The male Great-billed parrot is noted for its very large head and bill. Not commonly reproduced in captivity, there seems to be a lopsided ratio of females over males.

Female Great-billed Parrots that were removed from the nest (at seven weeks) for photographs. These youngsters were completely parent-reared.

The Blue-naped Parrot appears to be reproduced more successfully in recent years than its two close relatives, the Great-billed and the Muller's Parrots. It is important that these species be held back for future breeding.

The World of the Tanygnathus Parrots

by Dale R. Thompson
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INTRODUCTION

The Tanygnathus group of parrots originate from the Philippines, Sulawesi (Celebes), Borneo and other smaller islands of Indonesia. All are known for their large, heavy bills and relatively short, rounded tails. This gives them a top-heavy look. They are very beautiful with their shades of brilliant blues and greens contrasted by a large reddish-orange bill. Some have greenish-yellow scalloping on the primary and median wing coverts. The feathers on the chest region are often hair-like in appearance. This feature is well known in the Eclectus Parrots. In earli-
er times both the Tanygnathus and Eclectus Parrots in Germany were known as "Edelpapagei" or noble parrots. This term is still being used today. Indeed, both groups are very noble in their appearance.

**SPECIES AND DISTRIBUTION**

*Great-billed Parrot*, *Tanygnathus megalorhynchos*, is found on the islands of western Papua, Tanah and Lesser Sunda, the Moluccas and offshore islands of Sulawesi (Celebes), Indonesia. Joseph M. Forshaw's *Parrots of the World* gives it eight subspecies.

*Blue-naped Parrot*, *Tanygnathus lucionensis*, is found in the Philippine Islands and offshore islands of Borneo and Sulawesi, Indonesia. It is given three subspecies.

*Muller's Parrot*, *Tanygnathus sumatr anus*, is found in the Philippine Islands, Sulawesi and the smaller islands of the Sulu Archipelago, Talaud and Sangir, Indonesia. It is given six subspecies.

*Black-crested Parrot*, *Tanygnathus gramin us*, is found on the Island of Buru, Indonesia. It is monospecific.

*Rufous-tailed Parrot*. This parrot is taken from one specimen (type), presumably from Sulawesi; regarded as an aberrant specimen of *T. sumatr anus* (Forshaw 197: 193).

Only the first three species are found in American aviculture.

**BEHAVIOR**

The Tanygnathus parrots belong to the Subfamily Psittaculinae which also include Eclectus, the ring-necked group, king parrots, hanging parrots, blue-rumped parrots and lovebirds. They have several intriguing features and behaviors that are different from most other parrot groups. Although not identical in each group, their similarities are unique enough to be grouped together. These include:

- The females are usually dominant in behavior.
- This group strongly prefers to not touch each other (exception—lovebirds). Even though one-way or mutual preening is done, the sexes usually maintain a minimum distance from each other. Often head-plucking is a problem.

  - A reddish-colored bill is very prominent in this group, often found only in the males. This red or coral coloration does not seem to fade as is seen in many museum specimens even after many of the feathers have begun to fade.
  - Eye blazing is often a characteristic with this group. This is a threatening action.
  - Feather coloration. If the parrot species has feathers of a different color on its back, rump or nape other than on the body, it is usually blue. This can be seen in the blue rumps of the Great-billed and Muller's Parrots and the nape of the Blue-naped Parrot. This color difference changes to red on the rump coloration of the hanging parrots. Often the tails are tipped with yellow, red or orange, which gives them a more threatening (or in a courtship, desirable) display when spread.
  - Behavior. Due to the dominance of the female, many of these parrots have quite a courtship display. The male will go through number of head and body movements to entice the female. This is often manifested by the male bowing and stretching its body, drooping or lifting its wings and swaying from side to side. Often the male will jump up and down or spin on its perch. The bright plumage and the coral bill coloration of the male is credited as being part of this courtship.

