

# A successful season for the Lear's Macaws of Serra Branca



Sam Williams

By SAM WILLIAMS

**With an estimated wild population of around 240 individuals the Lear's Macaw (*Anodorhynchus leari*) is very much on the brink of extinction. There can be no doubt that saving this species will require broad and far-reaching conservation efforts and that these will only be achieved through considerable work, co-operation and investment. In the 2002 season the combination of successful nest protection and sustained rains helped the Lear's of the Serra Branca (White Mountains) fledge 25 chicks. This is great news for the population and clearly there is a lot of potential for future conservation efforts.**

At the time of my visit to the Serra Branca nest cliffs I was not convinced that the continual rain was such a good thing but the effect on the habitat was unquestionable. The Lear's Macaw live in a habitat known as the "caatinga" which translates to white forest and in this region of north east Brazil rain is typically limited and unpredictable. During long periods without rain the vegetation of the caatinga loses all its foliage and the area does indeed appear white. However in 2002 the caatinga appeared lush green and very productive. Licuri palms (*Syagrus coronata*) are found in this habitat and the kernels of their nuts form around 90% of a Lear's Macaw's diet. The men who are responsible for guarding the nests have a great understanding of the local ecology and they believed that there was a good crop of Licuri fruit in the region because of the high rainfall. They believed that this was the main reason the Lear's Macaws were having such a productive season.

The BioBrazil foundation employs guards who protect the Serra Branca nest cliffs around-the-clock throughout the Lear's Macaw breeding season. During my visit I was fortunate enough to learn some



Protected Licuri palms, as they take many years to grow.

Portuguese and get to know these men and their families. They take great pleasure from being outdoors surrounded by fascinating wildlife just as I do and they are all very proud about the conservation of the Lear's. One of them in particular is very passionate about the cause and he carves natural wood or paints pictures of the macaws on anything he can lay his hands on, paper, wood, t-shirts and even his house. I soon learnt not to leave things lying around! It is through their efforts that the nesting Lear's Macaws are protected from trappers and when you consider there was no evidence of poaching during the 2002 breeding season, they have every right to be proud.

The threat of poaching is ever present because unscrupulous collectors worldwide still generate a demand for these birds. Raising public awareness locally has without doubt played an important role in protecting the Lear's. This has been achieved through poster campaigns being run by the various groups involved and within the local towns just about every shop or bar has one of these posters on their wall. Educating the local people about the Lear's Macaw's plight and conservation



efforts has given them a lot of pride which has also helped raise awareness within the community of the fact the nest cliffs are continuously protected. This is almost as important as the guards actually providing the protection. Ultimately though, it is the demand for these rare species that is the problem and it can no longer be socially acceptable among parrot keepers to keep such endangered species.

## A typical day in the white forest

Even before first light there are muffled macaw squawks escaping from deep inside cavities on the rock walls of the Serra Branca. As dawn creeps upon the scene, pairs of Lear's appear and leave their roost or nest holes often joining others in flight above the cliffs where they call and interact with each other before flying purposefully towards their feeding sites. As the Lear's head out, the Blue-fronted Amazons (*Amazona a. aestiva*) begin their attempt at a dawn chorus. These social birds fly from tree to tree around the small valleys forming large but fluid groups and all the while making amazing and entertaining sounds.

After having flown over 12 kilometers from the cliffs some of the Lear's Macaws begin to arrive at the feeding station where food is provided everyday at a safe location. The Lear's are able to cover much greater distances in search of food but in times of low Licuri availability this has occasionally caused conflict, because at these times they have been known to raid the crops of local farmers. This of course is not the case on the Serra Branca ranch and there they are able to feed without the risk of causing



problems. Normally a pair will land in the fronds of the Licuri and then climb down towards the raceme (bunch) of fruit. They will then bite off a stem of 8 to 20 or more fruit and either sit in the palm or fly to a nearby tree before working their way through each fruit. It is not the fruit itself that the birds are interested in and this is quickly stripped off to reveal an incredibly tough nut. After rotating the nut within its beak a Lear's will split it clean in two revealing the white meat, which they scoop out and eat before moving on to the next fruit. Interestingly the macaws often move a palm frond along their beak when attacking the nut. Whether this is to clean their beak of slippery juices left by the fruit or to pad their nut cracking effort is not known but it is a clear example of tool use.

