So often the debates erupt in aviculture surrounding the topic of breeding versus not breeding. Different factions support breeding activities while others are vehemently opposed. Sound reasons may be put forth on both sides, but recently I was faced with a superior argument on the breeding side. In some cases, species need the intervention of conservation experts in order to survive. The art of aviculture isn’t only about breeding birds for the pet trade or producing as many birds as possible. Sometimes it is about hand-feeding techniques or the best methods of weaning. The knowledge of those techniques lies with individuals who work breeding birds and supporting their conservation and diversity.

Many people are now familiar with the plight of the Kakapo (*Strigops habroptilus*) after recent YouTube postings of a male Kakapo attempting to mate with a filmmaker, but fewer know the story of the great flightless parrot. The conservation efforts aimed at the Kakapo began many years ago in Fiordland, New Zealand when Richard Henry moved hundreds of Kakapo from Stewart Island to Resolution Island. This capture and move was in response to an increase in predation of the Kakapo by non-native mammals such as the stoat and other feral cats. This was successful for a while, but eventually the invasive mammals arrived at Resolution Island and the population of relocated Kakapo was decimated. Many years later the remaining birds were relocated and now the total population of Kakapo in the world is 131 individuals living on predator free Codfish Island. There have been three plans put forth since
the early attempts by Richard Henry to help create a successful population of Kakapo in the wild. The most current plan includes establishing one population requiring no management and two others that would need to be managed into the future. The mission statement of the Kakapo Recovery Plan includes a statement that the plan hopes “to restore the mauri (life force) of Kakapo”

When talking about the Kakapo, superlatives like “largest” and “only” get used quite a bit. The Kakapo is the heaviest parrot in the world weighing in at 2000gm normally and up to 4000gm during breeding season. In addition they have the lowest metabolic rate of any bird. They are the only flightless parrot species, and Kakapos are also nocturnal.

The breeding habits of the Kakapo also make them distinctly different. Their breeding rituals are known as lek-breeding. This term refers to the competition amongst males for breeding females. They don’t breed each year if the supply of rimu fruit which the females feed the chicks isn’t abundant enough. Males build a bowl in the earth on ridges in the mountainous terrain on the island where they sit for two to three months, and try to lure a female to the site. The females find the males through a series of vocalizations called booms and chings. In a single night a male Kakapo can boom one thousand times! The booms are a low sound that can be heard for up to 5 km in the mountains. They also build a number of trails going to the bowl, a habit which lends itself to the term track and bowl system of breeding. When successful mating has occurred, the females can lay clutches of one to four eggs which are incubated for roughly 30 days. Once the chicks have hatched, the females do all the foraging and the males have little or nothing to do with the chicks.

On a speaking trip in New Zealand and Australia this past June, I was lucky to be part of a planned meeting with members of the New Zealand Department of Conservation to discuss the Kakapo Recovery Project. Barbara Heidenreich, animal trainer, and I traveled to Nelson on New Zealand’s south island with increasing excitement as we watched the beautiful scenery pass by. Our hopes were that we would speak with Ron Moorhouse who works on the project to strategize ways to spread the word about the Kakapo and support the work of the DOC. To our surprise we were presented with a once in a lifetime opportunity.

Our adventure with the Kakapo had only just begun in Nelson. Ron asked if we would be interested in traveling to Invercargill to see seven chicks that were being hand-reared in preparation for re-release on Codfish Island. Our eyes lit up at the offer and after a harrowing evening drive from Picton to Nelson, Barbara and I asked how long of a drive it was to Invercargill. The depressing answer was 12 hours. Neither Barbara nor I had ever seen a Kakapo in person. We watched as the large chicken-like parrots scurried around the pen stripping vegetation from branches. On the floor of the pen were little white balls of stripped foliage which are a telltale sign that Kakapo are present. The chicks were climbing on the branches in what appeared to be the Kakapo version of the children’s game King of the Hill. Upon closer inspection it was apparent that the chicks were simply looking for tasty morsels and honing their climbing skills. Our conversation with Daryl was filled with great stories of
Kakapo adventures on Codfish Island and the challenges facing the species. In New Zealand, habitat destruction isn’t the issue as there is plenty of undeveloped land. The greatest issue facing the Kakapo is the introduction by man of invasive predatory species.

As we stood discussing the future of the Kakapo, we were offered an opportunity that hadn’t even entered our wildest dreams. Daryl asked if we wanted to touch the birds and have a chance to interact. As we picked out chins up off the floor, Daryl explained that their research showed that as long as the chicks were raised in a group they didn’t show signs of bonding with humans. Previous clutches had been hand-fed and housed off Codfish Island and were thriving once re-released. We knelt beside the pen and the chicks cautiously approached and began exploring our hands to see if we had something to offer. They began exhibiting typical baby behavior, bobbing their heads in search of food.

