

# the Red-fronted Macaw

*Ara rubrogenys*

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## Part II

**T**he Red-fronted Macaw (sometimes shortened to RFM here) was introduced into the U. S. from its native Bolivia in the early 1980s. It has only one fairly small area of habitat in Bolivia, unlike many other macaws which have widespread multiple locations. This fact creates a serious problem wherein the small current wild population is even more vulnerable to habitat destruction and environmental degradation.

The exact location of the habitat seems to be described differently in every reference. Forshaw (1) mentions nesting sites "in crevices in cliff faces" and "found on lower slopes of the eastern Andes." This would make a lot of sense because their flying ability is amazing. They seem to be able to hover like a hummingbird in an effortless manner of speed and maneuverability much like large swallows. Cliff and mountain dwellers would certainly need this kind of maneuverability. Abramson (2) locates them in south central Bolivia, but in any case, it is a very small area, and the bird numbers are miniscule. It seems to be agreed by all that their habitat is a subtropical area of different altitudes constituting a desert type flora.

It may also follow that this type of habitat would have much lower humidity than is ordinarily associated with "tropical" parrots. This needs to be considered in planning artificial incubation. This sort of desert-dwelling macaw will no doubt be exposed to a considerable amount of cool-to-even-cold weather, especially at night. In Florida, they become very animated and active when the weather grows cooler. They love

rolling over and over in standing water and don't seem to care how cold the air is when they do it.

It is believed that the Red-fronted Macaw's diet in the wild may include a lot of ground feeding on crops, and while I am sure that this is true due to the availability of ground food and the constant decrease in their natural habitat, I doubt that they would go to the ground without the enticement of food. In large flights in captivity, they never go to the ground, not even to pick up something they have dropped.

## Wild Status

In July of 1983, the Red-fronted Macaw was placed on the CITES Appendix I listing. According to people who have visited the habitat areas in Bolivia, the birds are hard to find, and the numbers are decreasing drastically due to international bird trade, overharvesting, and decline in supportive habitat.

Although there have been many attempts to quantify the numbers and exact locations of the various groups of Red-fronted Macaws, the overall numbers and geographic habitats are still not well known. This is probably because much of their range is not accessible except on foot, and it is very difficult terrain. It is known that they feed on farmed crops such as corn, peanuts, and vegetables on the ground.

Much more field work is needed to determine the exact numbers and wild status of this lovely parrot.

## Domestic Status

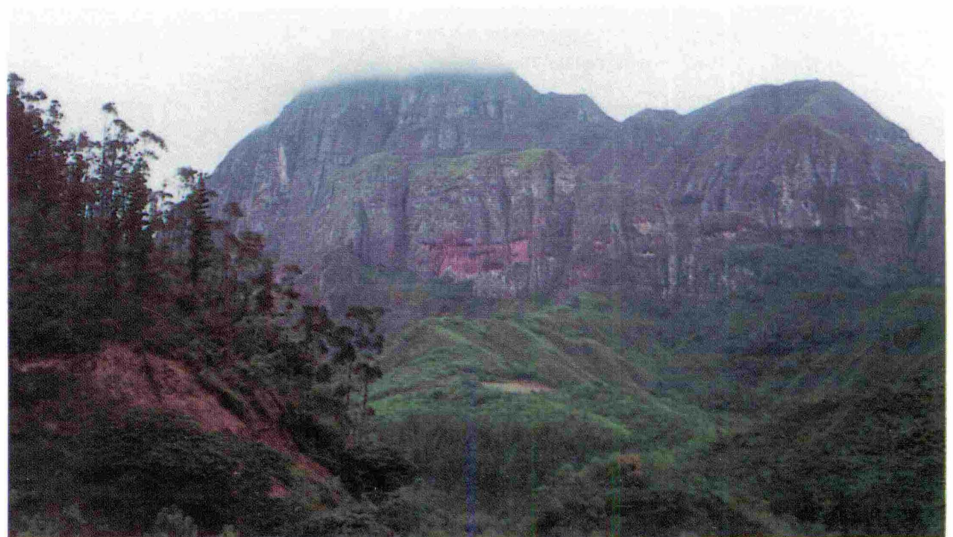
The Red-fronted Macaw seems to be making a comeback domestically as people are discovering the beauty of the adult, as well as their wonderful dispositions and personalities. They are successfully bred in several aviaries and raised with excellent results from the F1 level within our own aviary, which no doubt means there are also offspring from F2 levels if we had complete information on all captive parrots.

