

# The Keeping and Breeding of the Great-billed Parrot

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## LARGE-BILLED PARROTS (TANYGNATHUS)

### Genus Description

The species in this genus are medium to large parrots with very large, heavy bills and proportionately short slightly rounded tails, giving them a “top-heavy” appearance, especially in flight. Sexual dimorphism is slight; young birds are duller than adults.

### The Black-lored Parrot

(*Tanygnathus gramineus*)

Little is known about the Black-lored Parrot except that its habits are generally nocturnal and that it is heard more at night than during the day. The Black-lored is found only on the island of Buru, just west, north west of Ceram. Its call is similar to that of the Great-billed Parrot but is more drawn out and higher in pitch. Like the Müller's, the male has a rose colored bill and the female's bill is horn colored.

**Habitat:** They inhabit mountainous areas but have been occasionally observed along the lower coastal regions.

### The Müller's Parrot

(*Tanygnathus sumatranus*)

Also called the Blue-backed-Parrot, this species is basically a dominant green. The blue on its back and rump is its most distinctive feature. The male's blue is normally more extensive than the female's. The tail is tipped with a greenish yellow. In adults the sexes are easy to identify as the male's bill is a rose red color and the female's is horn colored. The iris is pale yellow to



Photo by Beth Greenberg

The Great-billed Parrot aviaries of Dwight and Beth Greenberg.

almost white. Immature birds resemble the female. The Species also includes the Rufus-tailed Parrot which is based on a single specimen (according to *Parrots of the World*) and that this specimen was probably an aberrant *T. sumatranus*. This bird had a reddish brown bib and also reddish brown coloring of the under tail coverts.

**References:** Forshaw (1973), Juniper & Parr (1998).

**Habitat:** lowland forest, especially forest edges and trees in cultivation; they tend to avoid dense forest.

**Subspecies:** There are five known sub-species: *T. s. sangirensis*, *T. s. burbidgii*, *T. s. everetti*, *T. s. duponti*, *T. s. freeri*.

**Indigenous areas:** The Müller's parrot inhabits the islands around the Philippines and the Islands of Taulaud and Sangir. They also are found on the island of Sulawesi and related islands in Indonesia. These birds are relatively quiet during the day but can have a harsh voice and are active and noisy at night. As with most parrots, they can be very destructive.

### Philippine Blue-naped

(*Tanygnathus lucionensis*)

The Philippine Blue-naped closely resembles the Great-billed Parrot, more so than the other species in the *Tanygnathus* genus. One of the striking similarities is the wing marking. Although noticeably smaller



Photo by Beth Greenberg

A pair of Great-billed Parrots. Their name becomes obvious when looking at their great bills. Males and females look much alike.

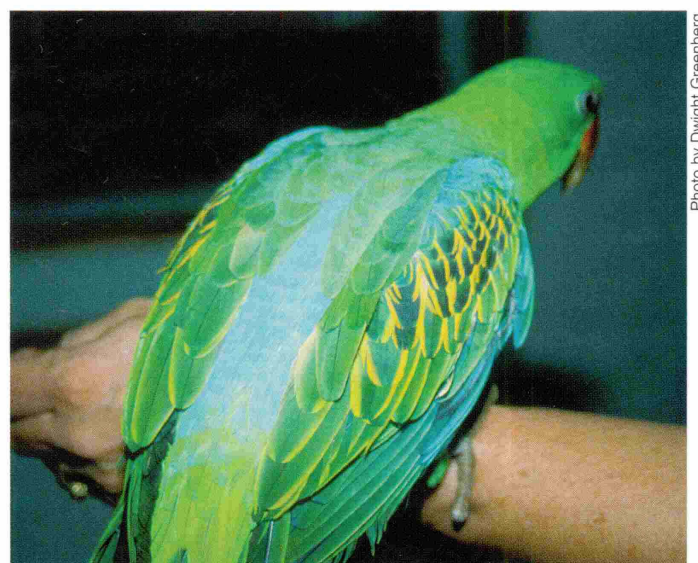


Photo by Dwight Greenberg

A color study of the Great-billed Parrot. The Blue-naped Parrot looks very similar but is smaller.

in size, the overall color is green with variations on the wing that closely emulate those of the Great-billed Parrot. The nape of the neck has a light shade of blue and the tip on the tail is not yellow. The rump is brilliant green and there is black on the bend of the wing.

*Subspecies:* There are two known sub-species: *T. l. hybridus*; *T. l. talautensis*.

