When Prohibition Isn't Enough

by Jorgen B. Thomsen* Washington, D.C.

Norld

Photo by Jorgen B.



Wild Hyacinth Macaws forage the ground in their native Brazilian habitat.

I often think about the Hyacinth Macaw as a macaw designed by birdtrappers: the largest and perhaps the most spectacular of all parrots, and also the most absurdly easy to locate and catch. Indisputably, Hyacinths are especially vulnerable to capture and shooting because they are large and conspicuous, noisy, intrinsically fearless, curious, sedentary, predictable, and have extremely specialized feeding behaviors. A trapper can quickly learn where a given group of macaws sleeps, nests, feeds, and rests. A clever trapper can determine regular flight routes into and out of favorite trees, then strategically place nets to capture the birds. And because they thrive on fallen palm fruits, Hyacinths can even be enticed into traps on the ground.

The same qualities which make

* Jorgen B. Thomsen is a Senior Program Officer with TRAFFIC (U.S.A.), World Wildlife Fund in Washington, D.C., and is a member of the ICBP/SSC Parrot Specialist Group and the author of several articles on bird trade and conservation of psittacines.



Brazilian parrot specialist Carlos Yamashita in front of a Scheelea palm, the main food source for the Hyacinth Macaw in the Pantanal.



The author in front of an Atalea palm, one of the main food sources for the Hyacinth Macaw in northeastern Brazil.



Aviculturalist proven, full spectrum vitamin, mineral, limiting amino acid supplement for all companion birds. Highly palatable powder and convenient capsules readily penetrate soft foods such as vegetables and fruits for efficient dosage delivery, or add to drinking water.

Besides the complete balance of all vitamins and minerals missing from standard seed diets, Prime also has a unique combination of digestive enzymes, microencapsulated probiotics, and various acids which slightly acidify the final mixture. Acidification encourages probiotic growth and improves digestive enzyme activity.

THE BEST WAY TO ENSURE TOTAL NUTRITION FOR ALL COMPANION BITOS

DISTRIBUTED BY: U.S.A.: ROLF C. HAGEN (U.S.A.) CORP. MANSFIELD, MA. 02048

U.K.: ROLF C. HAGEN (U.K.) LIMITED LEEDS, W. YORKSHIRE, LS42BZ CANADA: ROLF C. HAGEN INC. MONTRÉAL, QUÉ. H4R 1E8 Hyacinth Macaws ideal prey for birdcatchers make them perfect quarry for aboriginal meat or feather hunters. One famous Kayapo' Indian head-dress included the tail feathers of more than fifty of these charismatic blue parrots.

The Hyacinth Macaws' specific feeding requirements also make them susceptible to habitat destruction. Their reliance on the fruit of certain palm trees limits their ability to adapt to changing environments. Although the palms on which Hyacinths depend for food are often spared during human agricultural activities (because they provide food for cattle), if those species of palms were cut and the rest of the habitat left untouched, all Hyacinth Macaws. would quickly perish.

But all is not lost. These birds can withstand an enormous amount of human disturbance as long as: 1) they are not captured; 2) they are not hunted for meat or for feathers; 3) they have food plants; and 4) they have nesting sites.

In 1987, when Charlie Munn (Wildlife Conservation International), Carlos Yamashita (IBDF) and I studied the Hyacinth Macaw for the Secretar-



iat of the Convention on International Trade in Endangered Species (CITES), it was clear that in the southern Brazilian Pantanal, at least, they have readily adapted to human neighbors. Hyacinths are often seen foraging on the ground in cattle corrals, sitting on fences, drinking out of cement cattle troughs, nesting in trees next to ranch houses. They generally appear at ease with high levels of human activity, as long as they are not directly disturbed and have access to food, water, and nest sites.

At the Projeto Grande Carajas (CVRD) in eastern Amazonia, Hyacinths feed, preen, copulate, rest, and may even nest within 50 to 100 meters of one of the busiest industrial railroad operations in the world. As ore-trains are loaded by a huge orehopper located at the base of a mountainside covered with rattling conveyor belts and monster trucks, these birds forage and fly about peacefully. They even land on and rest in trees only 10 meters away from a noisy road that averages four cars and ten large dump trucks per minute. Hyacinth Macaws utilize these sites despite the fact that 99 percent of the surrounding forest ecosystem of Carajas is completely intact! They simply do not care about human noise and actions as long as no one bothers them.

But this flexibility and tolerance of human activities has not been enough to ensure this species' survival. Apparently as a result of trapping, the three remaining viable populations of Hyacinth Macaws are now so isolated from one another that each must be managed as separate biological units.

The plight of the Hyacinth Macaw exemplifies not only the negative impact trade can have on a particular parrot species but also the difficulties experienced in trying to assess the sustainability of trade. Although our CITES study concluded that probably fewer than 5,000 individual Hyacinths are left in the wild, this species' original range and population size remain unknown.

