

CAIQUES

Clowns of the Parrots

by Peter Them
Dragor, Denmark

Editor's Note: Mr. A.B. McNabney was generous enough to spend much time doing the preliminary editing of this article. His efforts and skill were of very great assistance to me in the preparation of this article for publication.

San Diego Wild Animal Park was the scene of a memorable visit by my wife and I in 1978. A feature of the Park is the large walk-through, tropical American rainforest aviary. We sat in the midst of this great display watching various hardbills, softbills, small species of ducks, curassows and small animals such as monkeys and deer. A splendid Guianan cock of the rock caught our eyes as he sat on a perch near a small waterfall.

As we eyed the sight of all of the avian species, we had the sense of enjoying the actual environment and atmosphere of the rainforest. We heard

and saw a group of black-headed caiques. They were seemingly without care or fear. The birds were playing among the tree branches. We were bewitched by their behavior.

A year later we were lucky enough to obtain seven black-headed caiques. Following the six-week mandatory quarantine period, the birds were introduced into our own aviaries.

I wanted to learn all about caiques; what to feed, how to care for them, so I got in touch with keepers. I received much valuable information. George A. Smith and Elizabeth Butterworth (both of England) were very helpful. Elizabeth Butterworth actually accompanied us on our visit in Brazil (November 1983). This article is based on the helpful information received from individuals as well as my own experience.

South America

We found the final thousand Km of the Amazon River to be very wide. It is, in fact, so wide that an island lies in the midst of the river's mouth and that island is just about the same size as the entire nation of Switzerland. Birds with poor powers for extended flight would be unable to fly across the Amazon. Consequently, on the north side of the river there are black-headed caiques and on the south, white-bellied caiques.

A Description

Black-headed caiques: (black-capped or black-crowned would be more accurate). Called *Pionites melanocephala*, they are small South American parrots with the same body size as pionus. Good illustrations of caiques can be found in J.M. Foreshaw's *Parrots of the World*. The birds (considered odd in color by some) have on the back, wings and tail a clear holly green; chest and belly, dirty-white; the base of the neck is tan-apricot; lower cheeks, throat, thighs and undertail coverts, orange; entire top of the head, bill, legs and periorbital area skin is all dull black. Total length of the bird is about 23 cm and the bird weighs about 160 gr.

Subspecies

There are two geographical sub-

species: the "true" black headed (*P.m. melanocephala*), is found in the Amazon Basin, as far as the Guianas. This species fits the above description. The "Pallid" caique (*P.m. pallida*), is also found north of the Amazon but to the westerly part of the continent. This species has orange, muted to lemon-yellow on the first race. Several of the black-headed caiques imported to Europe — all of unknown geographical origin — exhibit many intermediate variations of color between these two subspecies so there may well be an interdiffusion of the two species.

The only other species of caique, the white-bellied caique (*Pionites leucogaster*), may be thought of as a black-headed caique that has "lost" its black pigmentation. Young of this species, when fledging, resemble natural hybrids between the two species. The birds of this species have black legs, feet and exposed skin. The beak is streaked with the same color pigment. The head, which in the adult white-bellied caique is bright apricot, is in the youngster a dirty brown, very thickly scattered through many black feathers. The albino-looking, flesh-pink feet and skin and white bill of this species takes almost a year to appear. This seems to be accomplished by gradual absorption of the pigmentation. The head feathers change in color to apricot at the first moult.

The white-bellied caique is distinguishable from the black-headed by the orange feathers extending from the forehead to the nape. There is no green line under the eye. Thigh feathers are green. The plumage, in general, resembles that of the black-head. The bill is pale horn colored. The bare skin surrounding the eye and cere is pinkish-white. Even the eye color is "diluted" with the red of the iris being a shade paler and the inner ring grey — not deep red and black as in the black-headed caique.