### Great-billed Parrot

(*Tanygnathus megalorhynchus*)

Huge red bill. Bright green head, upper mantle, and upper-tail-coverts. The feathers of the lower mantle are dull green and tipped pale blue. Back and rump are pale blue. Under-parts greenish-yellow; thighs green. Under-wing-coverts and sides of breast are yellow; yellow across underside of flight feathers. Scapulars and lesser wing-coverts are black with broadly margined yellow; greater wing-coverts green edged with greenish-yellow; primaries and secondaries are blue, outer webs are narrowly edged green. Tail above green, tipped with green-yellow, below dusky yellow. In flight narrow wings are bright yellow with thin tapered tail. Iris yellow-white; legs green-gray. Immature: have little or no black on wings.

*Habitat:* favors coastal forests including mangroves; far less common than Müller's Parrot; coastal areas only.

*Characteristics:* Given that much information on parrot distribution and population levels has been inferred from studies of parrots in flight, very little is known about the Great-billed Parrots. While studying large parrots *in-situ*, two factors were studied – flight frequency and flight duration. During watches from vantage-points overlooking forest patches on the island of Sumba, Indonesia. Great-billed Parrots *T. megalorhynchus* flew most often in the early morning and late afternoon. Compared to the other psitticine species inhabiting the same area the Great-billed flights were some of the most frequent and longest.

*Subspecies:* There are seven known sub species: *T. m. affinis*, *T. m. subaffinis*, *T. m. bellmayri*, *T. m.*

*viridipennis*, *T. m. djampeae*, *T. m. floris*, *T. m. sumbensis*

### AVIARY CONSTRUCTION

#### Racks/Cages

We chose suspended caging system to allow easier maintenance, cleaning and feeding of our collection, thus greatly reducing the man-hours needed to run our operation. We feel the birds are more secure when they can look down at you while you are feeding them or cleaning the cages.

General construction of the racks that hold the cages are 4in X 4in X 12ft pressure-treated posts buried four feet into the ground. Pressure treated 2in X 6in X 16ft rails fastened five feet off the ground provide the support that the cages rest on. This structure is tied together with double 2in X 12in X 16ft headers fastened to the 4in X 4in X 12ft posts. Two racks are tied together with 2in X 4in X 5ft braces in the middle. The dual sets of racks run in parallel with a 6ft walkway between the racks. 10ft by 26in V-grooved tin roofing completes the rack structure providing shade and protection from the elements. All rails are covered with galvanized drip stripping that prevents the birds from chewing on the pressure-treated timber used in construction. Overall dimensions of one rack are 32ft long by 16ft wide by 11ft tall at the peak of the roof.

Three 15 watt light fixtures spaced 14 feet apart provide night lights for the birds. Water is run to the rack for watering and cleaning purposes.

Cages are built using 1/2 in X 3in X 4ft 12-gauge hot dipped galvanized wire. Stainless steel "J" clips or hog rings are used as fasteners. The cages for the Great-billed Parrots are 10ft to 12ft long. Dual cages have privacy partition constructed of "U" channel tin and "V" groove tin. This privacy partition is protected by 1/2 in X 1in 16-gauge hot dipped galvanized wire.

Each cage has a custom built feeding station that contains compartments for food and water. The feeding station has a small access door in the middle of the cage back located along the walkway between the racks. Most of the breeders

move to the opposite side of the cage while we are feeding. The small door greatly reduces the possibility of escape. The feeding stations also keeps the food and water bowls where you put them and not where the bird would like them to be.

All access doors, with the exception of the feeding station door, are hogringed closed. Use of steel hog rings allows the removal of the rings so new perches may be added or birds may be netted.

Cages are secured to the rails with tie-down wire. One of the great advantages of this type of construction, is when threatened with hurricanes, the tie-down wire is cut, the cages are removed from the rails and placed under them, affording some protection from falling pine and oak limbs. Once the emergency has passed, the area is cleaned the cages placed on the rails, secured, and then pressure washed. The birds are then placed back in their respective cages.

Having an abundance of oaks in our area allows us to use natural perches. The hangers consist of 2in

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X 6in hangers mounted on the cages with fender washers and pop rivets. Once in place, it is a simple matter to cut an oak branch to size and simply set it into the hanger.

A vertical grandfather style 12in x 12in x 36in nest box has proven successful for us. The nest box is wired inside. The nest box is secured to the cage by sliding it into a wire sleeve constructed of 1in by 2in 14 gauge wire. An access door in the wire sleeve opens to a small access door on the back of the nest box. The nest box is prepared for breeding season by cleaning it out then soaking in bleach. Once the box dries, a light coat of five-percent sevin dust is applied, then about four inches of clean pine shaving are added. While interviewing other breeders of Great-billed Parrots we have found they have been successful with many different styles of nest boxes including "L" type, "T" type and a horizontal grandfather style. If the Great-billed Parrots are in the mood they are not choosy about their nest boxes.

