# Thick-billed Parrots a homecoming for our native parrot

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A raucous flash of green, brilliantly accented by red and yellow, hurls itself across an azure sky or perches quietly, dismantling a pine cone for deeply hidden, sweet nuggets. Such sightings of wild Thick-billed Parrots, re-established in their ancestral home in the desert Southwest, would bring joy to many an avian enthusiast.

For several years, conservationists and zoo groups have worked to accomplish just this, with limited success. For the most part, aviculturists have sat by, guarding these gems of the Mexican pine forests in quiet seclusion. The time has come for aviculturists to take a stand and do their part for a return of our native parrot to the skies of Arizona.

Through the intiative and persistence of Richard M. Schubot, Avicultural Breeding & Research Center (ABRC) was able to negotiate an agreement with the United States Fish and Wildlife Service (FWS) to allow ABRC to acquire and work with donated Thick-bills from people desirous of seeing them returned to their natural home after some 50 years of absence.

Under a new, cooperative agreement between the Arizona Game and

Fish Department, the U.S. Fish and Wildlife Service Region #2 office in Albuquerque, New Mexico, and the Florida-based Avicultural Breeding and Research Center, a program has been established which will allow captive Thick-billed Parrots of questionable legal origin to be utilized for breeding and future release. Any birds currently held by aviculturists or pet owners can be donated to this project without fear of legal prosecution.

## History and Natural History of Thick-billed Parrots

Thick-billed Parrots (Rhynchopsitta pachyrhyncha) represent a truly unique opportunity as well as a dilemma for American aviculture. They are the only living psittacine species native to the continental United States. As the Carolina Parakeet, Thick-billed Parrots were virtually eradicated in the early 1900s. Only a small flock was reported in the Chiricahua Mountains of Arizona in 1938. Early accounts from the Chiricahuas detail annual sightings and reports of breeding activity in the area. Most published reports on Thick-billed Parrots refer to shooting by hungry miners and woodsmen deriving their sustenance from the arid land. Other game species, such as wild turkey, sheep, elk and pronghorn antelope, disappeared from the region at the same time. Timbering associated with mining activities placed additional stresses on the population. Unlike the Carolina Parakeet, Thick-billed Parrots have survived in the highland pine forests of Mexico's Sierra Madres. Now they are facing new threats in their historic stronghold in Mexico. Despite international protection, these birds are being harvested for illegal trade.

#### The Reintroduction Project

Conservationists for many years have discussed the possibilities of reintroducing our only living native parrot into its historical range. In 1985 and 1986, U.S. Fish and Wildlife Service agents and many aviculturists observed an enormous increase in the flow of illegal Thick-billed Parrots into the U.S. Many of these birds were confiscated and formed the nucleus of initial reintroduction efforts.

A cooperative release program between the Arizona Game and Fish Department, the U.S. Forest Service and the U.S. Fish and Wildlife Service was initiated in 1986. Since then, a number of other organizations have become involved in the project, supplying birds or financial support or both. The program receives major financial support from the Wildlife Preservation Trust, the granting arm of the Jersey Wildlife Trust in England.

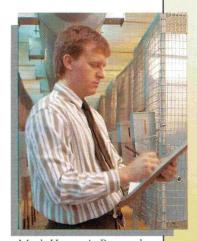
Many zoos and individuals have taken an active and vital interest in the project. Susan Healey of the Sacramento Zoo currently holds the North American Regional Studbook for Thick-billed Parrots. The Tyson Research Center has initiated a captive breeding project utilizing confiscated birds not suitable for release. Nonetheless, the project suffers from a lack of releasable birds.

The Chiricahua Mountains of southeastern Arizona represent an ideal area for re-establishment of the parrots. The area is a famous mixing ground for northern and southern wildlife species. The forests of southern Arizona and New Mexico have regrown and are now mature. The terrain of the Chiricahuas is rugged and inaccessible to ecologically-sound logging. The area is managed by the U.S. Forest Service primarily for recreational use. The forests of pine, fir, spruce and aspen represent abundant



Thickbills are found in the highlands of northern and central Mexico. They are on the endangered species list and on the CITES Appendix I list. These young Thickbills in the photo are reared in captivity. They have not acquired the black mandibles that are found in the adult birds.





Mark Hagen is Research Director at HARI. He has a Master of Agriculture from the University of Guelph and specializes in Psittacine Aviculture. His continued Research includes Nutrition, Incubation and other Psittacine Aviculture research projects.



The HAGEN AVICULTURAL RESEARCH INSTITUTE (HARI) located in Rigaud, Québec was established in 1985 to study the captive breeding and maintenance of companion birds. At present, the breeding colony houses 150 pairs of 40 various parrot species.