**GREAT-BILLED PARROT**

(*Tanygnathus megalorhynchos*)

This parrot is aptly named as its very large head and bill are almost "macaw-like" in appearance. These large green parrots (16 inches) do not have the long, pointed tails of the large macaws but have medium sized tails that are rounded. They have a blue rump and yellow-tipped green tail feathers and have beautiful outer wing feathers (coverts) that are black with orange to brassy-gold scalloping or margins. Both sexes have the coral-red bill with the adult male's usually being much more massive than the females.

I observed my first Great-billed Parrots in the early 1970s. They were two males whose heads were much larger than birds of the same species I later observed in the 1980s. I can only assume that I was observing a different, and larger, subspecies than those now seen in aviculture. Checking with the books, I probably was observing the largest subspecies, *T. m. sumbensis*, from Sumba in the Lesser Sunda Islands.

The Great-billed Parrot has been imported in small to moderate numbers over several years. The greatest number was brought into the U.S. during the last few years before parrot importation came to a halt (in October, 1993) due to the enactment of the Wild Bird Conservation Act [WBCA] of 1992.

There was little to no success reproducing the Great-billed Parrot in the U.S. until it was accomplished by Joan Davis in 1989 (May 25) in Fremont, California. Prior to this, a number of aviculturists had infertile, and sometimes even fertile eggs, but with no success. These poor captive reproductive results were due to several reasons, the main cause probably being incompatibility between the mates.

The dynamics of female-dominant species is not easily understood under captive conditions. Aviculturists are more used to pairs with dominant males that often drive the females to go to nest. With the roles reversed, it often results in a shy and somewhat intimidated male. I feel it is important to allow these birds to choose their own mates. This is seldom done because it is difficult to obtain several birds to place together for bonding.

Wild-caught Great-billed Parrots can be quite shy, and placing two new birds in a cage can be very stressful to both of them. Although incompatibility does not usually result in serious aggression, other symptoms are often result. Feather chewing and plucking may result when there is serious incompatibility or after long term bickering or confrontations occur. Often a bird in perfect feather condition will pluck out its chest feathers completely in only a few hours. Sometimes the birds, mostly males, will soon have fuzzy feathers along their primary wing covers.

Feather chewing and plucking can also be caused by an inadequate diet.
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or the lack of sufficient water to bathe in. A large open crock or bowl in which the birds can stand in, is ideal. The bathing bowl should not be same source as their drinking water as the large bathing bowl can be easily polluted with dirt, feathers, old food, or fecal matter. An overhead misting system is also a good way for these birds to bathe. Polluted water should always be changed immediately.

The Great-billed Parrots have a very raucous voice which can be quite annoying. This is especially true if one keeps them in a residential area where their noise may disturb the neighbors. These birds usually do not sound off unless disturbed and this loud voice can even be emitted from youngsters inside a nest that has been opened for inspection.

Even though these birds have a sedate personality, they can make interesting pets. They are often kept as pets in their home country of the Philippines, but due to the difficulty and low numbers being reproduced in captivity, these large parrots should be held back for future breeding stock.

Usually two to three eggs are laid per clutch and there is now a concerted effort to have the parents do some or all of the feeding. Pulling eggs for artificial incubation has to be done if the eggs are broken or abandoned in the nest. But more and more aviculturists are allowing their pairs to feed the youngsters for at least two weeks. Several are allowing the babies to be completely parent-reared which will be ideal for future breeding as they will have gained the needed parental instinct for rearing future clutch dates later on in their lives.

Compatible pairs tend to be very attentive to each other and will be diligent in their duties as parents. The babies grow fast, and a chart for early weight gains can be found in the January/February, 1994 Watchbird article on breeding the Great-billed Parrot authored by Ma. Regina R. de Dios and Roger G. Sweeney. By the 32nd day of age, both babies mentioned in their article topped the 400 gram mark. This breeding was accomplished at the facilities of B.I.I. (Birds International Incorporated) in Quezon City in the Philippines.

