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The Red-fronted Macaw A Conservation Priority (Part I)

By Leticia A. Alamia, Ph.D. and John P. O'Neill, Ph.D.
Baton Rouge, Louisiana

Conservation efforts today are most often directed at protecting and preserving, as much as possible, large areas that contain intact ecosystems. Declining numbers of dramatic animal species often serve to draw attention to a particular area and direct the public and scientists alike to the need for protection or concern. All the plants and animals inhabiting such an area benefit from the protection. Some species are naturally restricted in their distribution, either because their preferred habitat is naturally limited or distributed in patches or because they occupy a habitat that has been heavily used and altered by people for a long time. These species often decline and almost disappear before their plight comes to anyone's attention. The Redfronted Macaw *Ara rubrogenys* and its strange, desertic environment in Bolivia are such a species and such a place.

In June, 1994, we were asked by AFA to investigate the potential for initiating a study of the Red-fronted Macaw in Bolivia as part of the AFA's conservation efforts. In a two-part series of articles, we will introduce the Red-fronted Macaw and what is known about its natural history to those who may not be familiar with this spectacular bird, and also describe some of the conservation concerns connected with it.

Identifying conservation priorities for an endangered or threatened species involves looking at the problem from various perspectives. Some things to be considered are habitat requirements, past and present distribution, and population size. In Bolivia, as in many tropical countries, the wet forests have, until recently, escaped heavy usage by man be-

cause heavy rainfall and flooding make life and work difficult. In Bolivia, immense mineral resources have also helped deflect development from the timber of the forests. Compared with humid forests of all kinds, tropical dry forests everywhere have always been more heavily populated, and cleared and used for agriculture and livestock since before the coming of the Spanish. In modern times, with expanding human populations and world beef markets, dry forest areas have been even more extensively exploited. The plants and animals of these little known and little appreciated areas have often diminished and sometimes disappeared while the world's attention was drawn to the plight of seemingly more dramatic places and species.

So how does this apply to the Red-fronted Macaw? An initial part of our mission during this exploratory trip to Bolivia was to find the places, the people and the publications dealing with this species. We found that like the bird itself, the publications, mostly in the form of reports (* see list at end of article), were sparse. If you refer to Forshaw's 1973 PARROTS OF THE WORLD, you will find that he reports that the Red-fronted Macaw is one of the least known of all South American parrots, that there is no published information about its habits, and that as late as 1970 it was thought to occupy forest! In the intervening 24 years only a little more has come to light.

Despite reading various reports about the habitat of the Red-fronted Macaw and descriptions of its appearance, we were not really prepared for our first

sight of these birds in the wild. The description of a "pale, olive-green bird with red on the forehead, crown, spot behind the eye and thighs; greyish blue on wings and tip of tail and pinkish facial skin traversed by blackish-brown lines of small feathers" did not come close to what we saw. In the afternoon sunlight flooding a dry, interandean valley our first flock of macaws took us all by surprise. Nine birds suddenly appeared overhead calling loudly and flying fairly closely together. They seemed to glow as they sailed along overhead showing us flashing patches of brilliant, fiery red-orange contrasting with the blue of the wings and tail and the soft green of their bodies. It was a truly exciting moment for us all. Later we would see several other groups, but none presented themselves quite as spectacularly as the first ones with the sun highlighting their beautiful colors. Wow, what a great bird--certainly a species deserving of a better outlook for the future than it is currently offered!

Actually, there are a number of conservation organizations in Bolivia interested and concerned with the species and trying to promote research. They are hampered by limited research forces and funds spread thinly over many conservation concerns. Two of these conservation groups, the Fundacion Amigos de la Naturaleza (F.A.N.) and Armonia (Harmony, a bird conservation group) are located in the Department (State) of Santa Cruz, an area where there are some populations of this macaw. These two organizations were extremely helpful by putting us in contact with local people already involved in working with the macaw as well as providing us with copies of little known and unpublished reports and censuses.

These censuses indicate that the existing population of wild birds may be quite low (one census indicates as low as 1000 birds). They also offer the hope that because only a few areas have been carefully examined that a larger population may be revealed by expanded and intensified research efforts.

