Program Supporters

Support for the Spix's Macaw recovery program has been provided by the following organizations:

Brazilian Institute for the Environment and Natural Renewable Resources (IBAMA); Fundacion Loro Parque; Ó Boticario Foundation; ASHOKA Foundation; Herbert Levy Institute; Birds International, Inc.; WWF-Brazil; BirdLife International; Houston Zoo; Grupo Relampago; AZA Brazil Conservation Action Partnership; The Moulton School; Fundação Parque Zoologico de São Paulo; Santa Ana Zoo; Central Hydroelectric Company of São Francisco; and many individuals involved in the program.

In the United States, the Committee for the Recovery of the Spix's Macaw is working with the American Federation of Aviculture (AFA); International Aviculturists Society (IAS); American Zoo and Aquarium (AZA) Brazil Conservation Action Partnership; and Houston Zoological Society to explore fundraising avenues to directly support projects, including field research, land acquisition, the rural schoolhouse program, reintroduction, and other priority programs.

Internationally, the Loro Parque Foundation of Spain has been the primary funding group of the field program and has played an essential role in raising funds for the conservation of this species. If you are in interested in supporting the Spix's Macaw program, please contact one of these groups for information.

References

Barros, Y. M. (1999) "Conservation and Management of Spix's Macaw: Successful Experience of Parental Care in a Hybrid Couple." Book of Abstracts, VI Neotropical Ornithological Congress, October 4-10, 1999, Monterrey and Saltillo, Mexico.

Collar, N.J., Gonzaga, L.P., Krabbe, N., Madroño-Nieto, L.G., Naranjo, T.A., Parker & Wege, D.C. (1992) Threatened birds of the Americas. The ICBP/IUCN Red Data Book, Cambridge: ICBP.

Juniper, A.T. and Yamashita, C. (1991) The habitat and status of Spix's Macaw *Cyanopsitta spixii*. Bird Conservation International 1: 1-9.

Schischakin, N. (1999) "The Spix's Macaw (*Cyanopsitta spixit*) Studbook and Population Management Plan of the IBAMA Permanent Committee for the Recovery of the Spix's Macaw." Houston Zoological Gardens, Houston.

Sick, H. (1984) Ornitologia Brasileira, Uma Introdução. 3rd. ed. Editora Universidade de Brasilia, Brasilia.

Parrotlets

Sandee and Robert Molenda, C.A.S. Santa Cruz, CA

iny, terrific and talented, parrotlets are quickly becoming very popular among people who want all the personality of a big parrot in a small, quiet bird. Parrotlets are adorable, intelligent, playful, sexually dimorphic, and make wonderful pets when handfed. They can learn to talk, need little space, are easy to breed and care for, and are incapable of screaming.

Relatively unknown until a few years ago, parrotlets are rapidly becoming one of the most popular parrots in aviculture. They are also one of the world's smallest species and are often confused with lovebirds. Being true parrots, however, they are most closely related to the large Amazons. There are actually three different genera of parrotlets: *Touit, Nannopsittaca* and *Forpus*, all of which are found in either Mexico or South and Central America. Parrotlets from the genus *Forpus* are the only ones bred in the United States.

These little parrots are various shades of green with patches of yellow, gray, and blue which identify the species. Identification of the male of a species is made upon the particular shade and location of blue he possesses. The females are more difficult to identify so close attention must be paid to small details such as subtle changes in the shades as well as the distribution of yellow and green feathers.

Parrotlets kept as single birds make the best pets. Ideally, the young parrotlet should be placed with its new owner at six to 10 weeks of age. They are weaned and their bonding instinct is strongest at this time. However, this does not mean that older birds do not make wonderful pets — they can. If the parrotlet is placed in a loving and caring home, it will quickly become a member of the family. Females more often than males can become "one-person" birds. However, the younger the bird is adopted and the more people handle it, the more likely it is to tolerate all people. Since many species of parrotlets are rare, only Pacific, Greenrumped, and Spectacled Parrotlets ought to be sold as pets.

Pet parrotlets are usually bundles of energy, spending hours swinging, climbing and playing with lots of toys which their cage should accommodate. Ropes, ladders, leather chew toys, bells, beads and Olympic rings which are particular favorites. They are amazing acrobats and often play with several toys at once. They can also be taught to use a playpen but they must be monitored as they will often come looking for their person. Being intelligent and fearless, their natural curiosity can get them into trouble if they are not supervised

Parrotlets, particularly hens, should be at least a year old before they are allowed to breed or they can become egg bound and die. Males who are too young often do not provide enough food for the hen and the babies which are then abandoned or destroyed. Young pairs can be kept with one another until they go through their first molt, then they should be separated until they are at least 11 months old. It is not uncommon to have handfed

birds begin laying as young as seven months — which can be disastrous.