In all likelihood, Hyacinth Macaws originally ranged from just south of the Amazon in Para to the drainage of the Parana and Paraguai Rivers in Paraguay and southern Brazil. Despite the futility of estimating the species' total population size prior to human interference, available information indicates that it may well have numbered several hundred thousand individuals. In the early part of this century, explorers reported flocks of hundreds of Hyacinths at localities in Piaui in northeastern Brazil. Today there are no Hyacinths in this region. Based on reports of numerous collecting expeditions (dating from 1930 to the 1960s) and from personal observations, Carlos Yamashita believes that the species formerly lived in many parts of Goias, Maranhao and Mato Grosso. There are few or none remaining.

A combination of habitat destruction for agriculture, capture for the bird trade and hunting for meat and feathers has reduced the total wild population of Hyacinth Macaws to somewhere between 2,500 and 5,000 individuals, according to current estimates. It seems likely that habitat destruction (palms and nest trees) and hunting for meat and feathers were the predominant causes of the species' decline until perhaps the 1960s or early 1970s. Beginning then and continuing today, a major increase in the international trade in live Hyacinth Macaws appears to have taken a greater toll on the species than either destruction of its habitat or hunting.

Field surveys and interviews in former Hyacinth strongholds, including ground and air surveys and detailed interviews in many parts of the Pantanal of Brazil, Bolivia and Paraguay over the last 15 years and in northeastern Brazil over the past few years, when combined with analyses of international trade records, provide copious data proving that bird trappers systematically harvested entire large populations of Hyacinth Macaws to sell to national and international bird dealers.

International trade records for the past several years indicate substantial trade in Hyacinth Macaws; in addition, they suggest that the reported trade may represent only a minor portion of the actual trade. For example, data obtained from guarantine stations in the United States indicate that 1,382 Hyacinth Macaws were brought into the United States from 1981 through 1984. CITES data for the same period indicate that only 702 entered the country. If CITES information for other countries is less accurate than that for the United States (as is generally assumed), then easily two or three times more Hyacinth Macaws may have been traded during this period than CITES data suggest.

Although the Hyacinth Macaw was accorded complete protection from

commercial international trade under CITES in late 1987, large-scale international trade in the species continues; indeed, it may have increased. It is estimated that during 1988, more than 700 Hyacinth Macaws were trapped in the Pantanal and northeastern Brazil and moved through countries such as Argentina and Paraguay to international markets.

The impact of this continuing trade is cause for concern, particularly in light of recent information on the Hyacinth's reproductive biology. Findings similar to those of Charlie Munn in Manu, Peru suggest that only 15 to 30 percent of the adult Hyacinth population in the Pantanal attempts to breed in a given year; this percentage may be as small or even smaller in the eastern Amazonian and northeastern Brazilian populations. In addition, not all breeding pairs of Hyacinth Macaws fledge young, and those that do almost never fledge more than one bird. Thus, 100 mated pairs of breeding age macaws may only produce between 7 to 25 young per year, a very low reproductive rate. It would appear then that, given its current population levels, this species does not have a high enough reproductive rate to withstand any substantial, long-term harvesting for either trade or aboriginal use.

The situation of the Hyacinth Macaw has left the conservation community in a quandary. Given the continued demand for and trade in Hyacinths despite CITES trade prohibitions, and given the fallibility of wildlife protection legislation in virtually every Latin American country, how does one protect this magnificent species?

Having investigated various possibilities, including population management techniques such as ranching, I have come to the conclusion that captive breeding is part of the answer. I do *not* mean captive breeding for release into the wild, but rather captive breeding for commercial purposes.

It is obvious that we cannot control the international demand for Hyacinth Macaws. Therefore, only if we can provide and market an alternative to wild-caught birds can we hope to reduce the pressure on wild populations, thereby improving the species' chances for survival. Perhaps in this way aviculturists will help ensure that Hyacinths remain a strand in the beautiful fabric of the Brazilian Pantanal and rainforest.

Judge us by the company we keep



U.S.D.A. • U.S. Center for Disease Control • Mayo Clinic • Saudi Royal Family Sloan-Kettering Institute • Walt Disney World • Busch Gardens • Opryland Six Flags • Lion Country Safari • U.S. Army • U.S. Air Force • VA Hospitals Countless Zoos • Universities and Game Preserves throughout the Free World

Write for our free catalog!

The Humidaire Incubator Company

Department W, 217 West Wayne Street, New Madison, Ohio 45346

(513) 996-3001 • FAX (513) 996-3633

Serving the world for 58 years

CANDLING WITHOUT HANDLING.



With this unique flexible transilluminator.

This revolutionary portable light features a high intensity, prefocused bulb on the end of a ten inch flexible shaft which may be bent into any configuration. Also,

its protective cover may be removed and used as an extension handle which will allow you to reach 27 inches. It is perfect for candling eggs in the nest!

Write to Medical Diagnostic Services, Inc. for more information regarding this and other inexpensive diagnostic products.

1640 Central Avenue St. Petersburg, Florida 33712 / Phone (813) 894-3512