So what will it take to determine approximately how many birds are out there? A quick visit to the species' preferred environment will give you a clue. First let us look at Bolivia, country of 1,098,581 square kilometers but with a population of less than 7 million! Most of the people are concentrated where agriculture, industry or major cities exist. Even the major cities do not have large

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human populations--the governmental capitol, La Paz, includes little more than one million inhabitants. This means that there are large areas in Bolivia where no one or only a few people live. Roads are scarce and many necessitate a four-wheel-drive vehicle, and even then often require a slow pace. Even though, as far as we know, the Red-fronted Macaw utilizes some of the more inhabited areas, there are still some very inaccessible places that need to be checked out. One of our recommendations is that an aerial survey be used to locate promising areas. Because this macaw is said to use riverside cliffs for nesting and possibly for winter roosts, it should be possible to identify the most likely cliff areas from the air and then plan "on-the-ground" investigations accordingly.

At ground level, the chosen home of the Red-fronted Macaw consists of wide, flat river valleys bordered by steep rocky hills covered with a formidable dry woodland. Dry, thorny shrubs, low leguminous trees (related to and resembling the southwestern Mesquite tree), and dramatic and beautiful columnar cacti are the most prominent vegetative components. In many ways, this area re-

sembles parts of the arid, southwestern U.S. and Mexico except that this is at about 4000 feet in altitude and with a steeper topography, denser ground cover and reduced accessibility. It is not the kind of place where most people imagine they will see a macaw--maybe that is why the birds are still surviving.

We were in Bolivia during the South American winter (our summer) and so were there during the coolest part of the year. It was still pretty warm most of the time. The South American winter in the lower, more tropical areas is somewhat like winter in extreme south Texas with extended periods of mild, warm weather interrupted by an occasional cold front. The cold fronts are less frequent than ours and instead of being called a "norther" they are called a "sur" which in English would be a "souther," because their source of cold in winter is the Antarctic! Without the "Weather Channel," the arrival of a "sur" can be really surprising as we discovered one evening in Santa Cruz when we entered a restaurant dressed in summer clothes and emerged an hour later into cold wind and rain! Despite the sudden onset of these fronts, the winter weather is generally mild and pleasant in this area and an excellent time to be outdoors. The breeding season research on the macaws will, of course, have to be done during the blazing hot summer and may not be quite as easy on the research team.

Some of the favored wild food plants of the Red-fronted Macaw, as indicated in studies done by several different ornithologists, consist of the large pods of *Prosopis kuntzei* and *Prosopis chilensis*, Mesquite-related small trees, as well as the fruits of many cacti and the seeds of various grass species. We observed two tame, wing-clipped Red-fronted Macaws feeding in one of these *Prosopis* trees in a farmer's front yard. Scientific reports as well as our conversations with several farmers indicate that the macaws feed readily and most commonly on the ground. They are known to glean corn and peanut fields after the harvest is finished. No one we talked to seemed to have any objections to their foraging in these fields. Some reports indicate that they occasionally enter the fields to eat when the corn is in the milk stage. Anyone who has observed how macaws feed in captivity, taking one bite and dropping that piece to go on to another piece can imagine what kind of damage they would do to live corn. It is easy to

understand that someone depending on this corn for food in the winter might not take kindly to the depredation. Our general impression and that of other researchers, however, is that local people are not harassing the macaws or other birds. The general tameness of wild roadside birds that allowed us to approach quite closely and observe them is further evidence of this. We watched a fearless group of about twenty Blue-crowned Conures *Aratinga acuticauda* feeding on a farmer's threshing floor which was only about 100 feet from his house. They were walking around calmly, picking through the piled straw and fallen grain much like house sparrows or cowbirds might do in the U.S., but exhibiting even less timidity.

