, we answer many individual enquiries from pet owners concerned about the well-being of their birds. Sixth, we continually, through this newsletter and in other ways, promote views that are intended to help both pet and aviary birds. Our descriptive article in the February 1991 issue of *PsittaScene* about the 150ft long 'Big Parrot Flight' at Paradise Park has undoubtedly influenced many parrot breeders to build similar aviaries.

Seventh, and finally, we have helped many pet parrot owners by agreeing to house and care for their parrots after their owners' death, or simply taking on unwanted birds immediately . In practice it is Paradise Park, where The World Parrot Trust is based, that undertakes this responsibility , because the Trust has a policy of not owning any parrots. David Woolcock, Curator of Paradise Park and also a WPT Trustee, reports that he is asked to take on at least a hundred unwanted parrots each year, and he tries to accept as many as possible; in practice, the Park takes in about twenty a year. Where possible they are paired up and given breeding aviaries, or placed in the 'Big Flight' or another large aviary.

TIME TO MAKE A START

The problem is, of course, that Paradise Park cannot go on for ever taking in these birds, because the aviary space required does not exist. For the last couple of years we have discussed trying to set up a World Parrot Trust 'Parrot Sanctuary' to help deal with this problem. Paradise Park can provide the land, the necessary veterinary and avicultural expertise, and some staff time, but the capital cost of even a simple new facility to house several hundred assorted parrots would have to be found. We estimate that an initial sum of £30,000 is needed , which would allow us to build the first stage of the WPT Parrot Sanctuary over the winter of 1996/97.

So where is the necessary funding to come from? To make a start we can pledge part of the income usually earned for the Trust each summer at Paradise Park by Martin and his flying squad of eagles, owls, falcons and human assistants. We expect our generous visitors to donate at least £12,000 this year, bringing our eight year total to over £100,000. We can commit £5000 of this year's income to the Parrot Sanctuary Fund, but we must find the remaining £25,000 from animal welfare charities, bird food suppliers, concerned individuals, and possibly European Union funds. I t would also be a welcome development to receive funding from trade sources, specifically from businesses which

Amazona barbadensis rothschildi. A bird of this species is available for adoption.
Photo: A. Michaels

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Members of IUCN The World Conservation Union

Martin Ballam with Zara the Golden Eagle, raising funds at Paradise Park for The World Parrot Trust.

have imported large numbers of wild-caught parrots over the years, or from individual pet stores. It is these wild-caught birds which have, almost without exception, been the ones which have 'failed' to be satisfactory pets, and have become the kind of miserable unloved parrot for which a sanctuary has to be found.

We will also need, in due course, to employ staff specifically for the Sanctuary, but we'll cross that bridge later on.

Do not doubt that there is a need for this sanctuary. Last month David Woolcock and I visited the well-known and highly regarded Dutch parrot sanctuary 'Nederlandse Opvang Papegaaien'(NOP). We were astonished to hear from Tonny van Meegen, the director, that they keep nearly 2000 birds, and expect a further 700 to be brought in during 1996. Their policy is never to sell any bird, but they are sometimes able to place birds with approved breeding programmes. They also do not require any payment from the parrot donors, so you might reasonably ask how on earth the sanctuary can be financed. The answer seems to be that funding comes from a number of sources: a major contribution from a Dutch animal welfare charity; donations from bird food and other companies; free gifts of building materials; the unpaid help of a large number of devoted volunteers; about 30,000 visitors annually paying a small entrance fee; and some personal funding from Mr van Meegen.

We were very impressed by the standard of bird keeping, and the quality and scale of the buildings. A vast new aviary is almost completed; it will be 80 metres long by 40 metres wide, and is well furnished with large numbers of tree trunks in which parrots will be able to breed in a very natural environment. The occupants will be amongst the most fortunate of rescued parrots.

Our proposed parrot sanctuary will have to be a more modest affair, at least to begin with. Finding the funding for it will not be easy, but here is one suggestion we would like to offer our WPT members, and indeed anyone else interested in parrot welfare. We have an adoption scheme for the birds at Paradise Park, and it could be a satisfying experience to adopt a Paradise Park parrot knowing the adoption fee will go directly, without deduction, to the WPT Parrot Sanctuary Fund.

PARADISE PARK & WORLD PARROT TRUST
PARROT SANCTUARY
Hayle, Cornwall

ADOPT-A-PARROT FOR THE PARROT SANCTUARY

So here is a short list of four parrots at Paradise Park, with their personal histories. If you wish to adopt one of them, please fill in and return the enclosed 'Parrot Sanctuary Adoption Form'. Note that you can be an Adopter for £25 ($40), a Benefactor for £50 ($80), or a Patron for £100 ($160) or more. All categories will receive a certificate with details of the bird they have adopted.

Another potential source of funds is from our 'Fellows' who make a single payment of £250 or $400 for life membership. If during 1996 you sign up for this form of membership, you will have the option of asking for your funds to be put into the 'Parrot Sanctuary Fund'.

ST. VINCENT PARROT: 'WOODY'

This big bruiser has been with Paradise Park since 1974, when he and his mate were sent to us by the St. Vincent government. Woody produced a chick in 1980, but ejected it from the nestbox. A typically aggressive male amazon parrot, for several years he had to be separated from his mate during the Winter, and watched carefully when being reunited in the Spring. In 1989 he damaged his mate's beak, but in 1991 he finally produced a chick! He did it again in 1994, and both young birds are females. In 1995 the 1991 bird was paired to a confiscated male of unknown age, and 2 clutches of eggs were laid, but they were all infertile.

BLUE CROWNED CONURE: 'ROCKY'

This little parrot had a long journey on his way to Paradise Park. He was discovered in Gibraltar by Customs officials after an attempt was made to smuggle him into the country in a black plastic bag. Identified as a Blue Crowned Conure and named 'Rocky' he was flown to England by the Royal Air Force after they had been asked for help by the Royal Society for the Protection of Birds. Two of their staff delivered him to Paradise Park, where he has now

settled in and formed a dubious relationship with a young Hahn's Macaw.

YELLOW-SHOULDERED AMAZON: 'BARBIE'

Found in a handbag at Heathrow airport, this endangered parrot was confiscated by HM Customs and placed in the care of Paradise Park, who found it to be a female.
A few months later, by an amazing coincidence, a male of the same species was found at Schipol airport in Holland. He was sent to be paired up with Barbie, and they have now produced eight chicks in two years. This success was reported in the 'Daily Mail' and on television.

SCARLET MACAW: 'OSCAR'

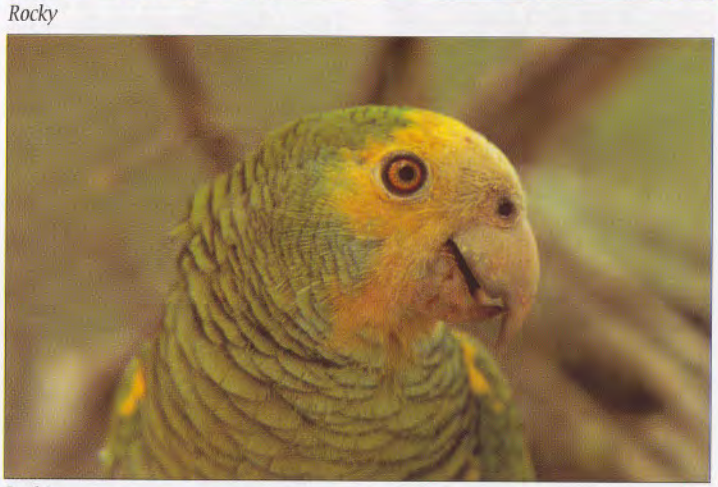
We were asked to take care of Oscar after his owner fell ill. We discovered that this unfortunate bird had lived in a large cage inside a car repair and paint spraying garage for over fifteen years. He was in poor condition with many feathers plucked and an overgrown beak. Our first task is to get him back into good health, and although he had only been with us for a few months his feathers are starting to grow. As Scarlet Macaws are endangered in the wild, we will be trying to pair him up so that he may breed in the future. Our picture shows him with Clare, one of our team of excellent parrot keepers.

ALL OF US AT PARADISE PARK HOPE YOU WILL DECIDE TO ADOPT ONE OF OUR BIRDS AND HELP THE WORLD PARROT TRUST FOUND ITS MUCH-NEEDED 'PARROT SANCTUARY'. IF THERE'S A GOOD RESPONSE, WE WILL OFFER A NEW GROUP OF BIRDS IN THE NEXT ISSUE OF *PSITTASCENE*.

NOTE: Over the years we have tried to keep Paradise Park in the background, so as to avoid any confusion between it, as a commercial enterprise, and the Trust as a UK registered charity. In this situation, however, we feel that the Park has an unique opportunity to help the Trust help the parrots. It is also the case that many Trust members are very interested in the activities at Paradise Park, and each year more members use their membership card to visit the Park free of charge. Early in May this year a party of fifty Belgian and Dutch members are paying us a special visit, and visits by members from outside the UK are increasing.
In response to many recent requests we will try to fit in some news from Paradise Park in future issues of *PsittaScene*.

Woody

Rocky



Barbie

Oscar

Macaw Behaviour in the Alto-Madidi National Park, Bolivia

By Catherine Soos, B.Sc., DVM'97

Last summer, Laurel Neufeld and I travelled to South America to assist Dr. Charles A. Munn in his efforts to conserve rainforest land, and boost populations of endangered species of macaws. In collaboration with Eco Bolivia, we studied the behaviour of wild Green-winged Macaws *Ara chloroptera* in the Bolivian Amazon during the dry season. There, we examined competition for roosting/nesting sites, aggression, pair behaviour, juvenile behaviour, parent-juvenile interactions, anti-predator behaviour, alarm calling and mutualism.

Of the macaws found in the Amazon rainforests, 6 are endangered or on the verge of extinction. These parrots are threatened by humans who disturb their natural habitat, and destroy nests for meat and feathers,or to supply the pet black market. Some species of macaws remain abundant in certain regions of the Amazon. However, without help these birds can potentially suffer the consequences associated with the pressures that have placed other macaw species in the endangered list.