Geographical Subspecies

Three geographical subspecies occur: the white-bellied fits the description already given. The yellow-tailed (*P.l. xanthurus*) is paler throughout. Thighs, flanks are yellow instead

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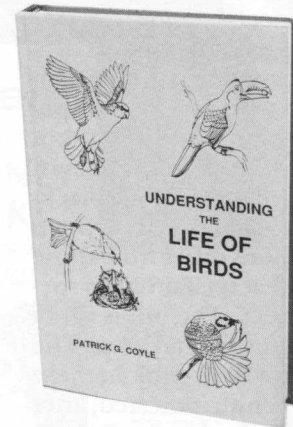
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of green. I have studied this subspecies in the Sao Paulo Zoo. I discussed the species with an aviculturist (breeder) in Sao Paulo. I had not previously seen this particular species either in skin or alive. I do not know if there are any yellow-tailed caiques in avicultural collections outside Brazil. The yellow-thighed (*P.l. xanthomaria*) is different from the nominate species in that it has feathers on the thighs and flanks that are yellow instead of green. The yellow-thighed species is more variable than the books suggest.

There is a geographical race which must come from Columbia. That species has the legs and periorbital skin that is quite black. In fact, the skin of this species is as black as in the black-headed caique. Birds of this type in European collections differ from those held in Brazil in that the European species have black feet. The bill is often black, as is the periorbital area. The Brazilian birds are flesh-pink in these areas. George A. Smith indicated, after watching these birds, that the Colombian birds might be called *P.l. malanopus* or *P.l. intermedia*.

The taxonomist, ornithologist and the aviculturist must learn to see similarities, rather than differences, before they assign birds into different species or, even more ludicrous, different genera.

South American parrots appear to have been separated into far too many closely related genera, with far too many closely related species and subspecies. The caique is a lovely example. Several observations indicate both species of caique react to one another as if they are the same bird. The birds sound, look and behave alike. Separation of the two adjacent species on the basis of such extremely trivial differences, as, for example, the amount of melanin in the skin and tissues, seems rather pretentious. It might be better to consider all caiques as geographical races — subspecies — of the same birds, with the white-bellied as the most "advanced" of the species. In other words, I would see the birds as being precisely the same species, despite their color.

Classification

Caiques are short tailed conures. D'Arcy Thompson (1899) showed the similarity of the skull in this "group" of birds. However, Peters (1937) and de Schauenses (1966) ignored this evidence. They then slightly modify the classification of Count Salvadori (1891), for they place them between *Touti* parrotlets and *Pionopsitta*.

Forshaw (1976) pointed out there are some similarities in the behavior of the caique, the *Phyrrhura* and the *Ara-tinga* conures.

As a breeder I consider the caiques and the *Phyrrhura* conures (not in a scientific manner but useful to me) to be the South American "lories and lorikeets." The behavior of these birds is very similar to the lories and lorikeets: they are full of curiosity. They are cheerful and amusing. They use sweet fruit in their diet and who says lories have a monopoly on the use of honey water in their diet? Many birds, in fact, like this kind of drink. If they are addicted to honey-water, I find it useful to include a supply of bird vitamins, protein and, if necessary, different types of avian medicine in the sugar water.

Range

The black-headed caique (*Pionites melanocephala*) is widely dispersed in the Amazon basin, mostly north of the Amazon River. The range of the birds extends from northeastern Brazil (Amapa), through the Guianas, south to Venezuela, west through northern Brazil to southeastern Colombia, western Ecuador, northeastern Peru, then south to the Pucallpa area in southern Loreta. (O'Neill and Pearson, 1974).

The white-bellied caique (*Pionites leucogaster*) is widely distributed in Amazonia south of the Amazon River. Its range is entirely allopatric with that of *Pionites melanocephala* and they clearly comprise a superspecies. They may, in fact, be closely related. The *P. leucogaster* range from south of the lower Amazon in northwestern Maranhão and the Belem area in eastern Para, west across Amazonian Brazil (extending as far south as northern Mato Grosso) to northern Bolivia (Seni) and eastern Peru. That species and *P. melanocephala* replace each other in the upper Ucayall River Valley (O'Neill, 1974). The white bellied caique is said to be found in eastern Ecuador by various authors (Meyer de Schauense, 1966, 1970. Forshaw, 1978).