This behavior reminded me that although they looked very different from all the baby birds I had seen in the past, they were indeed young psittacines. This interaction also allowed for closer inspection of the chicks, their unusual plumage, and their fascinating body shape. At first glance the Kakapo appeared to have a mottled green plumage with feathers like most other psittacines. After touching the chicks it became apparent that their feathers were similar on the majority of their bodies but that they also have whisker like feathers on their faces. When someone talks about a baby parrot, one pictures something quite small and awkward. The Kakapo chicks met the criteria of being awkward but size was another story. These chicks were the size of a chicken or even a bit larger. The other significant physical difference was the shape of the Kakapo’s facial disc. This area looked similar to that of a barn owl.

The final treat in our trip to Invercargill came when Daryl asked if we wanted to see how much a chick weighed. It was getting late and at first I thought how odd that he would end our visit by weighing one of the chicks. I couldn’t have been more wrong as I watched him lean into the pen and pick up one of the chicks which he then handed to Barbara and then to me. What a thrill holding an endangered species and this was a substantial bird! After years of holding young parrots, I was expecting the usual even though these chicks looked so much bigger. Expectation proven wrong as the meaty Kakapo perched on my forearm!

Holding the chick only served to strengthen my lust for knowledge about this incredible species and with the help of the DOC in New Zealand I have been able to learn a great deal more about the recovery project and the species in general. As any aviculturist can attest, hand-raising birds is a full time job but imagine having to hand feed, wean, and release a bird that is a member of a species that is not only endangered but is also fairly secretive in it’s natural habits. The Kakapo require a diet that is quite low in protein as they are completely herbivorous in the wild. Finding a hand-feeding formula that met their dietary needs was a challenge. On the island, adult birds spend the bulk of their days silently foraging on...
the ground and climbing trees to find the foods of choice. Weaning of the hand-fed chicks was accomplished by adding items such as apple, native berries, rimu, walnuts, and almonds. As with any captive reared animal, the diet was increased in variety as the birds were able to try new foods and recognize them as a food source. This slow introduction also helped the chicks develop foraging skills. The release back into the wild involves temporary pens that are equipped with cat doors to allow the chicks access, but not adult birds. The pens are placed in the ranges of wild Kakapo. Upon release, the chicks are supplied with supplemental food from bins with lids for approximately a year. The chicks do not appear to require or seek out the supplemental food after a year’s time.

After our encounter with the chicks we spent time with Daryl and the staff discussing our work and ways to help get the word out about the Kakapo. I have always felt that our zoos and collections of birds provide a great educational foundation for fostering a passion for animals and conservation. This experience reminded me of how important that connection is when you have the chance to see or interact with an animal that may need help through conservation efforts. I suggest that if any readers are looking for a conservation project to support take time to look into the Kakapo Recovery Project at www.Kakaporecovery.org.nz/. After experiencing their “mauri,” I must say that I have a passion for the species and hope that readers will take some time to learn more about this fascinating oddity; one of New Zealand’s natural treasures, the Kakapo.

Many Thanks

I would like to thank Barbara Heidenreich for igniting my passion for this species and for making the contacts that allowed us this great experience; Ron Moorhouse for offering such a phenomenal opportunity and Daryl Eason and the staff and volunteers at the DOC in Invercargill for staying up late to show two bird groupies from the U.S. how to grow a Kakapo!
The American Federation of Aviculture, Inc. (AFA) is a non-profit, 501(c)3 educational organization, established in 1974, whose purpose is to represent all aspects of aviculture and to educate the public about keeping and breeding birds in captivity.

AFA’s primary goals are the education and dissemination of information related to aviculture among pet owners, hobbyists, avicultural societies, zoos, veterinarians, research institutions, the pet industry and government officials. In addition, AFA is concerned about the welfare and humane care of all birds and promotes the establishment of high standards of avian care both in the United States and abroad.

The AFA supports your rights to acquire, keep, breed and sell birds in a responsible manner. The organization monitors proposed laws and regulations at the state, federal and international level that affect your future as an aviculturist and the well being of birds.

The AFA is primarily a volunteer organization. Our efforts to ensure the future growth and development of aviculture are totally dependent upon people like YOU joining and supporting AFA. The AFA believes that aviculture is a valuable conservation tool and that the care and breeding of birds in captivity is an exciting and fulfilling endeavor. AFA offers many different services to its members because AFA has so many different types of members.

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Cuban Macaw by Wayne E. Smyth

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