Dr. Charles Munn of the Wildlife Conservation Society and his colleagues have been studying wild macaw behaviour in Perù, Brazil, and Bolivia. Munn's research in Perù has shown that macaws possess naturally low reproductive rates that cannot keep up with the various external pressures that decrease their populations. Only 10-15% of adult macaws successfully reproduce per year. This low frequency is mainly a result of insufficient suitable nesting sites, as well as the fact that eggs and chicks suffer a high mortality rate of 75%. Over the years, Munn and associates have devised successful methods to raise macaw populations in the wild. Furthermore, their work has helped conserve over 8 million acres of rainforest land.

Because of the importance of this work and my desire to contribute to it, I contacted Dr. Munn in October 1994. Months later I was on a plane to Bolivia, full of anticipation (I could not wait to set my eyes on wild macaws flying above the rainforest canopy) as well as apprehension. I did not know what to expect, being a solitary, non-Spanish-speaking, pale faced city girl accustomed to the luxuries of the metropolitan life.

ECO BOLIVIA

I spent the major part of the summer volunteering for a non-government organisation called Eco Bolivia. This group is led by Rosamaria Ruiz, a very strong, clever, and motivated Bolivian woman who has 40 years experience in the Bolivian rainforest, and hence an intimate knowledge of the area and the people native to it. The main goals of Eco Bolivia are the conservation and active protection of intact, vulnerable areas of rainforest, and the improvement or sustainable development of areas inhabited by native peoples. Eco Bolivia takes pride in hiring local men and women who have lived their entire lives in the Bolivian lowlands, and have a vast knowledge of its plants and wildlife.

In collaboration with Dr. Mario Baudoin and Alejandra Sanchez de Lozada (director of the National Biodiversity Directorate), and Charles Munn, Eco Bolivia is the primary organisation responsible for the recent (September 21 1995) creation of the 1,800,000 hectare Alto-Madidi National Park in the north-west region of the Department of La Paz. This work was backed by Conservation International's Rapid Assessment Team which spent one month in the area in 1990 , under the leadership of the late Ted Parker. Madidi contains at least 11 percent of the world's birds, and is by far the most biologically rich area on earth. Presently Eco Bolivia is actively protecting 40,000 hectares in the most vulnerable areas of Madidi, and is planning to expand this protection to 120,000 hectares by mid year.

Members of the Eco Bolivia team. L to R: Lorgio Hirose, Rosamaria Ruiz, Eric Hirose and Rodolfo Cartagena. *Photo: Laurel Neufeld*

THE GREEN-WINGED MACAWS OF CAQUIAHUARA:

I worked in Caquiahuara (a region within the Alto-Madidi National Park on the Tuichi River), about a three hour motorised boat ride from the nearest town. Eco Bolivia has built a very comfortable biology research station in Caquiahuara, also a very extensive but noninvasive trail system. Several local men including Lorgio Hirose, Erik Hirose, and Rodolfo Cartagena (see photo) are employed by Eco Bolivia. Prior to the creation of the Alto-Madidi National Park, their main job was to actively protect Caquiahuara and neighbouring areas from the constantly invading hunters and loggers.

A characteristic of Caquiahuara is the series of 60m to 90m high sandstone cliffs that contain holes that several species of parrot live in. During the months of June and July 1995, this area contained a population of 34 Green-winged Macaws *Ara chloroptera*, 26 Severe Macaws *Ara severa*, and 30 White-eyed Conures *Aratinga leucophthalmos*, most of which lived inside the cliff holes.

For two months Laurel Neufeld, (a biology undergraduate at the University of Manitoba), and I studied the behaviour of the Green-winged Macaws that lived in the cliffs. We examined competition for the cavities, territoriality and aggression, antipredator, juvenile and social behaviour. Social behaviour includes pair behaviour, juvenile-parent interactions, calling and mutualism.

PAIR BEHAVIOUR:

On average, four pairs of Green-winged Macaws were within their cavities at any one time during the day. While sitting at the entrance, pairs roosted quietly, occasionally preened each other, or loudly called out to other nearby macaws. Members in a pair almost always remained with each other, and flew away from their cavity together to feed or socialise in nearby trees. Every day at dusk (by 6.30pm), all pairs that lived in the cliff returned to their cavities where they spent the night. At dawn, pairs began leaving the cliff to go foraging, and most were gone by 7.30am. Some pairs did not return until dusk, while others intermittently returned and departed for various lengths of time throughout the day.

COMPETITION, TERRITORIALITY, AND AGGRESSION:

We observed competition for the cliff cavities in June and July, and attributed this to the forthcoming nesting season in October. A few of the holes were measured by Charles Munn and Lorgio Hirose. They were determined to be as large as 6ft (2m) deep by 6 ins (15cm) wide by 10 ins (25cm) tall. Some had tunnels that branched off, making them ideal sites for macaws to protect themselves and their eggs/chicks from predators or foul weather.

Pairs of macaws that had already established themselves in holes aggressively defended their territory against invading pairs. When I arrived at Caquiahuara, nine pairs of Green-winged Macaws were regularly roosting in particular holes. When a pair would try to land in a cavity belonging to an existing pair, the residents would usually aggressively chase the other pair away without any fighting. On several occasions, however, I witnessed birds tumbling from cliff holes while grappling beak to beak after an invading pair attempted entry. By the time we departed from Caquiahuara, 12 pairs of Green-winged Macaws were defending cavities. Pair1 defended three holes for an entire month and a half. On one

A pair of Green-winged Macaws flying above the rainforest canopy in Caquiahuara. *Photo: Catherine Soos*

occasion, we observed a new pair aggressively confront Pair1. They flew directly at Pair1 who were sitting within their cavity, landed on the ledge at the entrance and faced Pair1 with wings spread. They stood there for about 20 seconds until Pair1 finally lunged at them. All four birds beak fought until the new pair gave up and flew away.

Pair4 appeared to act as the "guards" of the cliff. Not only would they defend their own site, they protected the cavities of three other pairs in their absence. This behaviour is contrary to past observations that Green-winged Macaws are individualistic or pair-oriented, rather than group-oriented.

ANTIPREDATOR BEHAVIOUR AND ALARM CALLING:

Macaws faced with imminent danger from predators give out very loud alarm calls which alert other macaws in the vicinity. Several macaws randomly flying in circles may confuse the predator.

We observed this behaviour in response to bat falcons, humans, and a helicopter. In fact, when a Green-winged Macaw alarm-called, Severe Macaws and White-eyed Conures also responded by calling loudly and flying away.

JUVENILE-PARENT INTERACTIONS:

In this population of macaws, there was a single juvenile from last year's nesting season. It was identical to its parents, except that it had more vivid facial markings. During the day, it socialised with its parents and followed them around. As the three perched together, the juvenile would continuously bob its head for food, and solicit preening when it was perfectly capable of feeding or preening itself. While relentlessly begging, it often irritated a parent to the point that the parent would bite it, lunge at it, or chase it away. These interactions frequently resulted in it flying away from the tree, circling back, and landing in the same branch as before, but slightly farther away from the parent.

LOCAL SCHOOL CHILDREN AND ENVIRONMENTAL EDUCATION:

Once a month, Eco Bolivia brings local children to Caquiahuara for three-day trips in order to teach them about rainforest ecology. Neufeld and I helped teach one group of 15 twelve-year-olds about macaw behaviour and how to birdwatch using telescopes and binoculars. Most of them did not want to leave Caquiahuara when the time came to return to their communities.

FUTURE GOALS AT CAQUIAHUARA:

Second and third macaw chicks of clutches have significantly higher mortality rates than first-hatched chicks. As a result, Eco Bolivia intends to rescue unthrifty second and third chicks, and raise them until they are ready to be released into the wild, and forage on their own. This approach to parrot conservation has been shown to be successful by the team at the Tambopata Research Centre in Peru. Eco Bolivia will soon begin ecotourism in Caquiahuara. The research station can comfortably hold 18 people.

THE MACAWS OF CHARQUE:

Ruiz, Hirose, Cartagena, Neufeld and I spent three days studying the series of much larger macaw cliffs in Charque, within the Alto-Madidi National Park. Due to funding difficulties, Charque had been left unprotected for one year. In 1994, Eco Bolivia determined the population size of the Green-winged Macaws to be 24 in all. One year later, however, we counted seven pairs. There also seemed to be a decline in the number of Blue-and-Yellow macaws *Ara ararauna* which do not use the cliffs, but build nests in nearby palm groves. Furthermore, not a single Scarlet Macaw *Ara macao* was observed during our stay, whereas pairs had been noted to nest in the cliffs in the past. Although these apparent declines are not conclusive, protection of this area is extremely important due to other evidence of destruction that we observed. There was mass removal of trees and plants, wide trails where none had existed before, chopped up trees allowed to sit and rot, destroyed streams, and littered abandoned campsites. Now that the National Park is in force, it is hoped that the populations of the different macaw species will rebuild themselves under better and safer conditions.

CONCLUSION

The use of sandstone cliffs as roosting and nesting sites by Green-winged Macaws has never been reported anywhere else. It is important to study the predictably located populations in Caquiahuara and Charque in order to improve our understanding of macaw behaviour and the interactions of macaws with each other. Longterm studies would be useful to determine the length of time each cavity is utilised by a particular pair, and whether certain holes are prone to having permanent or transient residents. This can be done by studying the unique facial markings of each individual.

ACKNOWLEDGMENTS:

I would like to extend my thanks to Charles Munn and Rosamaria Ruiz for allowing me to study the macaws at Caquiahuara and Charque. I would also like to thank Rosamaria and the Eco Bolivia team, Wayne Davey, Mike Pearson, Margaret Mostert, the Bird and Exotic Animal Hospital in Montreal, and Laurel Neufeld for their guidance and moral support. I thank Canadian World Parrot Trust, Golden Triangle Parrot Club, Parrot Association of Canada, Canadian Parrot Symposium, Lafeber Company, University of Guelph, Ottawa Parrot Club, Avian Preservation Foundation, and Vancouver Island Cage Bird Society for their generous contributions that helped fund my work.