Habitat

The black-headed caique is found in the canopy and edge of both tierra firma and varzea forest. The species also range in tall, secondary growth and in clearings in which there are large trees. It occurs mostly in lowland areas but is found in diminishing numbers up into upper tropical zone to about 1000 m.

The white-bellied caique occurs in forest and forest edges in both varzea and tierra firma forest. The birds

resemble the black-headed caique in every known aspect of behavior.

Status In The Wild

Robert S. Ridgely, U.S.A., has been traveling in South America studying parrots (July, 1975 - November, 1980). This author writes: *P. melanocephala* is generally common and usually conspicuous in lowland forest. Vast areas of undisturbed habitat remain over much of its numbers' large range. Any declines in the species have been minor and highly localized. The colorful black-headed parrot is frequently kept in captivity locally. Small to moderate numbers of the species are exported. Export is (now) principally from the Guianas. Wild populations have certainly not been affected by the limited capture rate.

P. leucogaster is common over much of its broad range. It is perhaps somewhat less numerous in the drier forest at its southern periphery. However, considerable forest destruction is occurring in many parts of the Brazilian portion of its range. Some decline has clearly occurred in this area. The species occurs in several large national parks and other reserves in both Brazil and Peru. The white-bellied parrot is kept in captivity, locally to a fair degree. Only small numbers are exported, all of which come from Bolivia. This limited capture rate has had no impact on wild populations.

Sexing Methods

In the last five to ten years three types of sexing methods have been used in the sex determination of monomorphic birds. First is surgical sexing by laparotomy or endoscopy. The latter is produced through a small incision in the bird's left side, near the last rib. This provides an immediate sex determination.

The second method is hormonal sexing, fecal steroid analysis, procedural estimation of gonadal function by microanalysis of hormones in birds' droppings. Parrots aged three years and under, or birds not in breeding condition may not be sexable. Results of sexing using these systems are usually available in two to three weeks.

The third method is genetic sexing — chromosome analysis. These procedures involve true genetic sex determination by isolating sex chromosomes from the blood of pin feather cells. Results under this type of testing are usually available in one to two weeks.

These sexing procedures are not generally available here in Denmark.

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(One veterinarian here in DK is attempting genetic sexing and another has just started a surgical sexing program.) I believe it will be only a matter of time until these two avian sexing procedures will be available for the Danish aviculturists.

Until reliable sexing procedures are available we have to sex our birds by observation. In 1979, I obtained seven newly imported black-headed caiques. I was unable to develop essential information concerning these birds. A contact with George A. Smith produced results. Dr. Smith provided the following behavior characteristics that are typical of males.

When offered a mirror, or put in proximity of any strange caique, a threat display results. This display involves a slow, dignified, very upright walk punctuated by little jumps. When jumping, the caique may physically leave the perch or the bird could make a merely "token" jump. In this latter circumstance the bird "bounces" on the perch. Expansion of the orange-red iris gives the eyes a non-blinking, fixed, glazed look. Hardy (1963) quixotically calls this blazing of the eye. Males, with blazing eyes, execute several slow, majestic bows. The head is dipped well below the level of the feet and then the head is slowly raised until the bird finishes by standing bolt upright. Every so often the head is pumped up and down and during this activity food can be regurgitated. The intention of feeding the other bird is obvious. Males, during such display and at all times (unless frightened into sleekness), have the majority of the body feathers fluffed and the tail is fanned out. Males often "wing-whirr." This display is carried out by the bird holding tightly to the perch and flying on the spot. This simulates a bird caught by the feet and trying to escape by flight. Such display is always considered to be an aggressive or intimidatory act. A hen may "wing-whirr" on occasion, such as when her mate and another caique fight. Such display can occur when the hen is disturbed from the nest when both sexes "wing-whirr" at the breeder's intrusion.