There is rumored to be an RFM studbook, but I have been unable to locate it after many attempts.

## Appearance

The Red-fronted Macaw is a unique and beautiful bird even in the world of macaws, which has many members of its genus that can be so described. It is an almost perfect size, approximately one-third smaller than the large macaws, lending itself to domestic in-home life.

The photographs of this bird simply do not do it justice. The deep red-orange band just above the beak subtly gives way to an orange-red as the color blends into the shiny green crown. The shade of green varies rather obviously in different family groups. The green of the "Fred and Ginger group" has more of an olive cast than the green of the "Carmen and Bolivar group" which is a brighter and more intense green. This makes it possible to distinguish between them, even as small babies. This has not



*A panoramic view of a cliff-site area.*

Photo by Glenn Sahara

been mentioned in the literature but it would be of interest to know if the same family or geographical differences exist in the wild.

The orange "front" pattern is noticeably variable at the interface, and individuals can often be identified by these variations. The skin around the eye in

the immature birds is a flesh color but on maturity becomes an orange-pink color. During the mating season, this area becomes thickened and much more orange in coloration.

The immature bird has a dark-brown band across the beak, the red front not being acquired usually until

around the sixth month, although this varies a lot with individual birds. The red cheeks are a bright rouge-red and give the appearance of high-cheek makeup. The shoulder epaulets are a very bright orangey-orange. Some birds have completely red legs, making a boot-type appearance, and many have a lot of red mixed in with the green on their chest and bellies.

The primary flights are a beautiful aquamarine color which is lost with a severe wing clip. The underwings are also a bright orange which gives an amazing flashing color in flight. The dorsal side of the long tail feathers is also a pale aquamarine in the center with varying darker colored borders.

The overall appearance on the ground, when combined with their comical little strut, always makes one smile and think of little toy soldiers. However, in flight or perched, they present an aura of elegance. They also have an entertaining habit of raising a crest when they see you so that they look quite different for a short time.

#### Personality

As a pet, I cannot think of a better choice. Red-fronteds are mischievous, loving, comical, and intelligent and will hang out with their people all day long if given a choice. Even though Carmen Miranda and Bolivar are very attached to each other, they will always come right to me if I enter the flight. Babies are easy to spoil as they are so cuddly and so must be properly trained from the beginning to enjoy spending some time alone. They house train themselves and seem to know instinctively not to poop on friends!!

They are good talkers and have amusing little cartoon character-type voices. They can develop a fairly large vocabulary. They also communicate with a variety of sounds like a "chik-chik-chik" sound when they are pleased and also have a kind of loud purring sound they make when happy.

Some of them will become "silly putty" and fall over backwards when you pick them up. One friend calls it RFM "melting." It is just a form of total relaxation that is astonishing the first time it is observed. I have one bird that likes to "meltdown" on his back right