RESEARCH PROPOSAL - BOLIVIA 1996

There is presently an insufficient amount of information regarding the proximate causes of species decline, such as reduction of food supplies, reproductive failure , and disease. Dr. Charles Munn's research in Peru has shown among other things, that macaws possess naturally low reproductive rates that cannot keep up with the various external pressures that decrease their populations. In actuality, only 10-15% of adult macaws successfully reproduce per year. This low frequency is mainly a result of insufficient suitable nesting sites, as well as the fact that eggs and chicks suffer a high mortality rate of 75%.

Disease plays an important role in regulating wild avian populations, and may precipitate the final extinction of small populations. Vertically transmitted disease such as polyomavirus and Psittacine beak and feather disease can significantly influence chick growth and survival, and may partially account for their elevated mortality rates. Only recently have researchers begun to perform disease surveys of wild psittacine populations. The information gleaned from such studies will significantly improve our knowledge of wild parrot populations, and as a result will ameliorate our understanding of some of the medical problems experienced by captive parrots. Furthermore, with the increasing occurrence of captive breeding, reintroduction, and translocation programmes, it is essential that the prevalence of particular diseases within the target population be known. One risk associated with reintroduction or translocation programmes is the potential to introduce new diseases into the target population.On the other hand, another risk is that the introduced birds may not be

Macaws-eye-view of Caquiahuara from the top of the sandstone cliffs. *Photo: Catherine Soos*

sufficiently immunised to survive infectious agents endemic to the target population. This emphasises the relevance of understanding the disease process relating to different wild populations of birds.

Throughout August and the first half of September, 1996, Catherine Soos (with the assistance of Laurel Neufeld) intends to lead a research team to perform a veterinary survey on a selected psittacine species. Soos is a biologist and a third year veterinary student at the University of Guelph, and Neufeld is a biology undergraduate at the University of Manitoba and manager of a breeding aviary. In collaboration with Dr. Charles Munn and Eco Bolivia, this research will be conducted within the Alto Madidi National Park in the Department of La Paz. The actual study site is located near the Peruvian-Bolivian border,by the Heath River where a large clay cliff is located.

Hundreds of parrots of various species flock to this "clay lick" daily in order to socialise with each other, as well as eat chunks of clay that are believed to neutralise the toxins in seed diets. Because of the abundance of parrots at this location, the team will be able to capture and release 20-30 birds upon which they will perform the survey. The species chosen will depend on the quantity of individuals of each species, the vulnerability of each species, and the ease/difficulty with which each species is captured. Soos and Neufeld will hire a guide with a motorised canoe to transport them and their equipment to the study site, as well as an expert Bolivian trapper to assist them in capturing the birds.

They will perform complete physical examinations on these birds, and examine conformation and feather condition. Each individual will be inspected for external lesions, defects, evidence of past trauma, and ectoparasites (e.g. mites, ticks, lice). Samples of blood will be collected and analysed on site in order to examine blood smears for haemoparasites, and to perform complete blood counts and packed cell volumes. Soos and Neufeld will collect faecal samples to microscopically examine Gram stains of smears, and carry out faecal flotations and sedimentations to determine the presence of gastrointestinal parasites. Gram stains of choanal and cloacal swabs will be performed to assess the microflora in those anatomical locations. They will also determine the prevalence of birds shedding Chlamydia psittaci by performing ELISA tests on faecal samples in the field.

Provided that they obtain permits to legally transport samples to Canada, and adequate funding for the appropriate supplies and equipment, they will attempt to determine the prevalence of viral induced antibodies using specific assays on serum or plasma samples. Viruses they are interested in are Pacheco's disease virus (Herpesviridae), Psittacine beak and feather disease virus (Circovirdae), polyomavirus, poxvirus and paramyxovirus.

Drs. Bruce Hunter and Michael Taylor of the Ontario Veterinary College (University of Guelph) have expressed a great interest in this project, and have offered to guide and supervise Soos on the Canadian side. They will ensure that she is adequately equipped, trained and organised prior to embarking on this endeavour. Dr Charles Munn will assist Soos, Neufeld and the Bolivian trapper with the logistics of capturing the parrots on or near the clay lick. In addition, Munn will help study the behaviour and flight routes of the parrots in order to implement the appropriate trapping procedures. The Canadian World Parrot Trust, the Parrot Association of Canada, and the Golden Triangle Parrot Club are supporting Soos and Neufeld both morally and financially, and have donated Cdn $2500 towards their research.

All parties involved believe that this research is quite important and very promising. It will help improve our understanding of wild populations of parrots and, in turn, provide more insight into some of the medical problems seen in captive parrots. The final report as well as photographs of the field work will be used as teaching aids for the annual Ecosystem Health course offered to Canadian veterinary students in subsequent years. Furthermore, Soos and Neufeld will be working in collaboration with Bolivian colleagues whom they will teach theoretical and practical aspects of avian medicine, including handling and clinical techniques. Soos will also educate them about the importance of understanding disease processes in the wild, and how to implement this information in their future captive breeding or reintroduction programs.

Tax-deductible donations to this project can be made through the Canadian World Parrot Trust.

BUDGET PROPOSAL FOR SOOS AND NEUFELD -- US DOLLARS

Airfare	2800
Transport within Bolivia	500
Permits	180
Salaries for trapper and guide with motorised boat	600
Food for 1.5 months, 4 people	400
Gasoline and motor costs	300
Microscope, Mini centrifuge, Refractometer	1680
Capillary tubes, microscope slides, cover slips, staining material (DiffQuik, Gram), syringes, needles, faecal containers, Fecasol, Alcohol, Unopette	400
Chlamydia ELISA test kits	440
Gasoline generator, Liquid nitrogen tank, vials, storage case	1200
Chicken wire to build cages, mist nets, butterfly nets	800
Total	**$9300**

Towards a Conservation Strategy for the Red-faced Parrot

By Paul Toyne PhD.

Until recently the Red-faced Parrot *Hapalopsittaca pyrrhops* was a little-known parrot endemic to southern Ecuador and northern Peru. Within its range it inhabits the temperate montane forests of the Andes between 2300m and the treeline. Forest clearance is so great in this region that the IUCN lists the parrot as critically endangered and cites habitat destruction to be its main threat.

However, the future is not as desperate as first suspected. Recent research supported by the World Parrot Trust and the International Aviculturists' Society has revealed new locations for Red-faced Parrots. The work also substantiated the importance of Podocarpus National Park for the long-term threatened White-breasted Conure *Pyrrhura albipectus*. The Park covers 146,200 ha and is situated in Loja Province. It comprises the only protected Andean forest in southern Ecuador. Such forest is important for other parrots, most notably the threatened Golden-plumed Conure *Leptosittaca branickii* (see also *PsittaScene* 1994, vol. 6, no. 3). Roughly 20% of the park is suitable Red-faced Parrot habitat, however simply preserving the park might not be sufficient for the parrot's future. Evidence for this is based on the fact that they have only been seen there in small numbers, suggesting that here they occur in low densities.

A rough population estimate within the park of a couple of hundred birds could be an exaggeration. This begs the following questions: Does the park support a viable population of Red-faced Parrots? Is this population at its optimal level? If not, can it be supplemented by immigrations of Red-faced Parrots from other areas? If at its optimal level what factors limit its size . . . food availability, nest site availability, predation? Without a detailed study it is very difficult to answer these questions. One worry is that factors such as disease and possible inbreeding leading to low reproductive rates could further reduce the population.

So, how can we best conserve the Red-faced Parrot? Fieldwork during 1992 and 1994-5 surveyed potential Red-faced Parrot habitat north of the park in the Saraguro area. The results were encouraging as new locations were found and information on diet and breeding were collected. Within these new locations they occurred in larger numbers, flocks of up to 20, compared with the small groups between two and four usually recorded in the park. This has led to the belief that Red-faced Parrots are more common in the Saraguro area. Why this should be is unclear. Maybe they were easier to detect in the smaller forests than in the large continuous forests in the park. Species with low average population densities are less likely to be encountered in surveys of large patches of their habitat such as within the park. Or maybe there is optimum habitat area whereas the park's habitat is of poorer quality. Or perhaps, as I suspect, the Saraguro area is close to the centre of their geographic range and as with other animals, the closer they are to this centre the greater their abundance. Scientific studies are needed to answer these questions, but do we have the time necessary to complete such studies? Can we propose a conservation strategy based on our current knowledge that will successfully conserve Red-faced Parrots? I believe we can.