Females of this species, said Dr. Smith, are not aggressive toward other caiques. At most they only show the usual fighting and petty scraps that come when settling "pecking orders." When paired off, they may become aggressive toward other females. This is especially true if their mate decides to flirt with the other bird. Males are extremely aggressive, one to another,

when paired up. This might explain the large number of male caiques that have a toe or toes missing. (No male has been seen to physically attack a female.) Unless cold or ill, hens are sleek-plumaged birds. They look tidier than the rather dishevelled males. Tail feathers are obviously more tightly bunched. Flaring of the tail, puffing of the cheek, neck and body feathers of males and the narrower, pinched-looking tail and trimmer look of the hens constitute the strongest guides to sexing the *Pionites*. These indications would also apply to Amazons and *Pionus*.

George A. Smith has also suggested that I use a tape recorder. The purpose, to try to record some caique sounds. If I could just record the birds talking, that would do. Dr. Smith suggested I play these sounds back to the birds. They will then "answer." I would then record the "answer" immediately after the first sounds I had recorded on the tape. When the birds have settled down and relaxed, preferably after they have had time to quiet down and relax for days or weeks, I could "borrow" a tame bird of any species to place in a cage near the caiques. I would then play the bird sounds back. I would sit by and closely observe the birds. It is probable the aviculturist will find both sexes will scold and whirr wings; *but* males differ in that they will "crow," that is, they will flick the head jerkily from side to side. They will then whistle a piping note and, as they do so, will lift the wings up from the sides and hold them for a second above the head. Hens have never been seen to do this. Secondly, males will fly to another perch and hover for just an instant before they drop onto the perch. Males also jump up and down more than do hen birds. In fact, hens never jump up and down.

My caiques were placed in a room with a window facing the road. All of the data received was then tested by reality. So, in the evening, staying on the footpath, in the darkness, I observed the caiques in the lit-up room. Sometimes, to ensure full details, I used binoculars. Once, while I was carrying out my observations a police car stopped. I was approached by one of the policemen, who asked, "What are you doing?" You should have seen the faces of the police when I gave a one word reply, "sexing." Of course, I had to explain and when I did, they laughed. Yes! It can be difficult to sex birds.

Information provided to me by

George A. Smith, plus my own experience in the keeping of caiques is such I want to make the material available to other aviculturists.

Dr. G.F. Kaal, Netherlands, has written a book (*Geschlechtsmerkmale bei Vogel*, 1982, page 104) dealing with the sexing of birds. Dr. Kaal has sexed some of his caiques by the endoscopy method. He believes the black-headed caiques are slightly different in color. The green line at the lore and under the eye is "shorter" on the male than on the female. The color of the male bird is somewhat paler than the female.

Feeding

Proper feeding is the keynote to success in the breeding of birds. Birds require a balanced diet, i.e., protein, carbohydrates, fats, minerals, vitamins and water. I offer my own caiques a lot of fruit, particularly apples and pears. The types change with the season of the year. I provide several types of berry, such as strawberries and so forth.

When caiques have fruit, they don't really eat it. Instead they chew the pulp and swallow the juice. When the fruit provided is particularly juicy, loose particles of pulp and droplets of juice are thrown off the bird's beak. The bird flicks its head from side to side, throwing the fruit pulp and juice about. If the caique is caged, the cage and surroundings soon become festooned with small pieces of sticky, dried fruit.