Photo by M.L. Simmons

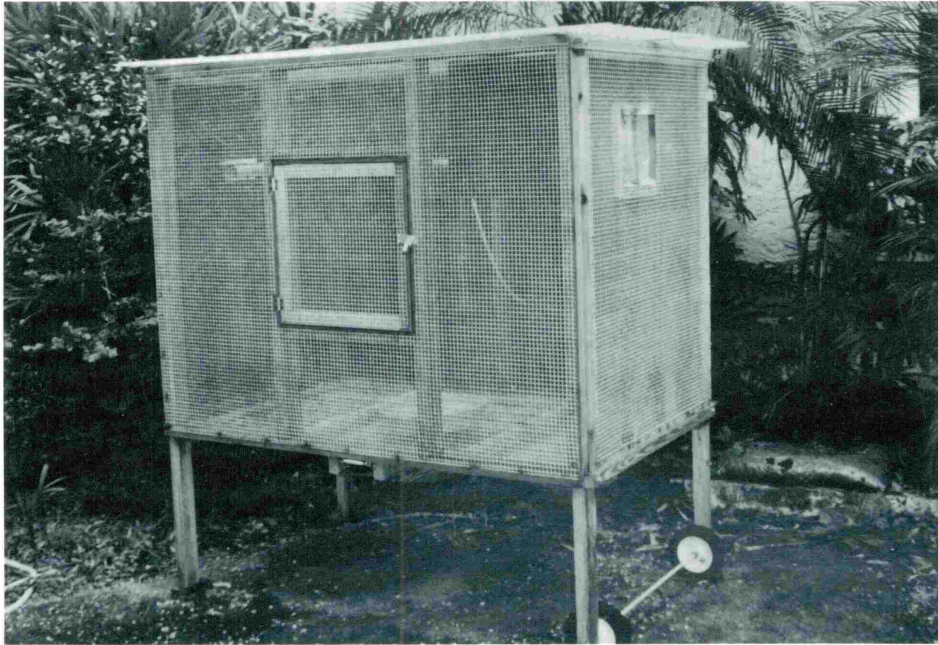


*Fred and Ginger's 12 foot square habitat. We use an inexpensive tarp over the solid wood roof to keep it dry. A wood plank floor with a wire-covered compost pit at one end allows easy cleaning.*

Photo by M.L. Simmons



*A closed, environmentally safe, portable habitat primarily used for weanlings, older babies, and smaller parrot species. Note the guillotine door (bottom center of the floor). It is used for flushing out the habitat debris.*



*A smaller version of the environmentally safe habitat showing the external nest box access door, guillotine door (bottom center), and solid aluminum bottom.*

on top of the big dish in which I am carrying the sprouts around. Makes it hard to feed sometimes.

### **Captive Breeding Habitat**

The captive breeding habitat is, of course, very important for any parrot, but the RFM is a very active bird and needs a lot of exercise to stay healthy. In Florida, we have a wide variety of problems from which to protect captive breeders, including insects, snakes, rodents, hawks and eagles, wild birds as disease carriers, 'possums, raccoons, feral, or partly-wild cats and dogs.

The outermost line of defense should always be a perimeter fence around your aviary property. Another excellent line of defense is an aggressive dog. A dog can reduce problems from 'possums and raccoons. The primary line of defense must be the habitat construction. It is easy to build a habitat that is varmint proof, flying insect proof, and covered so that feces of wild birds and climbing varmints cannot wash through and contaminate food, water, and perches. It is very difficult to keep out roaches and ants and other crawling insects. (To help control them we use anoles and geckos in the habitats.)

Since we now have access to large numbers of publications about the spread of avian disease, it makes sense

to develop habitats that can eliminate the threat of as many of them as possible. We know that sarcocystis and other fatal diseases can be carried to food dishes by insects. And we know that pigeons and other wild birds sitting on top of aviary flights can introduce disease by passing their feces into the flights. We also know that 'possums defecating on the top of aviary flights can contaminate the food, water, and perches within the flights.

We all know about about snakes getting into nest boxes and eating parrot eggs or young birds, raccoons chewing birds feet off by attacking them through the bottom of suspended flights, and rats burrowing under buried fences and gaining access to parrot food dishes. So the task is simply designing the habitat as an environment protected from all of these things.

We have come up with several alternative designs which work well with the RFM and other parrots as well.

Some important specifics in the general design are:

- Parrot containment inner wire.
- Mosquito screening layer.
- Outer hardware cloth to prevent squirrels and other critters from tearing the screen.

Note: At least 1.5 inches of space needs to be maintained between each layer for prevention of screening layer

damage.

The solid bottom is slanted toward the hole in the middle with the guillotine door acting as a seal. When you hose out the habitat, you leave the door closed and hose from the sides toward the middle allowing the bottom to fill with water. Then you open the door and...whooooosh!!! – all the water and debris flush out, and then you rinse the floor with the hole still open. Here I let the debris go to the ground because I have fat 10-pound squirrels who will make short work of the food that washes out. However, if you are inside, you can hook the hole up to a sewer system or a pipe going to a compost area.

The solid bottom has a raised wire floor over it which is made in two panels. The panel width must be smaller than the diagonal dimension of your service door for easy removal. This also keeps smaller birds from escaping during cleaning when the cleaning hole is open.

The roof or top of the habitat (any design) should be completely covered

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with adequate drainage to one side for water runoff.

The habitat should either have a solid floor or go all the way to the ground to protect the parrot's feet from varmints and to prevent insects from accessing the flight from the bottom.

I like to have the food bowls and water at least four feet off the ground if the habitat goes to the ground. For portable flights, the water can sit on the bottom, but the food will still be placed at least halfway up.

The RFMs love to bathe, even in cold weather, so I like to give them large planter bottoms or dishpans for bathing. They do not wash their food in water like some parrots do, so the water is changed only once daily.