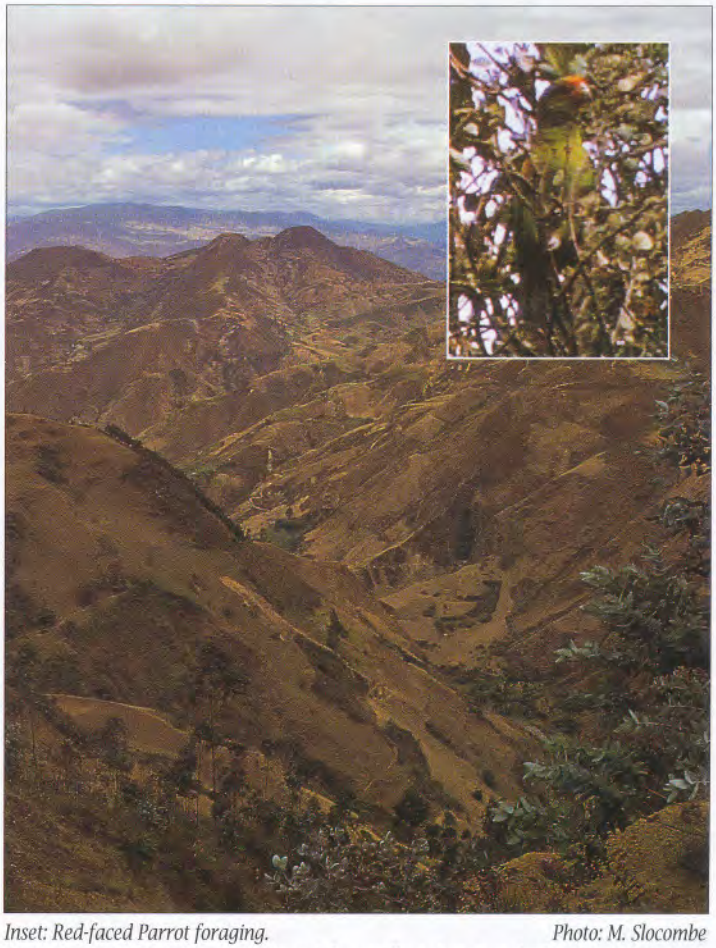
Previous studies on animal distributions provide some clues as to how to conserve species. There is some variation in the results from these studies but in general, and all other things being equal, geographically restricted animals (like the Red-faced Parrot) tend not to have large local populations making them vulnerable. However we have a good idea where Red-faced Parrots occur, year round, in good numbers. Researchers are presently mapping the distribution of the remaining Andean forests in Loja Province and relating them to the known distribution and abundances of the parrot within the same area. When completed, key areas can be identified and targeted for either further research or possible reserve acquisition.

The long -term aim would be to have a network of reserves. Some reserves could be linked by "corridors" of treeline Andean forest, as such forests are usually the last to be felled. These "corridors" could provide habitat through which parrots and other animals could disperse. Such reserves would provide habitat for other threatened Andean birds including Golden-plumed Parakeet, Bearded Guan *Penelope barbata*, Grey-breasted Mountain Toucan *Andigena hypoglauca* and threatened mammals such as Spectacled Bear and Mountain Tapir.

For any proposed reserve to be successful the local communities must be involved in its management. An environmental education programme emphasising the importance of their forests for wildlife and for watershed protection is vital as these communities will become the guardians of these reserves. This is not a far-fetched idea. Within Loja Province there is already a community-owned forest called Haushapamba, near Saraguro. This 400ha forest managed by three Indian communities is a wildlife reserve. On this reserve all of the above Andean bird species have been seen. Indeed, the reserve supports a sedentary population of at least eight Red-faced Parrots.

Those wishing to see parrots in Ecuador should include Huashapamba on their itinerary; despite this low number they can be seen on most days feeding in trees near the forest edge. Permission to enter the reserve can be obtained by contacting Promusta at their office in Saraguro (Juan Antonio Montesinos y Esquino mercado central - on the corner of the market square). A small, volunteer donation for the up-keep of the reserve should be paid. This will encourage the Saraguro people to understand that these forests have other benefits than just firewood.

Current research on Red-faced Parrot is set to end this year, when complete recommendations for the conservation of the Red-faced Parrot will be made to the World Parrot Trust and other nature conservation organisations. Hopefully, some of the recommendations can be implemented (dependent as ever, on the availability of funds) and the future of the Red-faced Parrot secured.



Inset: Red-faced Parrot foraging. *Photo: M. Slocombe*

Main picture: Habitat loss in the inter-Adean valleys threatens the long term future of Red-faced Parrots. *Photo: E.P. Toyne*

Carnaby's Cockatoo - preventing a crisis!

By Tony Jupp

South-west Western Australia is blessed with more cockatoos than any other part of the world. In total there are eight indigenous species (two species being represented by two distinct sub-species each) plus one which was introduced; the Sulphur-crested Cockatoo *Cacatua galerita*. This may seem to comprise a cockatoo's paradise and in some ways it does; however, south-west Western Australia also has more than its share of environmental problems which threaten the survival of some of these cockatoos.

Destruction of habitat has been dramatic especially in an area known as the wheatbelt roughly defined by an annual rainfall of between 300 - 500 mm. This region runs from Geraldton in the north to Esperance in the south. Originally it supported vast tracts of Eucalypt woodland but massive clearing of vegetation to grow wheat and other cereal crops has left very little remaining habitat, spread in a fragmented patchwork across the landscape. Not only has this adversely affected the local wildlife but it has led to extreme problems of soil erosion and salinity which in turn leads to reduced agricultural effectiveness.

Each of these eleven types of cockatoos has had its distribution or abundance affected since the arrival of Europeans with the possible exception of the Cockatiel *Nymphicus hollandicus* which seems to have remained fairly constant.Some have had their distributions extended due to the removal of woodland and the spread of agriculture providing them with their preferred grassland type feeding areas:

- the Inland Red-tailed Black Cockatoo *Calyptorhynchus banksii samueli*
- the Little Corella *Cacatua sanguinea*
- the northern sub-species of the Western Long-billed Corella *Cacatua pastinator butleri*
- the Galah *Cacatua roseicapilla* which has reached plague proportions in some areas.

Two are suspected to be under threat from loss of forest habitat in the wetter extreme south-western corner of the state:

- the Forest Red-tailed Black Cockatoo *Calyptorhynchus banksii naso*
- Baudin's Cockatoo *Calyptorhynchus baudinii.*

The remainder are known to have suffered contractions of their distribution and/or populations:

- the southern subspecies of the Western Long-billed Corella *Cacatua pastinator pastinator* which has been added to the Endangered list with an estimated population of 1,500.
- the Pink or Major Mitchell's Cockatoo *Cacatua leadbeateri*
- Carnaby's Cockatoo *Calyptorhynchus latirostris*

NOTE: Originally it was thought there was only a single species of White-tailed Black Cockatoo but after much debate and a number of different taxonomic changes, it is now generally accepted that the two forms of the White-tailed Black Cockatoo are in fact discrete species and are named as follows; Carnaby's Cockatoo (or the Short-billed White-tailed Black Cockatoo) *Calyptorhynchus latirostris;* Baudin's Cockatoo (or the Long-billed White-tailed Black Cockatoo) *Calyptorhynchus baudinii.*

A SPECIES UNDER THREAT

Carnaby's Cockatoo is a unique bird facing a complex array of threats to its survival. It is a migratory species, moving between its breeding grounds found in drier Eucalypt woodland and more coastal areas in the non-breeding season. Dr Denis Saunders from CSIRO (the Commonwealth Scientific and Industrial Research Organisation) has studied and documented the decline in their breeding success in the wild for many years. His predictions of their continued demise seem to be coming true.

In order to survive, Carnaby's Cockatoos need a number of resources but above all else, they require two things to successfully breed in the wild;

1. A large hollow in the limb of a Eucalypt tree in which to lay their two eggs although usually raising only a single chick. For a tree to support such a hollow it needs to be at least 130 years old.

2. An ample food supply in the form of the seeds of native plants such as Banksia, Hakea and Grevillea close enough to the nest to allow the parents to complete the required number of feed trips per day.

Due to the enormous amount of land clearing for agriculture throughout their range, these resources are now scarce or at least highly scattered, resulting in a reduced breeding success rate. Because this species lives for a very long time (up to 60 years), when local people see flocks of them flying over Perth at the end of their breeding season, they are fooled into thinking the population is still healthy. These are however, mostly old birds. When they eventually die, very few younger-generation birds will be left to take their place.

Female Carnaby's Cockatoo leaving the nest. With newly hatched chick inside (inset).

Shooting and competition with introduced honey bees and artificially high numbers of Galahs and Little Corellas for nest sites, are additional problems faced by this species in the wild. A further threat is the poaching of chicks, or even eggs, from the nest to be sold for high prices on the local black market or smuggled overseas for even greater profit. The smugglers usually destroy the nest hollow, in the process exacerbating the shortage of nest sites. Even though this region is the only place in the world lucky enough to have wild White-tailed Black Cockatoos, both species are still shot as pests by some farmers. Both poaching and shooting are illegal incurring serious penalties for offenders.

Because of all these factors, Carnaby's Cockatoo is officially listed as a vulnerable species.

CARNABY CONSERVATION

There are many things that can be done to prevent the further decline of Carnaby's Cockatoo. More Conservation Zones are needed to protect remaining habitat and ensure remnant vegetation remains for nesting sites and feeding grounds on public and private lands. In particular local governments can preserve vegetation along road verges which provide vital habitat, particularly large mature eucalypts needed for nest sites.

Farmers can fence off any remaining native vegetation they have on their properties to protect it and allow new plants to become established. (If sheep or cattle are allowed to graze between the trees in a stand of woodland, seedling trees are never able to grow and this leads to the ultimate loss of this habitat.) This in turn helps the farmer by stabilising the soil, lowering the water table and reducing the risk of salt rising to the surface, thereby ensuring the continued existence of large trees to provide vital shade for their

stock. (A subsidy from the Department of Agriculture is available to assist farmers with the cost of this fencing.) Farmers can also revegetate unproductive cleared land by planting local native plants to provide habitat and also help to stabilise the soil and prevent salinity problems. This results in a win for conservation and for the farmer. Through regional Landcare groups many farmers are already following these principles.

People, especially in the country areas, should alert CALM (the Department of Conservation and Land Management) of any poaching or shooting of Carnaby's Cockatoos. People driving around in the bush with ladders on their roof racks should be treated with suspicion. CALM Wildlife Protection Officers have received calls from people who have reported the licence plate numbers of such vehicles which they have used to good effect. Other ways that individuals can contribute include encouraging their local council to protect remnant vegetation in their area or adopting a Carnaby's Cockatoo through the Perth Zoo Society. Money raised through animal sponsorship in this way is used to further the Zoo's work with the conservation of Endangered Species.

ZOOS COMMITMENT

Responsible zoos today have a firm commitment to education and conservation. Perth Zoo, itself lucky to be frequented by wild flocks of these magnificent parrots, is helping to alert people to the problem so that they may help. We have recently opened a small Cockatoo Information Centre with interpretive graphics to aid in this education process. This project was aided by students who approached us from Christchurch Grammar School in Perth. They aim to continue to assist us through fund raising to help with the conservation of this species with much work and many possibilities to pursue.