The birds breed best when there are more than one pair in the facility and they can hear but not see each other. Pairs can be separated by wood barriers, foliage, burlap or even cardboard between the cages. Handfed birds generally make the best parents as they are not as sensitive to stress and are used to people. Be careful, however, handfed birds have no fear of people and, females especially, will inflict a painful, bloody bite if given a chance. Parrotlets also have a much deserved reputation for not letting go once they latch on. When removing babies, a piece of cardboard can be used to hold the hen back as she will not usually leave the box the way males do. Females have been known to attack babies as they were being pulled so the utmost caution must be used.

A single parrotlet should have a cage no smaller than 18 inches tall, 13 inches wide and 14 inches deep. Most species breed well in a minimum cage of 18 inches tall, 24 inches long and 24 inches deep. Cages should have pull out trays with grates to keep the birds off the bottom. They can also be bred successfully in three- to six-foot-long flight cages. Both Mexicans and Yellow-faced breed much better in flights than in small cages. Not surprisingly, many breeders feel their birds are in much better condition and have more production with large flights. Food and water should be placed so they are not soiled by droppings. Natural wood perches of varying sizes must be sturdily attached to the cage. Infertility can sometimes be traced to wobbly or unstable perches.

Breeding pairs should have nest boxes that are six inches wide by 10 inches tall and seven inches deep, which should be hung on the outside of the cage and filled with about two inches of untreated pine shavings. Boxes should be placed on the front of the cages so when the birds look out, they only see the inside of their cage. Some birds, particularly Greenrumpeds, are fond of throwing the nest material out of the box so be sure to keep it replaced. Babies can develop crippling orthopedic problems if left on the bare floor. Conversely,

sometimes birds will bury their eggs and lose them in the shavings. Mexican Parrotlets seem particularly prone to this habit. If this is the case, remove the shavings a little at a time until the problems ceases or try using heavier shavings. In any case, by checking nest boxes daily, you will be able to monitor the pairs and deal with any problems as they arise. Also, following a routine will teach the birds to tolerate your interference.

Use open food dishes as parrotlets often will not stick their heads into a dish with a hood and can starve. Water should be provided in a glass tube fountain. Often, parrotlets use their water dishes to bathe in and will splash out all of the water. If provided with a canary-sized bath, they will play and splash until they are soaked. Parrotlets will also bathe in wet spinach or lettuce by rolling every inch of their body on the wet leaves.

Parrotlets are extremely active birds and require a great deal of fuel. Gram for gram, they eat more than a macaw. Pairs feeding babies will often consume three times the normal amount of food.

Handfed parrotlets should be introduced to a wide variety of foods while young. A good-quality small hookbill or Cockatiel seed mix should be fed. A large hookbill seed mix can be provided, however, parrotlets are unable to crack open the nuts often contained in these mixes. They can also be fed a commercial pelleted diet, although parrotlets require some seed in the diet particularly breeding pairs. Fortunately, they will usually eat both seeds and pellets, unlike most parrots. Whether fed seeds or pellets, they still require fresh fruits, vegetables and greens daily. Breeding pairs also need sprouted seed, egg food, cooked beans, whole-grain breads, potatoes, rice, and pasta which should be fed several times a week. Fresh water, mineral block, and cuttlebone should be available at all times. Vitamins should be sprinkled on the soft foods several times a week. Spirulina can be added to the egg food, if desired.

Finally, the importance of calcium to breeding hens cannot be stressed enough. Cuttlebone and mineral block should always be available and calcium powder should also be sprinkled on the soft foods. Most hens will devour massive amounts of cuttlebone immediately before they lay eggs. It is common for a hen to eat a six-inch cuttlebone once a week for several weeks prior to laying. If the hens do not receive enough calcium they will certainly become egg-bound.

The male will usually investigate the box first and, when he deems it safe, will try and entice the female into it. Once mating has taken place, the hen will lay from four to eight eggs although Pacific hens have been known to produce 10 fertile eggs. She will hardly leave the nest box from several days prior to laying until the last baby is gone, which can be as long as nine or 10 weeks. Females lay one egg every other day. In most species, the babies take 18 to 21 days to hatch. Remember, Mexican and Yellow-faced Parrotlets are the exception and usually take 24. In all species of parrotlets, the females incubate the eggs and the males provide food and protection. Sometimes the hen will allow the male into the box and even to incubate the eggs but this seems to be an individual preference in each pair.

As with all baby parrots, parrotlets are blind, deaf, and almost naked when they hatch. Even so, they have loud cries for their tiny size as Greenrumpeds, Blue-wingeds Spectacleds can often be heard begging for food when only a few hours old. They are extremely tiny when they hatch — no larger than a bumble bee. Unlike many species of parrot, parrotlet hens begin incubating almost immediately after laying the first egg, therefore the babies hatch in the order the eggs were laid. This leaves a great deal of age difference between the oldest and youngest babies, especially in large clutches.