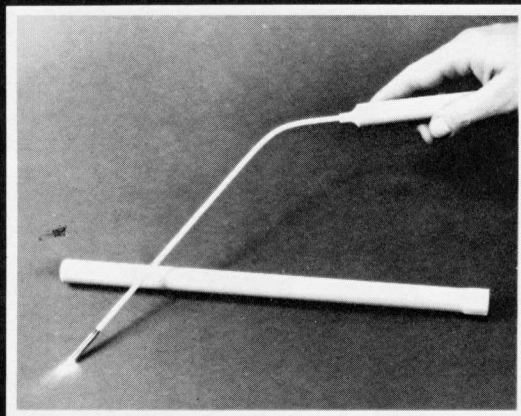
The caique's head is not raised to swallow fluid, such as water or fruit juice. Instead the bird's tongue moves, piston-like, lapping within the partly-open bill. In many ways, including coloring patterns, movements, and shape and in the way the species "laps," I am reminded of the lorie species.

Caiques are more selfish than many other parrots. However, they often seem not to mind another individual sharing a foot-held meal. An angry "squar" of annoyance is uttered at any adjacent caique, even if it is its mate when the bird is feeding at the time. Marie Louise Wenner, Napoli Zoo, asserts caiques, as a species, are very aggressive.

Dry seed is not the food used to a great degree by wild birds. My caiques are fed dry seed of various types including oats, canary, millet, hemp, as well as soaked sunflower and wheat. During winter months I feed more hemp and sunflower seed.

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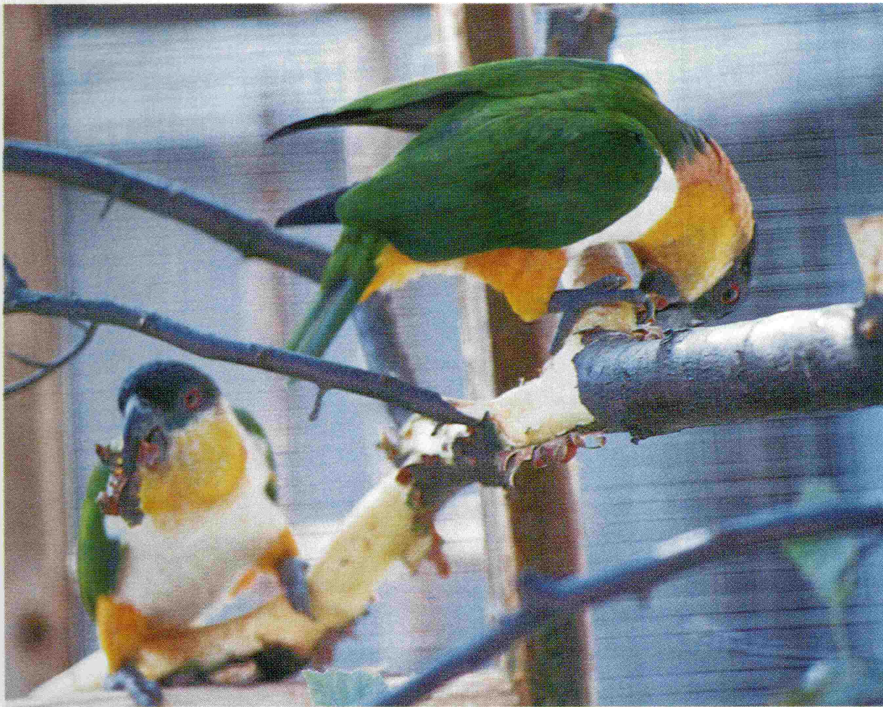
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Pionites melanocephala melanocephala, the black-headed caiques in the author's collection.

and the birds never touch it so the food is discontinued. I find it necessary to persevere for weeks to get my birds to try some new food. Some adults will only eat certain types of food when they are laying. For example, I had a pair of rosellas. The male would dig after and eat earthworms during the breeding season. The bird would not touch such food at other times of the year.

