



Thick-billed Parrots

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What bird is essentially extinct in the wild, the subject of a Special Survival Plan in the United States, and one of the few psittacine species ever to set foot in North America?

Stumped?

It is, of course, the Thick-billed Parrot *Rhynchopsitta pachyrhyncha*. This species was endemic to northern Mexico, mostly in the highland forests, with a few venturing into the southern portions of Arizona, New Mexico and occasionally California during the colder months. However, no significant populations of this species have been sighted in the United States since the 1930s.

Appearance

The Thick-billed Parrots are often lumped together with the various species of Amazon parrots, primarily because of similarity in size and coloration. The Thick-billeds, however, are generally smaller, with an average length from beak to tail of just 15 inches. Adults are green over all with a red "forehead" that extends over the top of the eyes – contrasting them from the Red-crowned Parrot *Amazona viridigenalis*. Additionally, they have striking red epaulettes on the shoulders. The beak is black and a bright yellow patch of feathers is found on the underside of the wings. Juvenile birds can be separated from the adults by their lack of the red eyebrow and the ivory to horn coloration of the juvenile beak. Their name comes from the fact that they have the thickest and sharpest beaks of all the parrots – capable of exerting 1,500 pounds of pressure per square inch. This allows them to slice easily through tough pinecones to reach the seeds, the parrots' main food source.

Commercial Exploitation

The species overall lack of color – when compared to some of the amazons and certainly to the macaws – may be one of its saving graces when it comes to commercial exploitation. A study done between 1991 and 1995 demonstrated that the Thick-billed Parrot was rarely among the birds being brought into the United States, either legally or illegally, for the pet bird trade.

Habitat

As stated above, the primary habitat for these birds was in northern Mexico and occasionally the southernmost parts of the United States (Arizona, New Mexico and occasionally southern California). They seek out mountainous terrain and this has led to their downfall since their habitat is being systematically destroyed by clear cutting for both the wood from the trees and to create places for ground agricultural crops. Just 20 years ago a survey was done by a number of conservation organizations and it was found that habitat destruction, and not commercial trade, was the primary reason for the sharp declines in the population of this and other Mexican and Central American parrot species. Because of the steadily decreasing populations, this bird was placed on the U.S. Endangered Species list in 1973.

On a more positive note, the nesting sites of half of the remaining western Thick-billed Parrots in the world are now protected by a conservation agreement entered into by a land cooperative in Northern Mexico. The Tucson based Wildlands Project and five Mexican conservation groups agreed to protect 6,000 acres of old growth forest in the Sierra Madre Occidental mountains of northern Chihuahua, about 150 miles south of the U.S. border. Without the agreement, logging of the area was set to commence within the next two years.

The agreement was made with members of the Ejido Cebadillas, a 40,000 acre land cooperative. A spokesperson for the Wildlands Project stated that no one has ever made a land protection deal with an Ejido before. "This was a negotiation solely between conservation groups and all

74 private members of the cooperative." There was no official government involvement even though U.S., Mexican and Canadian governmental representatives attended meetings where the negotiations took place.

The concept behind the agreement is to protect the lands and demonstrate to Mexican landowners that income from conservation can equal or surpass that from logging. The money, approximately \$250,000 US will come from The Wildlands Project, a non-profit organization with headquarters in Tucson. The agreement will pay Ejido members 50 percent of the net value of the uncut timber within the protected area over the next 15 years. The Wildlands Project will fund a forest study for the remainder of the cooperatives' land, which will hopefully result in a sustainable logging plan.

Species Survival Program

Currently the American Zoological Association administers 90 Species Survival Programs (SSPs) for approximately 118 different species of birds, reptiles, and mammals at zoos and aquariums throughout North America. The Thick-billed Parrot is one of the birds included in this program. The Thick-billed SSP provides funding for research in Mexico to insure the survival of the parrot within its historic range. Additionally, the SSP maintains a captive/managed population at a number of U.S. zoos. This captive breeding program has as its goal to increase knowledge of Thick-billed Parrot biology, increase the number of birds available for potential release, and educate the public about the plight of these birds that used to be a part of American fauna.

The basic concept behind the SSP is to breed the birds in a controlled captive breeding program to ready them and/or their offspring for eventual release into the wild.

A "master plan" for the target species is developed which outlines the goals for the population. A stud-book is also created to gain maximum genetic diversity and a stable demographic diversity. Breeding and other management recommendations are made for each individual ani-

mal in the program. The SSPs are often linked to U.S. Fish and Wildlife Service Endangered Species Recovery Plans, assessing wild populations and working on habitat protection programs.

Planned Release Programs

In 1986, a program was begun with the Arizona Game and Fish Department, the USFWS, and the AZA's SSP for Thick-billed Parrots to investigate the feasibility of re-establishing a small wild population in Arizona. In short, wild-caught birds confiscated via the smuggled bird trade and captive bred birds from various North American zoos were released into the wild with disastrous results. It was found that the captive bred birds were essentially unsuitable for release due to their almost complete lack of fear of humans, their reluctance to socialize with wild-caught birds, their inability to form flocks, their lack of recognition of predators, and their poor ability to find food on their own. Additionally, there is a risk that captive bred birds may carry diseases to wild flocks, particularly where captives are not held in isolation from other avian species.

Based on the unfortunate results with the original experiments of release, the SSP guidelines and the husbandry manual for these birds has been revised extensively to help "train" the birds for a life in the wild. This includes, but is not limited to, providing food in its natural form rather than in a stainless steel bowl, holding the birds in larger enclosures so that a "flock mentality" will develop, determining ways to introduce them to predators, and to send them to a "bird boot camp" in an area near their eventual release site where they can practice their food gathering, flocking, and predator evasion skills while still within the protection of a large enclosure for their protection.

Further Information

The current studbook keeper for the Thick-billed Parrot is Susan Healy at the Sacramento Zoo in Sacramento, California. She can be reached at (916) 264-5013. More general information about these birds and the SSP can be found at the AZA web site located at www.aza.org/programs. 