There is a preponderance of females in captive Great-billed Parrots both as wild-caught birds now available and as domestic babies. Why there are so few males hatched and reared in captivity compared to females is still a mystery. Even the Arizona aviculturist, Barry Sky, noted for his great reproductive success in the Great-billed Parrot and the other Tanygnathus parrots has a very lopsided sex ratio of extra females.

Of great interest is a certain dietary supplement Barry Sky gives to his Great-billed Parrots. While reading in Thomas Arndt’s LEXICON OF PARROTS, Sky noted that this parrot species readily consumes the flower of the Coral Tree, Erythrina sp. He then proceeded to plant and grow several Coral trees on his property for consumption by his Great-billed Parrots. He feels this is one of the key ingredients for his excellent reproductive success.

MULLER’S PARROT
(Tanygnathus sumatranus)

The Muller’s Parrots are medium-sized birds measuring from 12 to 13 inches in total length. The males have a coral-red bill, while the females have

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difficult to assume that they are easily fed for eight days before the chick incubation duties. The baby was par­rented from this position. Both par­ents were observed participating in the mutual preening and feeding center and 20 in. above the bottom of the cage. Mutual preening and feeding was accomplished by M. D. Moll and K. K. Muser in 1984 (February 21) in Fort Lauderdale, Florida. Their pair was housed in a 4 X 3 X 3 ft. cage placed high off the floor. They had a vertical nest box measuring 12 X 12 X 24 in. with a 3 in. entrance hole placed off center and 20 in. above the bottom of the box.

A courtship was observed where both birds would hang from the top of the cage. Mutual preening and feeding was done from this position. Both parents were observed participating in the incubation duties. The baby was parent fed for eight days before the chick was removed for handfeeding. This was a very compatible pair.

As with the Great-billed Parrots, the Muller's Parrots are also prone to become feather pickers. Many aviculturists working with Muller's Parrots find incompatibility a problem (unlike the pair above). Another similarity is the overabundance of males in this species, especially in the offspring. A secluded environment with a good diet appears to be key ingredients in reproducing the Muller's Parrot along with the importance of having a compatible pair.

**BLUE-NAPE PARROT**
(*Tanygnathus lucionensis*)

This Tanygnathus parrot is mainly emerald green in coloration with a beautiful shade of blue found on its nape, oftentimes extending into the cheeks. The color of its chest feathers range from light green to olive-green and they are very fine in texture, similar to the chest feathers of Eclectus Parrots. They also have the distinctive yellow-margined wing coverts similar to the Great-billed Parrot. Both sexes of the Blue-naped Parrot have coral-red upper and lower mandibles. The Blue-naped Parrot has never been imported in substantial numbers in the past. During the latter years of importation when Great-billed Parrots and Muller's Parrots were becoming more abundant, the importation of the Blue-naped Parrots came to a complete halt. This was because the Republic of the Philippines stopped exporting its wildlife. Thus two very important Philippine large parrots, the Red-vent­ed Cockatoo and Blue-naped Parrot, began to decline within the U.S.

From past literature, it appears that the Blue-naped Parrot was successfully reproduced in the 1930s and 1940s. Records show that Mrs. H. S. Bonestell of California bred them in 1935 and years following. Dave West also reproduced the Blue-naped in the 1940s and he wrote that they were “easily bred.” Considering the low numbers reproduced in recent years, it would be difficult to assume that they are easily reproduced. I can only assume that the scarcity of this species in present day American aviculture is the main reason for this.

Mrs. Bonestell described the courtship behavior of the Blue-naped as weird. The male stretched out his body and swayed back and forth in front of his mate. The male then slowly flapped his wings and blazed his eyes to where they showed mostly white. Mrs. Bonestell also related that her breeding pair of Blue-naped Parrots built a very compact nest of feathers, bamboo leaves and small sticks, bits of string and any other types of material on the top of the nest material (peat moss and leaf mold) she placed in the bottom of the nest box.