Equally important to education is the need to conserve this species through a coordinated captive breeding effort. To this end I work as the Australasian Studbook Keeper for our three local black cockatoos including Carnaby's. Unfortunately there are less than twenty individuals on the studbook between the zoos of the Australasian region with no breeding pairs (Perth Zoo does, however, have a breeding pair of Baudin's Cockatoo). The ultimate purpose of captive breeding is to maintain a healthy, self-sustaining population so that if the situation in the wild becomes worse, captive born individuals could be returned to suitable wild habitat.

Left: Tony Jupp inspecting a Carnaby's Cockatoo nest during field monitoring.

Right: Peter St Clair Baker (left) and Alison Doley (right) helping volunteers inspect a nest. Note how low the nest can be to the ground - the entrance is just in the fork of the tree at head height.

Perth Zoo intends to increase its numbers of this species and establish three breeding pairs. In order to further increase breeding potential however we have embarked on a programme in cooperation with CALM to include private aviculturists. Initially this will be limited to those people holding Carnaby's Cockatoos which remain the property of the crown. These are birds that are handed to CALM who pass them on to selected aviculturists and, because of some injury or the like, are subsequently considered unfit for re-release. All birds in the programme will receive a health check by our veterinary staff, have blood samples taken for DNA analysis and receive a silicon implant for positive, irrefutable identification. Records of these birds will then be added to the studbook and attempts made to maximise their breeding potential.

Of course the best possible way to conserve a threatened species is to protect its wild habitat. Perth Zoo's Landcare Education Officer, Peter St. Clair Baker, has embarked on a pilot revegetation programme in the northern wheatbelt. He recognised the potential here for a trial programme to raise community awareness and get local and city people involved in conservation. Near the town of Coorow is found Koobabbie Farm owned by John and Alison Doley. The 6,885 hectare (17,005 acre) property contains sizeable tracts of fenced off "bush for wildlife". The owners have actively pursued Landcare practices for many years to the benefit of their farm and to the local wildlife. One particular section of their property contains near perfect Carnaby's Cockatoo breeding habitat. Many large Salmon and Gimlet Gums (*Eucalyptus salmonophloia* and *Eucalyptus salubris* respectively) exist to provide the necessary nest hollows. These species require heavy, loamy soils in which to grow. The food species however require light, sandy soils and very little of this vegetation remains on the Doley's farm. One problem lies in the fact that the nearest suitable feeding grounds are a number of kilometres distant from the breeding grounds which limits the number of trips the parents can make in a day.

Dr Saunders' research has already identified this as one of the causal factors in the extinction of Carnaby's Cockatoos from some former parts of their range.

So far the project has involved us taking volunteers from the ATCV (Australian Trust for Conservation Volunteers) to the area to collect banksia and casuarina seeds from a property owned by one of the Doley's neighbours. Our group stayed overnight at Koobabbie and received some expert tuition from Alison who showed us around the property including many active Carnaby's Cockatoo nests. [Whilst there I took the opportunity of a 5am early morning stroll to avoid the heat and see the birds at their most active. In just over an hour I had seen six species of cockatoos; a family group of Cockatiels, Galahs and Western Long-billed Corellas in plague proportions and tremendously vocal, a magnificent pair of Major Mitchell's, the ever spectacular Red-tailed Black Cockatoos and many breeding Carnaby's Cockatoos.]

Peter enlisted the support of a suburban Perth primary school, North Beach, to tackle the job of propagating the seeds we had collected. Firstly the seeds had to be extracted from the woody banksia nuts. This was done using a traditionally Australian BBQ. The heat and smoke from fire triggers many Australian native plants to expel their seeds and thus be ready to germinate into the relatively fertile ash covered soil. The seeds have now germinated and are growing in the "Men Of The Trees" shade house at North Beach Primary School here in Perth. When they are big enough Peter plans to return with students from North Beach Primary School who will link up with Coorow students and use these seedlings to revegetate an area of degraded sandy soil closer to the nest sites of Alison's breeding pairs to aid in their breeding success.

Peter has plans to include city and Coorow school children in this project which will help raise community awareness, both urban and rural, of the plight of Carnaby's Cockatoos whilst at the same time actively working for their conservation. We hope this project will capture the imagination of other farmers, schools and local governments so that they will be motivated to protect existing remnant woodland and work to restore food species close to existing nesting areas. If we can achieve this then hopefully no more local extinctions will occur and the sight of spectacular flocks of Carnaby's Cockatoos over Perth will be assured.

Concern for the Greater Vasa Parrot

By Paul McBride

The rainforest of the east coast of Madagascar has a number of unique distinctions from comparable rainforests in other continents. The vegetation is layered in canopies, with tree density per hectare triple the world rainforest average. It has a lower main canopy with no emergent trees, large or otherwise. A considerable number of the unique tree species have aerial exposed or buttress roots, with many orchids and ferns clinging to their tree hosts. The competition for life-giving light results in no undergrowth on the forest floor. In this dripping dank world of gloom and silent shadows lives the Greater Vasa Parrot *Coracopsis vasa.*

Vasa Parrots are completely different from the colourful species in Africa and other continents. They are dark grey with pearly pink-white beaks and large areas of white skin around their piercing jet-black eyes. As they grow into adult-hood the white around the eyes turns to a dark grey. Under the rainforest canopy they are just about invisible. In the half light, when you finally spot a Vasa Parrot clinging to a parasitic bulb on the lower trunk of a tree, it is usually because your ears first located the bird by its happy mumbled chattering as it goes about its business. The Vasa, believing it is invisible in the deep shadows, allows you to approach to within a meter or so without any sign of fear at all.

Greater Vasas hate direct light and only gather in groups at sunrise when they take to the air above the forest canopy, circling and swooping in happy groups, calling to each other with a haunting melodious whistle. As the burning tropical sun climbs higher in the blue sky, they return to the shady sanctuary under the canopy, to spend the day alone in each individual's chosen section of the forest. In the evenings when they have flown together and the sun has dipped below the mountains in the west, the Vasas retire to sleep in small groups high up in the canopy. However, one member of each group remains vigilant throughout the night, due to the constant threat from the two-metre long boa constrictors who actively seek out fresh parrot for supper.

The Betsimisaraka tribespeople, the ethnic tribe of the east coast rainforest region, have a rice-based culture. Rice is their one treasure and they eat no other cereal crops. Boiled rice, three times a day, is their staple diet. Over the centuries, as these tribes have grown in size and number, they have made further incursions into the primary rainforest. They seek out rich fertile valleys between the mountain slopes to cultivate more rice to feed their ever demanding populations. When no more valleys exist to be cultivated within a reasonable distance of their villages, the Betsimisaraka resort to 'slash and burn' agriculture, destroying huge swathes of forest with uncontrollable blazes that burn for days on end. In the process they are destroying the natural habitat of the Greater Vasa, along with thousands of other indigenous species, many of them botanically unrecorded.

The Betsimisaraka tribespeople regard the endemic Greater Vasa as their 'public enemy No.1' due to its liking for their staple crop - rice. No amount of education will convince them that Vasas have a right to co-exist harmoniously with them in the rainforest. "The parrot steals rice, so kill it on sight" has been the attitude of the Betsimisaraka for centuries.

Trade relations with the western world have recently been opened by the newly elected government of Madagascar. Twenty years of communist-backed socialist government has left the Madagascan population reduced to abject poverty. Now the entrepreneurs of the First World countries are making substantial in-roads into Madagascar by exploring and exporting the unique flora and fauna including Vasa Parrots. In the eastern rainforest region of Madagascar a working man's pay is 28p - 2000 Malagash Francs. The agents of the First World exporters pay £1.50 - 10,000MGF - cash for a captured Greater Vasa, regardless of age or condition. Consequently, on the three days of the week when it is traditionally Fadi or taboo to work in the rice paddies, the tribesmen go parrot-hunting for the substantial financial rewards on offer.

The hunting and capture of the parrots is carried out brutally, with no regard for the birds' well being. They are traditionally regarded by the Betsimisaraka as vermin, on a par with the British crow. The wing feathers are hacked off with an iron knife before the bird is stuffed into a shoe-box sized cage built of various scrap materials. There is no room for movement, other than head swivelling,for months on end, until the annual visit during the brief dry season of the exporters' agents.

During our three year residence in the north-eastern rainforest of Madagascar, working with the Betsimisaraka tribespeople, we have acquired a number of Greater and Lesser Vasa Parrots from the native trappers in our area of Manompana. Some of these parrots were stuffed into their cages at three months of age. By the time we cut the parrot out six months later, he fills it completely. We have found that the mental age and skill development is exactly the same as that of a three month old youngster.

We introduce the birds into a new, large home as the first step of slowly rehabilitating them for eventual relocation away from the rice paddies of the local tribespeople. Some parrots are unable to drink water as all liquid nourishment has been obtained from a diet consisting solely of rotten bananas. Rice and fresh water would have been considered too precious and time-consuming to be given to 'vermin'. Other parrots cluck like chickens and crow at sunrise after sharing the underneath of the huts with fowl. Some are in immovable trances for weeks after their release. Others pluck their feathers and bang their heads monotonously on the wall for hours on end. Some sit rigid in one spot and cry piteously whilst rolling their eyes. All have to be hand-fed initially, to introduce them to their natural diet.

The World Wide Fund for Nature (WWF) is currently attempting to have the Greater Vasa Parrot listed on the Endangered Species List of Madagascar, although, at this time, not the Lesser Vasa. WWF is unfortunately not active in our remote, difficult to access, region. Their locally orientated educational programmes on the necessity of preserving and protecting the unique diversity of flora and fauna of Madagascar, would be of real value in the eastern rainforest.