Most breeders who handfeed, leave the babies with their parents until they are 10 to 14 days old. Babies should be placed in a brooder which is set at 89° F. and checked often to make sure they are comfortable. Birds that are younger than eight days, particularly Greenrumpeds and Spectacleds, need a temperature of 91° or higher. They are fed every four hours beginning at 7:30 A.M. and ending at 11:30 P.M. Younger chicks are fed more frequently and

given a 2:00 A.M. feeding. Parrotlets can be fed with a spoon or syringe. Tenday old babies generally take between one and two cc's per feeding, gradually working up to a maximum of six by the age of three weeks.

As with any good breeding program, accurate records are a must. Each baby should be closed-banded and all information as to parent identification, date egg was laid, date of hatch, date baby was pulled, and medical or veterinary information should be recorded. In addition, babies should be weighed each morning prior to their first feeding so as to monitor gains and losses.

Babies show an interest in solid foods when they are approximately four to five weeks old. They should be given millet spray, finely chopped fruits, vegetables and greens, whole grain bread, small seeds such as finch and cockatiel, pellets, cooked rice and pasta. Dry foods are scattered over the bottom of the brooder; cooked foods are placed in flat dishes. The temperature in the brooder is gradually lowered to room temperature as the babies

feather out. At about five weeks, they are placed in a large weaning cage with low perches and food is fed on paper plates or small flat dishes placed on the bottom of the cage. By the time the birds are six weeks of age, they are usually completely weaned. However, birds are individuals, if one is weaning more slowly than the others, he should continue to be fed.. It is better to continue feeding a few more days than have a tragedy. Some species, such as Blue Wings and Spectacles take longer to wean, usually eight weeks rather than six.

The sex of parrotlet babies can be determined when they are about three weeks old. By the time their pin feathers are growing in, you can see the blue feathers of the males. Mexicans, Spectacles and Blue Wings sometimes take as long as their first molt to produce the blue feathering on the rump, but it is evident on the wings as soon as they begin to feather out. Coloring enhancement after the first molt can also occur in various subspecies such as the hens of the Pacific subspecies Forpus coelestis lucida and the males

of the Green Rump subspecies Forpus passerinus deliciosus.

As with all bird breeding operations, cleanliness and sterilization is an absolute must. While common chlorine bleach is okay for disinfecting most equipment such as feeding dishes, cages, baskets, tubs and scales, a virucide/pseudomonacide such as Wavecide, Viron, Rocal-D, Avinol or Kennesol such be used for soaking syringes, feeding spoons, brooders and anything that has been in contact with either babies or a sick bird. Also use common sense such as never bringing strange babies into the nursery and always quarantining new birds for at least 60 days.

Whether breeding parrotlets for the pet market or trying to establish captive breeding cooperatives for conservation, these diminutive parrots have a lot to offer. They are beautiful, intelligent, quiet, hardy and relatively easy to breed. Hopefully, as aviculturists, we can find a place in our hearts as well as our aviaries for these fascinating birds so they will be available for future generations.



RX-2 Exotic Bird Breeders Favorite Incubator

- Solid State Temperature Control
- Preferred By Top Breeders Around The World
- Unparalleled visibility with Impact Resistant Polycarbonate **Domes**
- Whisper Quiet Fan Motor
- · Improved Turner Power
- Unique "Wall of Air" Design on All Four Outside Walls

We also carry a complete line of reptile products including scales, digital thermometers, candlers, heating mats, and more!





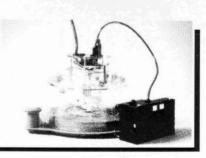






AICU Intensive Care Unit

- Hospital Unit for Ill or Injured Birds
- Nursery Unit to Hand Raise Young Birds
- · Large LED Temperature/ Humidity Read Out
- Veterinarian Designed and Tested
- Audio and Visual Alarm
- Provides Safety and Security
- Easy to Clean and Sanitize
- · Filtered Air
- Nebulizer Adaptable



TX-7 Incubator

- Preferred and Used by Tens of Thousands of Bird Breeders, Schools and Hobbyists World Wide
- Total Visibility Polycarbonate
- Improved Turner Power Motor
- Solid State Temperature Control
- · Unique Humidity Control
- Adjustments Can Be Performed Without Opening The Incubator
- Highly Reliable Mercury Thermometers

Free catalog available. Call, Write, or Email: 690 Brandywine Ave., Chula Vista, CA 91911 Phone: 619-216-3400 • Fax: 619-216-3434 www.lyonelectric.com