**Diet**

From reading in the literature, it appears that the Great-billed Parrot is a specialized feeder. In the wild it feeds on the fruits from trees found on the beach and in mangrove areas, primarily from *Sonneratia alba*. The internal gut tract of the Great-billed is quite complex with its long length and folds. It is believed that this parrot needs a diet made up of fibrous plant material.

It is not surprising to read of the captive diets given to Great-billed Parrots by Joan Davis and the Muller's Parrot by the Moll/Muser team. The Great-billed Parrots were fed corn-on-the-cob, carrots (at least one or two per day per pair), green beans, Chinese peas in the pod and Brussels
sprouts. Their fruit included apples and pomegranate (some pairs even ate the skins of this fruit). The seed mixture was fed in a combed feed form.

The Muller’s Parrots were supplied a 20-30% diet of whole seeds (sunflower, parakeet and canary seeds, buckwheat and safflower), peanuts, peppers, oats, hemp, hard corn and squash seeds. The diet also included chopped whole wheat bread, carrots, apples, chicory, whole kernel corn and a variety of other seasonal fruits and vegetables.

Each of the above diets is high in fibrous plant material. If the gut and bowel systems of the parrots do require a specialized diet rich in fibrous food, these breeders certainly supplied it. Whether this aided in their reproductive success is unknown but it is important to note that these two first breeding successes did include a high fibrous diet for the birds.

**AVICULTURE**

Most pairs of the Tanygnathus parrots now set up in breeding situations are housed in suspended cages measuring from 3 to 4 feet in width by 3 to 4 feet in height and 4 to 6 feet in length. Suspended cages are recommended as the food and water can be placed in the cages through small doors, thus allowing more privacy for the birds.

These parrots, however, can be reproduced in 8 to 10 foot flights, but entering flights can be extremely disturbing to these birds. I say this with some trepidation as at the present time I am documenting two baby Great-billed Parrots being parent reared in a long, narrow flight or aviary that reaches the floor.

Nest boxes usually are the standard grandfather-type, being vertical in shape. Measurements range from 12 in. X 12 in. X 24 in. to nest boxes that are deeper in depth. The most successful breeder of Great-billed Parrots (Barry Sky) in the U.S. and probably in the world uses vertical wooden nest boxes that have a smaller width at the top than they do at the bottom, similar in shape (not size) of an outside bricked chimney. I have observed cockatiel-sized nest boxes hung on the cages of Tanygnathus parrots, but these appear to be too shallow. Shallow nest boxes may be one of the reasons that so many eggs disappear or are buried or broken under these parrots. These parrots are very shy by nature, especially the wild-caught ones, and secluded nest boxes should always be supplied to them. Nest boxes do not seem to be the key to reproducing these parrots. Diet, compatibility and seclusion, however, do appear to be very significant.

**FUTURE OF THE TANYGNATHUS PARROTS**

Although there is a slow breakthrough in the reproduction of the Tanygnathus parrots, it would be very unwise to place any of the offspring in the pet market. This is especially true regarding the males. Every adult male that is a pet or a single bird should be placed in a breeding situation and all male offspring should be kept back for breeding in one’s own aviary or supplied to other dedicated breeders of Tanygnathus parrots.

Although a goodly number, presently and in the future, will end up as pets, American aviculture is still a long way from establishing these beautiful parrots. There is so much more to learn about their unusual behavior. We do not know for sure if the domestic birds will act like their wild-caught counterparts under breeding conditions. Early reports show they are very different.

Communication and the sharing of information will be extremely important. Aviculturists must be ready to give their long-time commitment to these parrot species for they must be considered one of the more difficult psittacine groups to establish in captivity. These parrots will certainly be challenging to maintain, let alone reproduce in captivity. All of these parrot groups are good candidates for dedicated and well run consortiums.

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