Photo courtesy Loro Parque

Red-Browed Amazon Parrot EEP Scheme

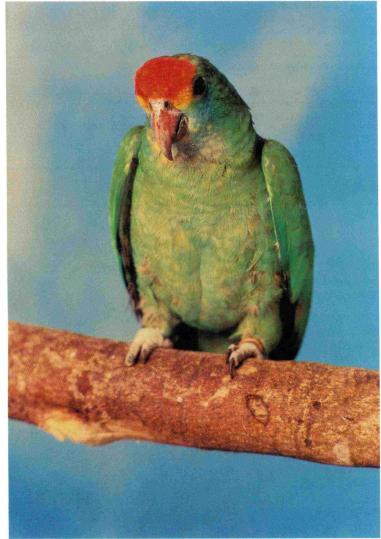
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he Red-browed Amazon Parrot Amazona rhodocorytha is endemic to the country of Brazil where it is found in a narrow coastal strip down the eastern sea coast of the country. It is found in the state of Alagoas and f rom Bahia and eastern Minas Gerias, south locally to Rio de Janeiro. Its preferred habitat is generally lowland humid forest although it has also been recorded at altitudes of up to 1,000m in the interior of undisturbed forests. Most reports refer to this species being located mainly in primary forest, with little sign that it can adapt to areas which have suffered large scale disturbance.

The primary threat against the survival of the wild population of Redbrowed Amazon has come from longterm habitat clearance across its natural range. A trade of wild-caught birds has existed in the past, but Brazilian national legislation has now stopped any trade in these birds being exported from Brazil. A limited local trade in the removal of nestlings for sale as pet birds within Brazil has continued in recent years but only in very small numbers and this is also now being tightly controlled. Probably the most clear need for in situ conservation of this species is to secure protection of some of the key regions of its habitat. The most important region, Bahia, is now protected but other areas of its range are still vulnerable to disturbance.

In size the Red-browed Amazon measures around 36cm [14.4 inches] in overall length and weighs around 450-480 grams, making one of the larger species of *Amazona* which is found in mainland South America.

The coloration of this species is par-



Red-browed Amazon Parrot Amazona rhodocorytha.

ticularly beautiful. As with most Amazona species, the main body plumage is green with the most striking visual feature of this species being the color on the head. The forehead and crown is red. The cheeks and throat are blue and in between the red of the forehead and blue of the lower face is an area of yellow which covers the lores. The extent of this yellow colour is a highly variable feature which on some birds is only a few feathers while on others all of the lores and the top of the cheeks are completely yellow. In our experience with a large number of these birds, the amount of yellow is a variation among individuals and does not represent any indication of sexual dimorphism.

In aviculture the Red-browed Amazon has always been a rare bird which was exported in small numbers from Brazil in the past. The captive population in Europe is therefore based upon a group of founder birds which have been in captivity for many years. yet only a small number of these birds have initiated reproductive behavior during this long period.

The small number of founder birds that *did* begin to breed have proved consistent in their breeding for several years which has produced a first generation population which is very closely related. These first generation birds were sold by the main private keeper who was breeding the species, often with little information on the exact parentage.

As birds have passed from keeper to keeper around Europe, often a new bird has been purchased by an aviculturist in the belief that it is unrelated when in fact the new bird is just as closely related as the other birds already held. Indeed, most current first generation pairings are of birds both from the same set of parents.

The overall picture for the future of this species in captivity was therefore not very hopeful with a founder population showing little breeding activity despite many years in captivity and with a few first generation birds being reared and, in most cases, paired to a clutch-mate.

When the results of a survey of Amazon parrots in European Zoos was then analyzed to see which species were most important for captive population management, the Red-browed Amazon was a very clear choice. Loro Parque was the obvious institution to coordinate this EEP scheme because a large number of Red-browed Amazons are part of the collection owned by the Loro Parque Foundation.

A proposal to form the EEP for the Red-browed Amazon was presented in early 1994 and this was approved in late summer of the same year. The first step was to more clearly identify the captive population of birds in Europe which could be included in a managed population. All known holders of this species who had been identified in the European survey [including private sector breeders] were sent studbook registration forms and by early 1995 the first edition of a European regional studbook for the Red-browed Amazon was produced (for the year ending December 31st 1994).

The first edition of the studbook listed 71 living birds from collections willing to be included in the EEP. Several more private keepers had also made initial contact but have proved slower to commit to full membership of the EEP scheme.

When reviewing the population it was clear that a great many founder birds were held in zoological collections without breeding success. Also, several collections held only single birds which were important founders. Moving and pairing some of these single birds would prove to be difficult.

Some single birds were confiscated by national authorities and placed with a zoo and were therefore subject to many restrictions on their movement to another country. Also, as almost no birds were being bred, no collections had "surplus" birds but rather everyone wanted to receive birds and nobody was willing to move a bird that they already had.

If the EEP scheme were to succeed, the most important first step was to initiate more breeding from previously unproductive founder birds.

The emphasis was again clearly on Loro Parque (which at this time held 25 of the population's birds) and also on Palmitos park (which held 12 birds) to stimulate breeding from their birds. The other European collection which held a substantial number of birds, Walsrode with 12 birds, had already recorded breeding success from their birds in 1993 and 1994.

In the early months of the 1995 breeding season at Loro Parque we had already taken the initiative to place around 20 of our Red-browed Amazons, those which showed least interest in courtship or breeding, into a large communal flight cage. Along the back wall of this cage, nine breeding cages were adjoined, each measuring 3 meters in length [approx. 10 feet] with a nest box at the far end.

Very close attention had to be paid to the behavior of the birds in this communal situation, even though we had undertaken this before the start of the breeding season to reduce the chances of aggression to a minimum. Actual aggression was not a major problem but we did note that two or three birds seemed to be intimidated by these circumstances and had to be removed from the communal situation. These birds which were removed after a few days, were kept separately and later given mates after the main pairing exercise had been completed.

Carefully, pairs which showed pairbonding behavior were separated from the communal group and the result was that in this same year Loro Parque recorded its first breeding success with the Red-browed Amazon. Five chicks were reared to independence from two different bloodlines. At the time of writing this article a further 13 chicks are being reared at Loro Parque from the current breeding season and we feel confident of increasing this success over the next few years.

Meanwhile, at Palmitos Park, a first time success was also recorded for this collection in 1995 when a single chick was foster reared. Early reports from the breeding centre at Palmitos in 1996 reported further breeding being achieved.

In the years since the EEP scheme was initiated for the Red-browed Amazon, a European regional studbook has been formed and breeding has been stimulated from several formerly unproductive founder birds in the population Over 30 Red-browed Amazon chicks have been successfully bred in 1995 and 1996 within the EEP population (18 of these at Loro Parque).

With a number of young birds being produced within the population it will allow increased opportunities to move and exchange birds to form unrelated pairs and hopefully bring all known founder birds into a potential breeding situation.

Given the uncertain prospects for this species in the wild, an established and well managed captive population must be considered of great conservation value for the future.