Once satisfied with their collection the breeding adults will return to their nests to feed their chick(s). I would generally go to the nest cliffs with Jose, one of the guards. This was great for me as he would inevitably see a track of some kind that I had walked straight past. Then as we sat up a tree waiting for the birds to return I'd try and learn as much as I could from him whether it was about Lear's, the mammals

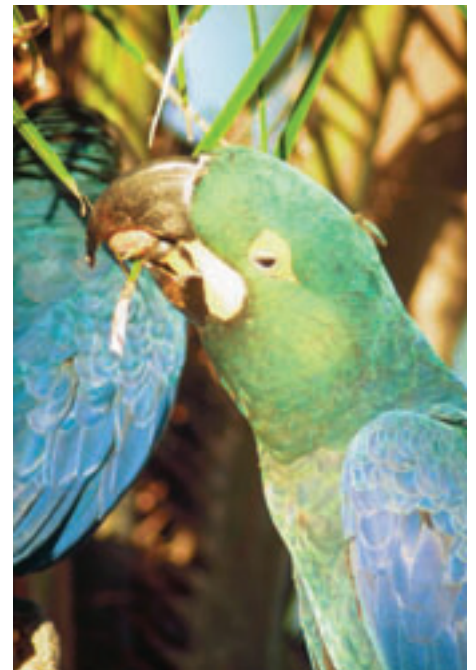


or just life in the caatinga. Upon return the Lear's would often perform a display, flapping their long wings and flying in circles high over the nest cliffs before flying directly onto the entrance ledge of their nest. As my visit was fortunately during the fledging period we often got to see the maturing chicks as they would look out when they heard their parents arriving with their first feed of the day. Only in the very last days before fledging did we get to see the chicks being fed at the nest.

Like most parrot species the Lear's are most active in the early morning and evening and during these times they are busy feeding. In the middle of the day though they relax and groups of 20 or so would often gather in a few trees to hide away from the hot sun. This was the same for the other parrot species of the caatinga but in the evenings the activity at Serra Branca was at its highest. As in the morning the Amazon parrots would be socialising - loudly! The Lear's would be returning to their nests, or roosts in the case of non-breeding birds. They are incredible agile flyers and would fly around the cliffs in displays but also often dive down onto each other. Whether this was play or territorial fighting is difficult to say. There are two species of Conure found at Serra Branca. These are the Blue-crowned (*Aratinga acuticaudata*) and the Cactus Conure (*Aratinga cactorum*). Both would roost on the cliff tops and would gather in huge chattering flocks swooping together as a black cloud. This was amazing to see especially on a night with a good sunset where the few clouds are turning pink and the rock walls of the Serra glow orange! On a lucky night you might also get to see a pair of Illiger's Macaws (*Ara maracana*) flying over. That would be a real treat because in my opinion they are the most beautiful parrots in the caatinga.

Once the Lear's chicks fledged they could often be seen at the feeding site along with their parents. They can easily be told apart from their parents as the yellow on their face is paler and they are very clumsy. On more than one occasion I saw a chick almost fall out of a Licuri palm and nearly take one of its parents with it. At first they show no interest in the fruit but over time it was possible to see a progression up to the point they could get down to the nut. However, I suspect it would be quite a while before they actually managed to split one open to get their own food.

The 2002 breeding season was clearly a great one for the



Lear's Macaw. Not only had the men at Serra Branca found no sign of poaching, the Lear's had taken care of themselves and had been very productive. The continued supply of food on the estate probably contributed towards the success too. With continued attention to public awareness and maintaining the guards at Serra Branca the threat of trapping at this site should be kept as low as possible. What has to be the next step in the conservation of these birds, at least in terms of efforts on the ground, is to learn more about their biology. Only with greater insight will we be able to determine the factors that are influencing their reproduction and then look for ways to minimise such limits in order to increase the number of wild birds as quickly as possible. The conservation of the Lear's Macaw as a whole will certainly require a lot of effort but the result from the 2002 season clearly indicates that saving this remarkable species is achievable. However next year is predicted to be an El Nino year which usually brings drought to the region!

Sam wishes to thank the World Parrot Trust, Disney Wildlife Conservation Initiatives, BioBrazil and the North of England Zoological Society for greatly aiding his visit. The experience provided an excellent opportunity to have a look at the Lear's Macaws and Serra Branca to determine what research could be attempted in the future. As a result Sam is currently proposing to conduct a Masters research project through the University of Stirling, Scotland. This project will investigate Lear's Macaw ecology and behaviour. It will also look at the community's views on conservation.

*If you would like more information and to make a donation for this essential research, please contact us at the usual address.*