We, however, in WWF's absence, will continue to do as much as we can to ensure that the rainforest of Madagascar will echo to the haunting melodious whistle of the Vasa Parrots for many years to come.

Nelson was rescued from local trappers. He spent six months in a tiny cage the size of a football but he now enjoys the freedom of Eucalyptus trees.

Update of the Guayaquil Macaw Conservation Project, Ecuador

Report by Eric Horstmann

This year has been a difficult one for the Guayaquil Macaws *Ara ambigua guayaquilensis* in the Bosque Protector Cerro Blanco. Throughout the rainy season (January-April) two volunteers from the University of Amsterdam, Holland carried out limited field observations of the birds in different areas of the reserve. The macaws during this time proved difficult to observe, mostly flying low and staying within the ravines, apparently spending a fair amount of time feeding on the fruits of "pechiche"*(Vitex gigantea)* and other native tree species.

Beginning in April, a pair (the same nesting pair?) were observed returning to the nest site where two chicks were successfully fledged last year, thanks in large part to the 24 hour surveillance placed on the site by park guards to avoid the robbing of the chicks to sell as pets. The pair was seen entering the nest cavity on several occasions and all signs pointed to another nesting last year. Then , in late July, the top part of the "pigio" tree *Cavanillesia platanifolia* fell down, badly infested by termites, leaving the nest cavity exposed.

In an effort to make up for the loss of the 1994 nest site and encourage new nesting in 1995, the Cerro Blanco reserve management constructed artificial nest sites in two locations, one near the fallen and another close to a toppled (again termites!) pigio tree. The macaws had been observed there previously. They were made using PVC and wooden boxes based on a similar design successfully employed in Peru, with other macaw species.

Between 18 August and 23 November, sightings of two or four individuals were noted in the vicinity of last year's nesting. Although they were not reported to have been using the artificial nest, the cavity was scrutinized on several occasions by the macaws. Since then, macaws had not been sighted until December 20, according to park guards. They are posted daily at a newly constructed guard station in the vicinity of the artificial nest site, mainly for park protection from poaching and land invasions.

Due to the extremely dry conditions this year, from October through December, there were a rash of forest fires in the area of the Bosque Protector Cerro Blanco. Park staff, trained in fire fighting techniques by U.S. and Canadian technicians and using special equipment donated by La Cemento Nacional, fought and put out over 15 fires in approximately 200 hectares, mainly in the reserve buffer zone. The fires were all deliberately set, mainly by squatters, both rich and poor who clear the land to prove their claim to it. The near complete Daule-Peripa project will bring water out to the dry Santa Elena Peninsula which is in the process of desertification due to un-checked deforestation. The destruction of secondary dry tropical forest outside of the reserve has stepped up dramatically with most land owners preparing to plant corn among other crops. This coupled with the continued expansion of the city of Guayaquil towards Cerro Blanco, will eventually create an island of habitat surrounded by urban development and agricultural lands. It is crucial for the long-term survival of the wide-ranging Guayaquil Macaws to identify and protect areas used for feeding and nesting outside of the existing reserve.

Significant progress has been made to this end with the purchase in October, thanks to the generosity of La Cemento Nacional, of approximately 280 hectares of land to be included in the Cerro Blanco reserve. The area in question includes a cross section of forest from wetter forest down to a drier area dominated by *Cavanillesia platanifolia.* Guayaquil Macaws have been sighted frequently in the area, including the last sighting of two pairs on December 20th and macaws heard calling on January 8. An additional 750+hectares have been identified for purchase and inclusion in the reserve and we hope to find the funds and complete the negotiations as soon as possible. The area, owned by two different land owners, is under severe threat of squatters.

On another front, for the third consecutive year, la Fundacion Pro-Bosque is carrying out an extensive reforestation programme in areas previously cut-over within the existing reserve. Thanks to the dedicated work of the park guards and soldiers from a local military base, a 25 hectare parcel of abandoned pastures has been prepared to plant during the winter rainy season. Over 10,000 holes have been dug and we are in the process of transporting native trees of 25 different species from the nursery of La Cemento Nacional up to the planting area.

We will be working through the month of January with 200 high-school students from the city of Guayaquil. They will be planting trees, which provides them with an opportunity to assist in this important hands-on work and help restore the tropical dry forest. The macaws depend upon several of the tree species used in the reforestation programme, including *Vitex gigantea* as a food source and *Cavanillesia platanifolia* for future nest sites.

The limited resources at our disposal have been practically exhausted by our conservation initiatives for the Guayaquil Macaws detailed above. For 1996, it is crucial to find support from other sources to move quickly to safeguard this magnificent bird's future in the Bosque Protector Cerro Blanco. The following is our wish list for the up-coming year:

- Purchase of 750+ hectares of critical macaw habitat at U.S.$400 per hectare.
- Two year field study of the Guayaquil Macaw in the Bosque Protector Cerro Blanco and cordillera Chongon-Colonche U.S. $20,000.
- Inventory of remaining forest parcels in the area of the Bosque Protector Cerro Blanco for rare threatened avifauna (including Guayaquil Macaw)U.S $5,000.
- Continued placement of nest boxes to bolster macaws nesting U.S $2,000.
- Preparation of macaws awareness poster and other materials for use in environmental education programmes in adjacent communities U.S. $2,500.
- Implementation of education programmes (transportation, etc.) U.S. $1,000.

(Dollar figures are estimates.)

Very few Buffon's Macaws are in captivity, and not many are being bred. In Guayaquil, Ecuador, the wild population may be as low as 20 to 30.

INTERNATIONAL NEWS ROUND-UP

AFRICA

by Mike Perrin

Following the World Parrot Trust Summit held in London last year, Mike Reynolds, Director of WPT, approached me to establish the World Parrot Trust Africa, which I was most honoured and willing to do. This is now eventuating and the World Parrot Trust Africa is coming into being with, at present, a small number of active but very dedicated members, and we have no doubt that it will succeed.

Since I am Professor of Zoology at the University of Natal in South Africa, it is not surprising that most members come from South Africa. However enquiries and requests concerning our aims and objectives have been tremendously varied and extremely interesting. We are also investigating the illegal trade in African parrots, both domestically within the country, and between Southern African states. You may recall that large numbers of Red and Blue lories came into South Africa a few years ago, and the same is true for many African species, including, for example, Red-bellied parrots from Tanzania, and African greys from several central African countries.

It has been shown unequivocally that African grey parrots can be bred in sufficient numbers in captivity, and I would suggest there should be a moratorium on the import of African grey parrots into South Africa. We are committed to educating indigenous people to realise the economic value of their parrots in conservation and ecotourism, and to examine the potential for the sustainable utilisation of some species. This is being undertaken by Luthando Maphasa, a Zulu doctoral student who completed a Masters degree in Conservation Biology at the University of Cape Town.

With reference to the work on the Cape parrot, it has been shown by the late Olaf Wirminghaus that it is endemic to South Africa, and that it breeds only in Afromontane yellowwood forests above a thousand metres in altitude. The ornithological data collected by Olaf, locally in southern Africa and at the British Museum, strongly suggests that the Cape parrot *Poicephalus r. robustus* is a separate species from *Poicephalus r. suahelicus*. We now know definitely that Cape parrot populations are declining, mainly due to illegal collecting for the avicultural trade, habitat degradation and fragmentation, and the loss of nest sites. Olaf has contributed very significantly to the knowledge of the breeding habits and foraging behaviour of Cape parrots in the wild. Olaf Wirminghaus' wife, Dr Colleen Downs, and his research assistant Craig Symes, are concerned with aspects of radio-telemetry as Olaf had shown that the parrots routinely move between fragmented patches of yellowwood forests to seek the fruits of these trees and to visit water sites daily. The forest canopy of yellowwood trees is essential for the breeding, feeding and social interactions of the Cape parrots.

Breeding success at the two sites this past season, based on the counts of juveniles, has been very good, which was most likely associated with the very good rains we have received, following the near drought. Raucous behaviour in the canopy contrasts with generally covert activity carried out at drinking sites well sheltered within vegetation. This has important implications for conservation, and may help explain their unusual daily movement patterns. Fragmentation of yellowwood forests means that birds travel many kilometres to satisfy their energy requirements each day, which might well lead to reduced feeding success and productivity. Illegal capture of Cape parrots in certain areas is still rife and negotiations with conservation authorities and private breeders to initiate captive breeding programmes may be necessary.

Dr Richard Selman, and his partner Margaret Hunter, came to South Africa and have been working on Rupells parrots in Namibia for about six months, in collaboration with Dr Rob Simmons of the Namibian Department of Nature Conservation and Tourism. They have located a breeding population and Richard has recorded the courtship and breeding behaviour of the birds, and their nesting behaviour in the field. Their distribution appears to be localised and the illegal trade is increasing.

Studies similar to those conducted by Olaf and Richard are being initiated on the Brown-headed parrot by Stuart Taylor in the Kruger Park and subsequently in Mozambique. Several graduates (Candice Rickard and Louise Warburton) are intending to undertake field studies of endangered African lovebirds. I refer specifically to a detailed study of the Black-cheeked lovebird in Zambia to follow up on the excellent pilot study of Tim Dodman, and over the next ten years, we plan to study each parrot species in Africa, including those of Madagascar.

We do not work in isolation and have received and accepted invitations to collaborate with African parrot biologists in the USA and Canada, Europe (UK, Italy, Spain, Germany) and of course Africa (including Namibia, Guinea, Ethiopia, Tanzania, Kenya and Mozambique), but far less so than in the first world.

I am contributing to the IUCN Action Plan on parrots, and we are in close association with BirdLife International, the Poicephalus Society and the Lovebird Society in Britain, the Association for Parrot Conservation, the American Parrot Society, IUCN, TRAFFIC, WWF (SA) And of course, the World Parrot Trust.

African parrots are as charismatic as those found anywhere else in the world, but are little studied in the wild, and poorly known in captivity. We will rectify this problem and look forward to receiving your interest and support. I am eager to meet many readers of *PsittaScene* at the Pan African Ornithological Congress to be held in Ghana in December.