### Timing

The Red-fronted Macaws in Florida generally go to nest at the end of June to early August. This is hurricane season, so we want to move the nesting season forward to avoid the storms and the hottest weather as well. This is easy to do with the RFMs because they respond very well to a lengthened light cycle. We have all our habitats wired with electrical outlets so we just plug in a timer with a daylight bulb and start it at 8:00 A.M. and off at 10:00 P.M. After the second clutch, we remove the light, and that stops the breeding season. This way we have all the hatching done and over and the babies inside before the really hot, stormy weather gets here.

### Diet

Since the breeding season in the wild is partly stimulated by the rainy season and the availability of fresh food, we think it helps to change their diets to simulate that effect. Spring is our driest season in Florida, so there is not much rain, but they seem to respond to the light cycle coupled with diet changes. In January, we increase the hard nuts and add more green foods. They especially like fresh peas in the shell as well as fresh corn. (Some breeders in Florida recommend 10 days on only dry seed to make the transition to fresh food more abrupt, but we have not found that necessary.)

The regular diet is sprouted seed,

fruit, and vegetables in the morning and nuts, peanuts, and natural (non-fortified) seed mix and two monkey biscuits each in late afternoon. We use the natural additive PD (Parrot-Deli) which contains organic beet, garlic, alfalfa, and non-organic carrot powders. We put one heaping tablespoon of this per two quarts of the sprouted seed mix.

This system seems to work well for both breeding pairs as we routinely get four fertile eggs per clutch from Carmen and three fertile eggs per clutch from Ginger.

### Incubation

We use the Alpha Genesis Wild Bird Incubator and a temperature of 99.2° F with a relative humidity of 37% to 40%. The incubator has an automatic rocker which we set to rock once per hour and we turn one quarter turn five to seven times per day, always in the same direction.

When the internal pip is complete and they start on the external pip, we move the eggs to a hatcher and lower the temperature to 98.5° and raise the humidity to 75% R.H. If it is an assisted hatch, we will observe closely to decide when to intervene, and if it is not assisted, it will be allowed to hatch normally in an individual dish with a wet paper towel covering the bottom.

### Handfeeding

Handfeeding the RFM babies is easy if you pay attention to a few simple rules. Heat the water first, and then add whatever you are using. (We use our own recipe, but we have had success with several commercial hand-feeding formulae.) Make sure the temperature is about 106° F., and they will take it just fine. If you are feeding day one hatchlings, you need to wait until they are 8-12 hours old before starting to feed them. We start them with a probiotic and water for the first few feedings.

We feed entirely with closed-ended pipettes which come in all sizes. We start with the smallest one and place the droplets on the side of the mouth where the upper and lower beaks meet. We do not put the tip inside the mouth until they have shown that the swallowing reflex is working properly.

This will avoid any aspiration of food.

As soon as they are swallowing properly, we change to thicker food. It needs to be thick enough so you don't have to draw it up into the pipette, sticking the tip of the pipette into the food is picking up enough of the formula for them to eat off the pipette. As they grow, we change to the larger sizes of pipettes. You can cut the end of the pipette with scissors to get the exact size opening you want.

We have found that if you have particles in the handfeeding formula instead of totally smooth, it helps prevent any crop slow-downs. This is why we always begin the feedings with CeDe Lory powder because it has a rougher consistency. It is not adequate nutritionally for more than a few days for macaws but makes an excellent starter diet. After a few days, you can add egg food shaken through a strainer and some additional low-iron hand-feeding formula to the mixture, and it works very well.

### Conclusion

The Red-fronted Macaw is a parrot that can be saved from its endangered status by aviculture. Since it also does make an excellent pet, people should be encouraged to breed it for that purpose. It is my opinion that once a bird is established in the "good pet" arena, breeders are much more interested in keeping it going. It is fairly easy to breed with the right habitat, nest box, and diet, and with its charming ways, it is a pleasant parrot to have around.

It is imperative that much more be done to evaluate the Red-fronted's wild status and, hopefully, money will become available not only to do that but also to encourage the protection of its limited habitat.

### Good References

- (1) Forshaw, Joseph M., 1989. *Parrots of the World*, Third Edition
- (2) Abramson, J., Speer, B.L., and Thomsen, J. B. 1995. *The Large Macaws, Their Care, Breeding and Conservation*.
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- (4) Boussekey, M., J. Saint-Pie, and O.Morvan. 1991. *Observations on a population of the Red-fronted Macaw *Ara rubrogenys* in the Rio Caine Valley, central Bolivia*. *Bird Conservation International* 1:335-350.