The birds are housed in separate, double door rooms incorporating the latest techniques in environmental control.

- Insulated walls and ceilings are totally waterproofed with PVC plastic sheeting.
- Sloped poly-urethane concrete floors are drained to an environmentally secure in-house septic system.
- Down draft ventilation is connected to a high tech air-to-air heat exchanger and multiple fan system which provides fresh warm air.
- 400 watt sodium and fluorescent lights with timers provide photoperiodic manipulation.
- Green House misting system provides continuous humidity control and a rainlike effect which the birds love.
- Large eight and ten foot suspended flights and gravity feeders provide privacy and minimal human disturbance.

Research fields include disease control, pair bonding, nutrition and the influence of temperature, humidity and light cycles on breeding. Progress has been rapid in the area of feeding research at HARI.

Hagen's new VME seed line (Vitamin and Mineral Enriched) incorporates the most effective supplementation for smaller bird species. HARI research determined that vitamin and mineral enrichment of dehulled seed kernels was more effective than other industry methods, such as coloring the outside hull or simply mixing seeds with poultry type pellets, which are often rejected by the birds.

PRIME, a unique vitamin/mineral and limiting amino acid supplement which includes beneficial bacteria and digestive enzymes, was also developed by HARI. The formula is designed for birds on a soft food or seed diet, ensuring that all essential nutrients are made available in the diet.

The TROPICAN line of formulated, fruit flavored extruded foods for parrots is the direct result of intensive nutrition research at HARI. The TROPICAN line includes both a High Performance formula for breeding birds, moulting or periods of stress and the Life-Time formula for normal maintenance conditions. Both PRIME and TROPICAN have been fed to HARI's own colony of birds since 1985 with excellent results. Hari has raised many of the larger parrots and is presently

supplying pet stores with tame babies.



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food and water supplies for Thickbilled Parrots which feed primarily on cones.

Many of the initially confiscated birds could not be released due to poor physical condition. Some had damaged follicles from having feathers plucked by trappers to prevent flight. These birds were used for captive breeding projects. Most of the remaining adults were experienced in survival techniques and pine cone feeding. The potential for their return to their home south of the border was soon born out. In the fall of 1986, 29 birds, some wearing radio collars, were released. Of these, seven birds were quickly lost due to hawk predation and eight headed for the border. Fourteen remained in Arizona, establishing a migratory route between the Chiricahuas and various sites in central Arizona.

The birds chose the more northern areas of Arizona for their nesting sites, possibly due to an ancestral migratory tendency. In the fall of 1988, two fledged chicks were seen traveling with the flock.

Early experiences in the release of captive-bred birds were problematic. Hand-raised birds, although caged with wild birds for months prior to release, failed to learn essential flocking, feeding and raptor avoidance techniques which are essential to survival. These birds were subsequently recaptured. A parent-raised chick, however, showed better chances of adaptability despite being taken by a raptor. In addition, droughts during

### **Deadline Schedule**

June / July '91 Featuring MACAWS

April 1 — editorial copy April 15 — display ADS

Aug / Sept '91

June 1 — editorial copy June 15 — display ADS

Oct / Nov '91
Featuring SOFTBILLS

Aug. 1 — editorial copy Aug. 15 — display ADS

Dec '91 / Jan '92

Oct. 1 — editorial copy Oct. 15 — display ADS

Feb / Mar '92
Featuring COCKATIELS

Dec. 1 — editorial copy Dec. 15 — display ADS

Apr / May '92 Feb. 1 — editorial copy Feb. 15 — display ADS late 1989 and 1990 resulted in poor food availability. Currently, the flock is known only from limited sightings.

Despite some initial successes, many more birds are needed in order to establish strong flocks of birds that can adapt to life in the Chiricahuas. A total of 43 birds have been released to date. Unfortunately, predation, migration and a severe drought have taken their toll on these birds. Sixteen birds, eight confiscated wild-caught and eight captive-bred, parent-raised birds, are now waiting for improved food supplies before they will be released.

As in other release programs, large numbers of individuals will probably be necessary for successful reestablishment. Thick-billed Parrots appear to be highly dependent on flocking for protection from raptors and breeding behavior. Genetic diversity of the population is also dependent on release of large numbers of birds. This is where American aviculturists can assist.

## Are Your Thick-billed Parrots Legal?

How do aviculturists know if their birds are legal? Thick-billed Parrots were listed as an endangered species on June 2, 1970. From that date on, birds could not legally enter the U.S. without first obtaining a permit from the Fish and Wildlife Service.