PROFESSOR MIKE PERRIN
UNIVERSITY OF NATAL,
PIETERMARITZBURG, SOUTH AFRICA.

USA

TONY SILVA - Update on Smuggling charge

This information was taken from the Internet CITES-L forum

Tony Silva is attempting to withdraw his guilty plea made in a plea-bargain with the government. The government has agreed to accept guilty pleas: on one wild life charge (5 years prison max) and one felony IRS charge (3 years max) and drop around 14 other charges. Many would consider this a fairly "soft" plea bargain. Pleading guilty normally means that a defendant is accepting his guilt and receiving the benefit of some or many charges against him/her being dropped, leading to a shorter prison term or sometimes probation. Despite Silva stipulating that he "wilfully" obstructed justice, the prosecutor surprisingly recommended that Silva receive a 12 point reduction, stating "Defendant has clearly demonstrated a recognition and affirmative acceptance of personal responsibility for his criminal conduct. "A large percentage of US criminal cases end in plea bargains.

Withdrawal of a guilty plea has been attempted before. In January 1993 orangutan smuggler Matthew Block of Miami signed a plea bargain to one felony smuggling charge in the case of the "Bangkok Six" orangutans. Later, Block tried to withdraw from this one-count plea bargain. A prosecution document filed in March 1993 explains the legal position in regard to withdrawal of guilty pleas:

START OF EXTRACT

On February 9, 1993, the defendant appeared before this Court and entered a guilty plea to the superceding indictment. The Court accepted the defendant's plea...

Now more than a month later, the defendant has moved to withdraw his plea...

Defendant in effect requests the Court to turn back the clock of this case...the defendant has appeared before this court and freely and voluntarily entered a guilty plea. Defendant may now regret the path he has chosen for fear of a harsh sentence. However, such fear does not provide a basis for withdrawing his plea. Federal Rules of Criminal Procedure 32(d) provides, in pertinent part, that, ' if a motion for withdrawal of a plea of guilty is made before sentence is imposed, the court may permit withdrawal of the plea upon a showing by the defendant of good and just reason.'

Under Rule 32(d) the defendant has a burden to show "a fair and just reason"for the withdrawal of his plea. In determining whether the defendant has met this burden, the district court may consider the totality of the circumstances surrounding his plea.

END OF EXTRACT

On 24 March 1993 Judge Kehoe rejected Block's effort to withdraw his plea and in April he sentenced

him to 13 months jail.

What attempting to withdraw from a plea bargain could mean in Silva's case:

1. The judge may refuse to allow withdrawal and this decision could be appealed, gaining months or years of time.

2. The government could sign a new, softer plea-bargain (unlikely?)

3. The case would go to trial and the reported "mountains of evidence," including tape-recordings by informants, would enter the public domain. The trial would be fascinating and there would be some very colourful witnesses. This is what I'd personally like to see happen as so much gets covered up when a case is bargained away- files are not open under the Freedom of Information Act. Felony convictions lead to animal dealers losing their licenses to import/export wildlife into/out of the United States. Matthew Block lost his license and Silva could if a felony charge sticks. That's one reason wildlife crime defendants try so hard to get misdemeanor plea-bargain.

Shirley McGreal, International Primate Protection League POB 766, Summerville, SC 29484, USA Ph: 803-871-2280. Fax: 803-871-7988

USA/AUSTRALIA

Egg smugglers sentenced

Parrot smugglers in the USA can expect no mercy at sentencing. Hopefully the tough sentences now being handed out will act as a deterrent. In December William Wegner, 44,of New York was sentenced to five years. He was one of six defendants who pleaded guilty to smuggling wildlife. His girlfriend Theodora Swanson, 36, was sentenced to 37 months in prison for her part in the conspiracy. Wegner recruited a group of former high-school friends to climb trees to rob cockatoo nests of eggs, and then to act as couriers to take the eggs into the USA. So many young people from a certain town wanted to get in on the lucrative business that competing smuggling groups were organised. The eight-year smuggling operation masterminded by Wegner came to an end when Australian national park rangers noticed several young egg thieves hitting the trunks of eucalyptus trees. One inept smuggler was even wearing his smuggling vest back to front when caught - meaning that the eggs would have been crushed when he sat down.

INDIA

A request has been received from Mr Rajat Bhargava for information on the Intermediate Parrakeet *Psittacula intermedia.* A former aviculturist who is now studying wildlife, he would like to know about any birds of this species which may have been exported. Photographs of live or dead birds would help him in his research on this rare and little known parrakeet. All correspondence should be addressed to him: Mr Rajat Bhargava, Research Scholar, Centre for Wildlife and Ornithology, Aligarth Muslim University, Aligarth - 202002 (Uttar Pradesh, India). He has seen trapped birds which may be of this species in its possible region of distribution but needs assistance in identification.

BOOK REVIEW

THE LARGE MACAWS By Joanne Abramson, B.L. Speer and J.B. Thomsen

Several years in production and well worth waiting for!

The Large Macaws is an avicultural publishing landmark. A wide range of topics has been covered by 30 contributors and collaborators, on the subject of the blue macaws and the Ara species up to and including the Red-fronted in size. (Lovers of the small macaws will be disappointed).

The book is divided into four parts - according to the index; nothing in the text indicates this. Part 1 covers Aviculture. Its 264 pages (the majority by Joanne Abramson), include contributions from experts in their field, such as Marc Valentine on chromosomal analysis, Sally Blanchard on behavioural problems and Janet Hanson on chick growth rates. Chapters include Anatomy and physiology, Acquisition, Nutritional requirements, Breeding and Incubation.

Brian Speer wrote Part 2 on veterinary medicine. This section alone will be worth the price of the book for many, especially those who do not have an avian veterinarian in their area. Because Brian Speer is that rare and valuable individual, a veterinarian who breeds parrots, his insight into practical aviculture makes his contribution of exceptional value. It includes chapters on the medical management of breeding birds and another on paediatric management.

This section contains information on anatomy, serum biochemistry, microbiology, viral diseases, papillomatosis, bacterial diseases, chlamydia, fungal diseases, parasites and feather plucking. Much of this is applicable to all parrot species. It is presented in a way which enables any layman to benefit from its contents.

The section on conservation spans 112 pages. Jorgen Thomsen wrote the introduction, in which he describes the factors threatening macaws, such as habitat destruction, also recovery efforts made to date. This is followed by nine papers describing specific conservation projects. These include Hyacinthine Macaws in the Pantanal and the world renowned study of macaw populations in Peru, at the Manu and Tambopata reserves. Of great interest are the weight and measurement tables of chicks reared in the wild, plus a table showing the fate of natural nests in Peru during 1990-1992. This shows that 30 young fledged from 71 eggs; 16 chicks died from malnutrition and 17 from predation and parasites.

Part 4 spans 14 pages on the subject of anthropology. The index indicates the wealth and variety of information; 23 pages of three columns identify the subjects. In addition, at the end of each chapter there are pages of references showing the literature cited. What a rich source of further study these provide!

Throughout the text are articles from contributors, some of which have been published elsewhere, with an application to many other species.

The parrot owner who does not keep even one macaw will find an enormous amount of relevant information.

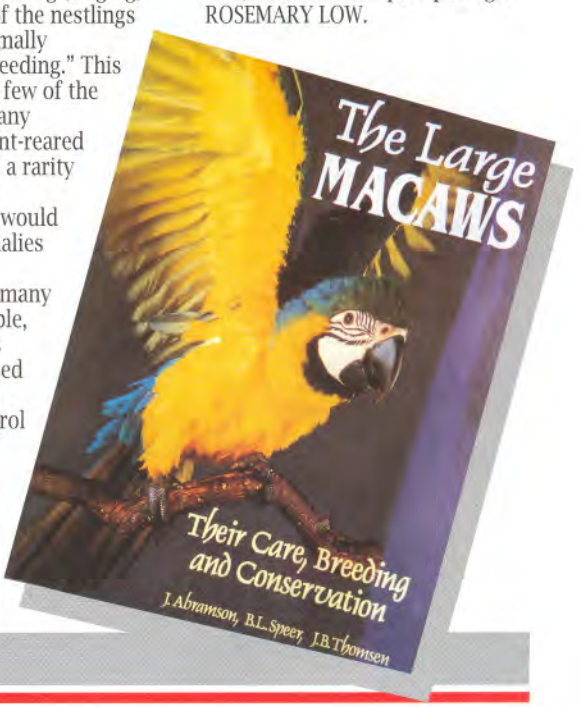
No one will agree with everything they find in a book as long as 534 pages. I found an oft-repeated myth, "Banding (ringing) requires removal of the nestlings from the nest, normally resulting in hand feeding." This is not so. Probably few of the contributors have any experience of parent-reared macaws, which are a rarity in the USA.

Stricter editing would have deleted anomalies resulting from contributors from many sources. For example, while Brian Speer's definition of a closed aviary concept (basically, the control and monitoring of disease) is that usually accepted, another contributor described it as an establishment where no visitors were allowed - making no mention of disease control.

The standard of the 70 line drawings and the 350 colour photographs is high. The photographs were chosen from 6,000 received for inclusion! Printed on glossy paper, page size 8in (21cm) by 12in (30cm), with colour tints enlivening some of the few pages without illustrations, this book is a joy to dip into. The only problem is its weight!

I consider this title to be a milestone in avicultural publishing history, representing a work of importance as the result of co-operation between those with expertise. The Large Macaws is available only from Raintree Publications, PO Box 1338, Fort Bragg, California 95437, USA (tel (1) 800 422 5963, fax (1) 707 964 1868). It costs $170 plus postage.

ROSEMARY LOW.



LETTERS TO THE EDITOR

Members write

Dear WPT

Before Christmas 1994 this bird was flying free in Africa. Now, less than 9 months on, the only feathers it has are a few around the face and head. Even the down feathers have been plucked out; can you imagine the stress levels in this bird, to mutilate itself in such a way?