#### NUTRITION

To ensure a proper and well balanced diet for Great-billed Parrots there should be a variety of vegetables, fruits, nuts, grains, and beans offered along with their basic diet. Some Great-billed Parrots have a tendency toward vitamin A deficiency. They also require a higher oil and protein content contained in a variety of nuts and cheese.

Our basic diet consists of a half seed mix which includes sunflower, safflower, pumpkin, buckwheat, groats, oats, cracked corn, peanuts, biscuits, red chili peppers, dried banana, almonds, and a few other seeds.

One quarter is made up of fruits consisting of one or more of the following each day: sliced apples, papaya, coconut, melon, mango, oranges, grapefruit, kiwi fruit, grapes, and other fruit when in season. We alternate these various foods from day to day. We also offer grains such as rice, macaroni, and wild rice.

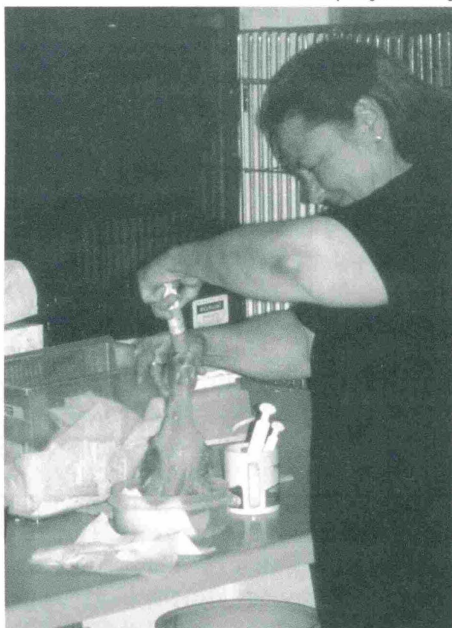
Rounding out the diet includes a variety of vegetables such as zuc-

chini, summer squash, broccoli, romaine lettuce, kale, collard greens, carrots, corn on the cob, peas, green beans, and sweet potato.

Along with their daily diet we also offer peanuts, Brazil nuts, almonds, walnuts and pecans. One of the favorite foods of the Great-billed Parrot is Kenari nuts or better known as Molucca nuts. These are difficult and expensive to obtain as they are shipped from Indonesia.

When breeding, the Great-

Photo by Dwight Greenberg



Beth Greenberg feeding a young Great-billed.

billed Parrots receive a soaked bean mixture three times a week. The mixture contains a combination of mixed pulses, such as navy beans, baby lima beans, lentils, garbanzo beans, and green split peas. We soak these for eight to ten hours, rinse well and then serve.

Our birds are fed early in the morning so by mid morning most of the fresh foods have been eaten. During spells of very hot weather, usually mid-June through Sept, (our hurricane months) we will offer fresh water twice a day. At this time we check to see if any fresh food is left and if so we will remove so as to eliminate any mold or bacteria buildup.

Great-billed Parrots are chewers and to satisfy their need to trim their bills we often offer them large pinecones. They seem to enjoy get-

ting the pine seeds from these cones.

When our Great-billed Parrots go into a molt or while preparing for breeding season, we offer CeDe egg-food mixture with additional calcium and minerals.

#### BREEDING

Our Great-billed Parrot aviary faces the back of our house so we can keep an eye on what's going on. This affords us the opportunity to observe our Great-billed Parrots and their habits. Courting usually goes on for a month until they settle down to the serious business of nesting.

During the courting session the male often flies to the female and makes gestures and chatters to her. The male's and female's flash their irises (blaze their eyes) and they stretch out their necks as they face one another and sway to and fro slowly as if in a trance. This behavior pattern is the prelude to the actual mating. While the male is mounted he will continue this trance behavior and will slowly sway back and forth near the female's head and chatters at the same time in a very low voice. Once mating is completed, the male will fly off to the opposite end of the aviary and the female proceeds to preen.

In 1997 our founder pair went to nest for the first time. Great-billed Parrots clutches vary between two and three eggs. Incubation begins with the first egg laid and continues for twenty-eight days.

The female will sit tight on the eggs. She will come out when there is fresh food delivered or upon our inspection of the nest box. We have never had to chase her off the nest. She has been very good about letting us inspect.

The Great-billed Parrots breeding season usually starts at the end of February and the first part of March. The eggs have a pearly white coloring. When the babies hatch they look very pink in color and will have just a few strands of light yellow natal down on their backs. The bill is a pretty orange color at this state. The toenails are a light gray.