The primary areas known to be inhabited by the Red-fronted Macaw are dry interandean valleys drained by large to medium-sized rivers. These valleys, as we have mentioned, have been developed as agricultural regions with the primary crops being corn, amaranth, peanuts (groundnuts) and some barley and fruit. In the more heavily populated areas, cattle, sheep and goats have overgrazed many of the slopes above the small agricultural communities causing serious deterioration of the plant community and extensive soil erosion. Although these changes cannot benefit anyone, they are probably not the major cause for the reduction in the macaw population. The food-producing trees and cacti that the macaws prefer are not as directly affected by overgrazing as are the smaller understory plants. However, growth of these larger plants is affected by the trampling and grazing of the livestock and over time these activities will also affect plant regeneration and ultimately reduce the availability of food for the macaws.

Even where natural foods are abundant, it is probable that the macaws would continue to feed in the fields where they have been treated tolerantly by the natives and have become conditioned to a readily available food source. Besides, how many parrots or macaws can pass up a peanut -- to say nothing of a whole field scattered with peanuts! Currently, agricultural activity provides the macaws with an extra source of food if natural foods are not in abundance, but increasing human population pressure may alter this tolerant attitude. If a lack of food and conflicts with man over consumption of crops are not the reasons for the reduced population of Red-



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fronted Macaws, what are some other possibilities?

All of the researchers that have looked at this species indicate that the birds use cliffs, not only for nesting sites, but also for roosting during the winter. Various ornithologists have searched for nests even in areas said to be regularly used by Red-fronted Macaws for nesting; but as far as we can determine, no one has actually found an active nest or studied nesting birds. Immature birds (identified by their lack of red on the forehead and their behavior) have been seen feeding with adults or begging food from them during the months of May and June in some areas, so we can assume that nesting is going on somewhere.

It is said that Red-fronted Macaws have very specific requirements as to the appearance and location of the cliffs that they prefer. Some ornithologists have stated that the desired cliffs must overhang permanent running water and that they are usually of hard sandstone which is reddish to yellowish in color. Desirable cliffs are said to be high and sheer, over 120 feet tall and free of any vegetation. Just before sunset one day we observed a small group of Red-fronted Macaws circling and calling near a large cliff fitting that description. The birds were acting as if they were going in to roost for the evening. However, after much calling, sitting in trees near the cliff and circling flights, they suddenly seemed to change their minds and flew off down the river. It is possible that some human or predator activity near the cliff frightened them. It is equally possible that they routinely move up and down the river before settling on a place to spend the night. A more desirable cliff may have been around the next bend in the river!

Because there has been little scientific investigation of the Red-fronted Macaw's use of cliffs for nesting and roosting, it is difficult to establish how the incidence and vulnerability of this geographic feature affects the population of this endangered bird. However, it is clear that this is one critical piece in the puzzle of the Red-fronted Macaw's life history that demands the serious attention of those concerned with the conservation of this beautiful bird. See a future issue of the Watchbird for the conclusion of our adventures in search of the Red-fronted Macaw and a brief outline of a proposed conservation and research program aimed at learning more

about the needs of this species and promoting its survival.

REFERENCES

- *Boussekey, M., J. Saint-Pic, and O. Morvan. 1991. Observations on a population of the Red-fronted Macaws *Ara rubrogenys* in the Rio Caine valley, central Bolivia Bird Conservation International 1:335-350.
- *Clarke, R., and E. Duran P. 1991 STATUS REPORT: The Red-fronted Macaw (*Ara rubrogenys*) in Bolivia: distribution, abundance, biology, and conservation. Unpublished report to Wildlife Conservation International (NYZP) and the International Council for Bird Preservation (ICBP).
- Forshaw, J.M. 1973. Parrots of the World.

Lansdowne Press. Melbourne, Australia. Pp. 367-368.

Lanning D. 1982. Survey of the Red-fronted Macaw *Ara rubrogenys* and Caninde Macaw *Ara Caninde* in Bolivia, December 1981 - March 1982. Unpublished report to New York Zoological Society and International Council for Bird Preservation.

*Ridgely, R.S. 1981. The current distribution and status of mainland neotropical parrots. Pp. 223-384 in Pasquier, R.F., Ed. Conservation of New World Parrots, Washington, D.C., Smithsonian Institution Press for the International Council for Bird Preservation (Techn. Publ. 1).

*Copies of these unpublished reports are available as part of our report filed with the AFA. ➔

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