In order to provide protection from international trade, these birds were listed on Appendix I of CITES (Convention on International Trade in Endangered Species) on July 1, 1975. Again, legal international movement would require both a U.S. import permit and an export permit from Mexico.

Although Thick-billed Parrots are migratory, they are not covered under the Migratory Bird Treaty Act. As a native species, they cannot be registered under current systems for captive bred wildlife (CBW). This makes any commercial sales across state lines illegal unless a permit is first obtained by both the buyer and the seller from the U.S. Fish and Wildlife Service. Legally obtained Thick-billed Parrots can move across state lines if they are loaned or donated, or they can be sold within a state without a permit. Offspring of illegally obtained Thick-billed Parrots are not legal by virtue of their birth in

The bottom line is that unless you can document that your Thick-billed

Parrots are pre-Act (obtained prior to June 1970), or you can document that they are the offspring of pre-Act birds and have not been sold across state lines, or you can document legal import, it is almost assured that they are smuggled birds or their illegitimate offspring. Currently, the only way that these birds can obtain legal status is for them to be abandoned to the U.S. government.

While prosecution for possession of these birds would require proving them illegal by tracing them to their origin, any transactions involving Thick-billed Parrots are looked upon with great suspicion. In the mid-1980s, many Thick-billed Parrots entered the U.S. illegally, ending up in swap meets and pet shops. Many aviculturists bought these birds, hoping to give them a good home, naive of their illegal origin. Ensuing confiscations and prosecutions sent many aviculturists underground, fearing repercussion of ownership.

Illegal importation of Thick-billed Parrots, or sale of same across state lines without a permit, is a felony under the Endangered Species Act and the Lacey Act if the value is more than \$350. Each bird so moved could be charged as a separate count. The penalty could be up to five years imprisonment or up to a \$250,000 fine.

## The Thick-billed Parrot Project at ABRC

In December 1990, the Avicultural Breeding and Research Center in Loxahatchee, Florida finalized a cooperative agreement with the Arizona Game and Fish Department and the U.S. Fish and Wildlife Service to produce captive-bred Thick-billed Parrots for release. ABRC has donated its collection of over 30 Thick-billed Parrots to the State of Arizona. Many of these were hatched at the Center and some were donated to ABRC by other aviculturists for this program. ABRC felt that this move was in the best interest of the program to eliminate any potential or alleged conflict of interest. Most of these birds will remain at ABRC as breeding stock.

As many Thick-billed Parrots are in the possession of U.S. aviculturists, a one-year agreement was negotiated to allow such birds to be abandoned to the U.S. Fish and Wildlife Service by a "paper trail" and subsequently transferred to ABRC for the project. The donor must certify that they were not directly involved with or responsible for the unlawful importation of the birds. Such abandonment will absolve the donor and the Center of any act of unlawful possession or transport for those individual birds. The birds can then be shipped directly to ABRC. The U.S. Fish and Wildlife Service will not take possession of the birds but will process the abandonment only on paper. They will not visit a donor's premises in regard to these donations.

Upon arrival at ABRC, the birds will undergo extensive quarantine and testing to assure that no diseases are introduced into the wild population. Birds will either be utilized for captive breeding or, if suitable, sent to Arizona for the release program. a large, "L"-shaped flight cage, approximately 17 feet tall, 25 feet wide and 150 feet long, allows birds to develop flight, strength and learn flocking and feeding behaviors. This cage has been equipped with a simulated cliff where birds learn how to find water as if in the wild. It has also been landscaped to simulate terrain where the birds will be released. Birds are provided with pine cones in order to learn feeding techniques since cone feeding is a learned rather than instinctive behavior. An isolated aviary is currently under construction to house donations.

Once the birds are ready and the conditions are right in Arizona, the birds are shipped to the release site where they are again housed in a large flight cage for acclimation and preparation for release. All releases are under the supervision of the Wildlife Preservation Trust International and the State of Arizona.

If you or a friend are currently in possession of Thick-billed Parrots and you are unable to document their legal origin, take advantage of this opportunity to assist in this project. Donations are confidential or, if you wish, you can join the ranks of people who have openly donated to this project. Please contact ABRC for more information. You can make a difference. Your birds may one day join into a wild, protected flock, a resource which we can all treasure for generations to come.

For additional information, contact Avicultural Breeding and Research Center, 1471 Folsom Road, Loxahatchee, FL 33470, phone (407) 793-5135, or Thick-billed Parrot Program, Arizona Game and Fish Department, 2222 West Greenway Road, Phoenix, AZ 85023-4399. ●