After removing the chicks from the nest box the ritual begins anew and approximately 26 days later (a full cycle) has passed the female will go back to nest again. Some Great-billed Parrots will go to nest a couple of days sooner.

#### NURSERY MANAGEMENT

When the babies are two to three weeks of age we will pull them for hand feeding. There are several different formulas offered on the market. When we pull the babies we will weigh them and monitor their growth. We place them in a brooder set for 96 degrees F. It is very important to keep a weight chart and when weighing the babies it should be done first thing in the morning when their crops are empty. By doing this we can get an accurate weight.

At three weeks of age the babies' eyes are open and the bill of the older chick has now developed a deep reddish-orange coloration towards the tip of the upper mandible. At about a month, the babies have started their pinfeathers on their wings, with smaller pins completely covering their head. The tail is approximate a half an inch to an inch long. Most of the bill has turned to a deep reddish-orange color and the secondary down has now appeared over much of the body. At this point in development the bird is rung with an AFA aluminum size 14 closed band.

At about 33 days of age the pinfeathers break through their quilling to reveal their green plumage. At this time we remove the chicks from the brooder and place them in plastic compartments and place these on a heating pad with the compartments half on and half off the heat. This allows the chick to move on and off the heat when he feels like it.

The chicks will be fully feathered on the wings at approximately 44 days of age and the head will be nearly fully feathered. The tail feathers are now free of their quills but will not yet have reached their full length. The breast, abdomen and thighs are all becoming extensively feathered.

When the chicks reach approximately 62 days of age, they

should be starting their weaning process. The babies like chewing on millet that we offer. After a few days we start with soft foods. They are attracted to color so we offer chopped carrot, summer and zucchini squash, and diced sweet potato along with broccoli. We call this our vegetable medley. They will pick at this at first and then they start eating most of what is offered. Rice is also offered. It isn't long after this that the babies are well on their way of eating on their own. We still supplement in between with hand feeding but they soon resist this and just want to eat their seed and veggie and fruit mixes.

#### CONCLUSION

Although these birds have been in aviculture for just a few years, the Great-billed Parrot has not been established to any degree in a captive population. This is a species that is one of the most challenging to maintain and breed. It requires a long-term commitment from those aviculturists keeping it.

The physical appearance of the bird is striking with its proportionately large head and bill. The voice can be loud, but Great-billed Parrots rarely create much noise. For us, they are great watchdogs. If there is an intruder of any sort in or near the aviary at night they will make quite a fuss, therefore alarming us and the rest of the flock. Other than this they are quiet and because of this they do make ideal aviary subjects.

Given that habitat loss will continue at its present rate – or accelerate – and the human populations that compete for the same resources as the Great-billed Parrots will take precedence, it is relatively easy to foresee the eventuality that these strikingly gorgeous birds are predestined to extinction in the wild.

Accepting the above statement as true, then it is a foregone conclusion that aviculturists must provide the stewardship required to fully utilize and protect those few specimens that are currently held in aviculture. Medical problems encountered in the not too distant past have slowed the distribution of these birds to interested aviculturists. As a

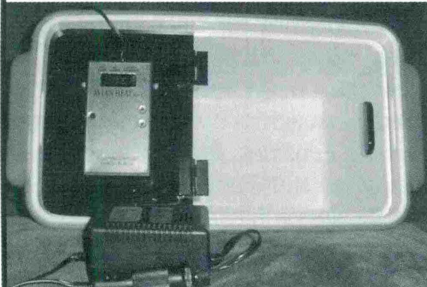
group, we do not have the luxury of waiting until all of the questions are answered. As the captive wild caught population ages, the breeding probabilities diminish and sooner than later all F1 stock will not be viable. If the genes from these birds have not been renewed through captive breeding efforts, they will be lost forever. We must weight our options, and move fast cautiously to ensure as large a pool of genetic material from F1 stock is secured. If we, as a group, fail to do this, we have no one to blame but ourselves. If this comes to pass, it could truly be said we helped with the extinction of another parrot species.

#### REFERENCES

- Juniper T; Parr M; *Parrots: A Guide to Parrots of the World*. Yale Univ. Press, New Haven, Conn. 1998
- Forshaw J; *Parrots of the World*. 2nd edition, T.F.H. Publications, Inc., Neptune NJ 1977
- Strange M; *Birds of Indonesia, A Photographic Guide to the*. Publisher; Eric Oey Periplus Editions (HK) Ltd. 2001
- Alderton D. Dr; *The Atlas of Parrots*. T.F.H. Publications, Inc. Neptune, HJ.1991



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