It has been subjected to surgical sexing on two occasions - imagine the stress involved in that alone, not to mention the handling and the journeys involved, particularly for a newly imported bird. Why the need for two invasive operations? Why do owners not keep the sexing certificates? Surely this should be common practice and the responsible thing to do with any bird which has been surgically sexed.

It has changed homes several times, in the hot weather it was subjected to the horror of a noisy electric fan blowing cool air right beside its cage in a birdroom.

If I had not taken this bird it would have ended up at a bird sale - imagine the trauma involved for this wild-caught bird. It is a mature bird, no doubt separated from its partner when it was caught; the chances are it has bred in the wild.

Before we start telling people in third world countries what they should and should not do with their natural resources we should get our own house in order. It is time we became a more responsible, caring society. If we are going to partake in the care or breeding or dealing of exotic birds or any animal for that matter; then treat it with the respect, the understanding, the care and compassion which every living creature deserves.

We are supposed to be the superior species, but judging by the way exotic birds are wheeled, dealed, abused and subjected to stresses beyond that which they can cope with, I think it is we who are the lesser species.

If the developed and educated countries do not take a far more responsible approach to the care, understanding, preservation and conservation of exotic birds and the wildlife which we are privileged to live alongside, our world is going to become a very sad place; we cannot survive ourselves without the whole spectrum of the animal kingdom.

We have charities that strive to preserve and conserve creatures and birds in the wild but perhaps some of their money should be spent on cleaning up our act in this country; educating pet owners, breeders, dealers and pet shop owners here. That is perhaps a responsible way to conserve and preserve. Millions of exotic birds have been imported into our country over the years - where are they? Parrots are potentially very long-lived. We should have far more birds than the demand. Perhaps this speaks for itself. Thousands of birds die of stress and stress - related conditions; these are intelligent and emotional creatures who cannot cope with this abuse by man.

Dealers premises, commercial premises, commercial breeders and pet shops should be inspected by someone who knows about birds (most local authority inspectors couldn't tell a sparrow from a pigeon, let alone know anything about the care and welfare of exotic birds). Standards should be set by an independent organisation and those who fall foul of these standards should be made to operate in a more responsible way: those which pass the inspection should be given an award and the general public urged only to purchase from those earning such an award.

It is no good burying our heads in the sand: cruelty does go on. Birds are abused, they often live in appalling conditions; they are subjected to huge amounts of stress. Perhaps ignorance of their needs is to blame in some cases, but things must change before it is too late. Trapping is still the biggest threat to many species of exotic birds and wild stocks cannot sustain man's greed.

Pam Fryer

EDITOR'S NOTE:
Recently, many members have converted to being 'Fellows', or life members. We think this may be because, in our eighth year, it is clear that the World Parrot Trust is here to stay, and is a serious organisation.
May we invite other members to become life members, and thus substantially increase the help they are giving to the parrots of the world?

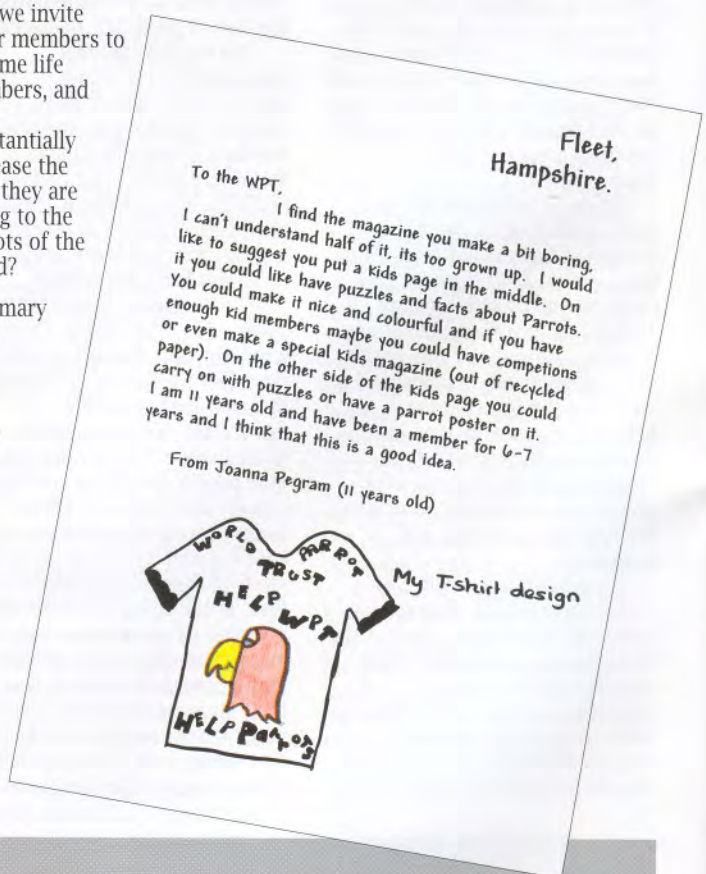
Rosemary Low

Dear Sir or Madam,

I currently have a Deed of Covenant in favour of the Trust and am due to pay my subscription on 1 July 1996. I would like to cancel this with immediate effect because I have decided to become a life member. I enclose a completed application form. I would also like to make use of the Gift Aid provisions and should be grateful if you would send me the appropriate form.

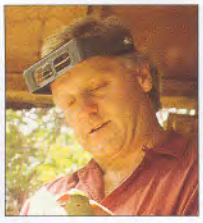
The conservation and welfare of parrots is something I consider to be very important (and so does my parrot). I am impressed by your cost-effective use of funds and also by your emphasis on protecting the environment and educating the local people in your conservation projects. I also thoroughly endorse Michael Reynolds' comments about the welfare of captive parrots in the recent edition of *PsittaScene*.

With best wishes
Yours faithfully,
Jane Moore
Sevenoaks, Kent.



YOU CAN HELP US...

Charles A Munn III PhD
Founder Trustee WPT-USA. Senior research biologist. Wildlife Conservation Society.



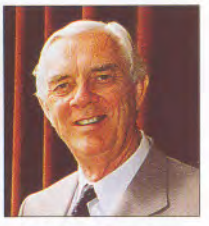
Andrew Greenwood MRCVS
Founder Trustee of WPT-UK and WPT-USA. Zoo and wildlife veterinary consultant.

Audrey Reynolds
Director, Paradise Park. Founder Trustee of The World Parrot Trust UK

Rosemary Low
Author of 'Endangered Parrots' and 20 more parrot books. Editor of PsittaScene.

Wm. Richard Porter MD
Director of the International Aviculturists Society. Founder Trustee of WPT-USA.

David Woolcock
Curator, Paradise Park. Founder Trustee of The World Parrot Trust UK.



Michael Reynolds
Founder of The World Parrot Trust, Hon. Director of WPT-UK, Trustee of WPT-USA.

...SAVE THE PARROTS!

Lear's Macaw

Echo Parakeet

Red-tailed Black Cockatoo

St. Vincent Parrot

Red-vented Cockatoo

Red-tailed Amazon

Hyacinth Macaw

Join us.

Become a member of the World Parrot Trust, receive our *PsittaScene* newsletter, know that you are actively contributing towards our aims.

Help fund our Projects.

We are currently supporting parrot conservation, education and welfare projects in Africa, Australia, Bolivia, Brazil, the Caribbean, Ecuador, Mauritius, New Zealand, Paraguay, Peru and the Philippines. Your generosity towards the parrots could help us expand current schemes and start new ones.

World Parrot Trust

Aims of the Trust.

The survival of parrot species in the wild, and the welfare of captive birds.

These aims are pursued by:-

Educating the public on the threats to parrots.
Opposing trade in wild-caught parrots.
Preserving and restoring parrot habitat.
Studying the status of parrot populations.
Encouraging the production of aviary-bred birds.
Creating links between aviculture and conservation.
Promoting high standards in the keeping of parrots.
Supporting research into veterinary care of parrots.

YES, I WANT TO HELP SAVE THE PARROTS OF THE WORLD

SUBSCRIPTION RATES (please tick)

- ☐ UK and Europe (Single) £15
- ☐ UK and Europe (Family) £20
- ☐ Fellow (Life Member) £250/US$400 Corporate (Annual)
- ☐ All Overseas Airmail £17/US$25 (or equivalent currency payment by Access/Visa/MasterCard preferred)
- ☐ Plus donation of £/US$.....

Name.....
Address.....
.....
.....
.....Zip/Postcode .....
Please charge my Access/Visa Acc/No.
☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐
Exp. date.....Amount £/US$ .....
Signature.....
OR: I enclose cheque payable to the WPT ☐

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

PLEASE SEND COMPLETED FORM TO 'WORLD PARROT TRUST' AT:-

UNITED KINGDOM
Glanmor House, Hayle, Cornwall TR27 4HY

USA
Cynthia Webb, PO Box 341141, Memphis TN 38184.

BENELUX
Mrs J. Fiege, Graafseweg 37, 5451 NA Mill, Netherlands

CANADA
Mike Pearson, PO Box 29, Mount Hope, Ontario LOR 1WO.

DENMARK (SCANDINAVIA)
M Iversen, Alsikemarken 48, 2860 Soborg.

FRANCE
J & G Prin, 55 Rue de la Fassiere, 45140, Ingre.

GERMANY
G & D Harries, Vodestr. 39, 44625 Herne.

ITALY
Freddie Virili, via Matarus w.10, 33045 Nimis, Udine.

AUSTRALIA
Peter Sipek, 1 Rossell Pl., Glenfield, NSW 2167.

AFRICA
Mike Perrin, Private Bag XO1, Scottsville, Natal, South Africa.

SWITZERLAND
Lars Lepperhoff, Sagemattstrasse 31, 3097 Liebefeld.

PARROTS IN THE WILD

CARNABY'S COCKATOO
Calyptorhynchus latirostris

Carnaby's Cockatoos perched high in a Eucalypt tree, North of Perth, Western Australia. Two females above, two males below

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

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