Nectar is appreciated by many birds. It is extremely beneficial and should always be provided for caiques. I provide my caiques with "honey-water"

made up of a spoonful of Biosorbin, a spoonful of honey and a spoonful of glucose. The mixture is stirred in a half liter of hot water. When cold, add 12 drops of ABCDin; the honey-water should be all right for about nine hours, but on hot summer days for only a few hours. Honey-water should be made up daily and should be provided in clean containers.

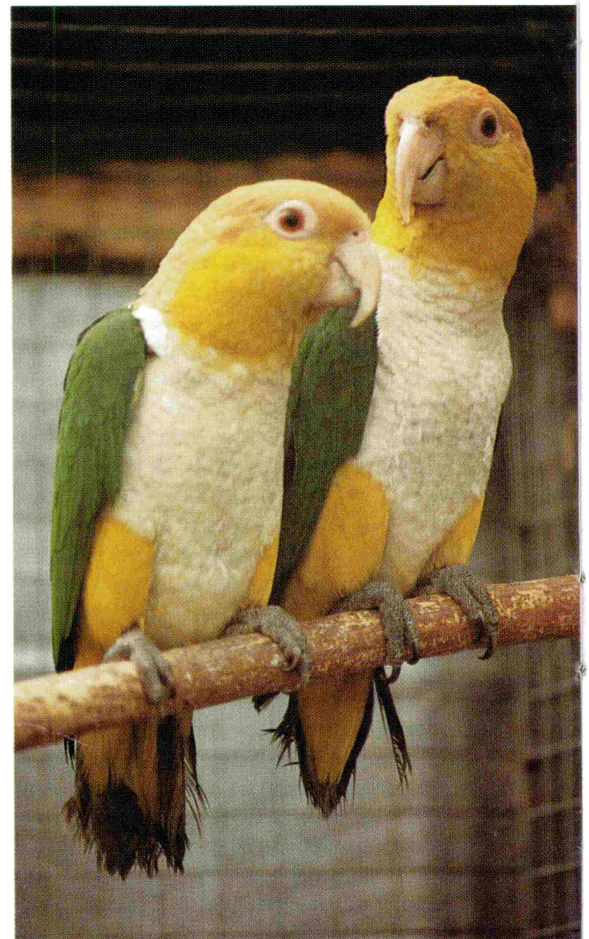
Dandelions are a great favorite so they are often provided to my birds. Meadow grass and a variety of seasonal greens are offered.

Caiques are full of energy and are

Pionites leucogaster leucogaster, the white-bellied caique in the collection of Pedro Callado, Sao Paulo, Brazil.



Pionites melanocephala melanocephala in the author's collection. Black-headed caiques, the nominate race.



The white-bellied caique, subspecies *xanthomeris*, in the collection of the late Mrs. Spenkeliink. Note that the thighs are pure yellow rather than orange.

very active. They keep and have to be kept busy for the entire day. When a caique is bored it usually will start to scream. Screaming caiques create problems for us, for neither our neighbors nor we like bored, screaming birds. I change branches in the aviaries several times a week. I try to provide birch branches, complete with leaves and, when possible, buds and bark. I have provided a swing in the aviary. The birds swing, mate and spend a great deal of time on the swing.

Each bird keeper has his own "special-menu plan." I believe one can offer caiques almost any food that is good and healthful for humans. In my estimation, one of the greatest reasons birds do not carry out their mating activity is due to inadequate diet. We, in Sweden, can now purchase pelleted food for parrots. Breeders, including Inge Forberg, have used such food and have found it to be very good for the birds. Inge Forberg not only breeds caiques but also keeps eclectus, green-cheeked Amazons, Venezuelan Amazons and many other parrot species.

The Nest Box

As with most parrot species, caiques roost in a cavity at night. In an aviary they prefer a dimly lit nest box rather than one exposed to lots of light. George A. Smith told me he had a particular pair of caiques. One winter, during December and January, the birds were housed in his workroom. A nest box was provided as a part of the birds' surroundings. The nest box was next to a window. The birds deserted the nest box. They proceeded to make a nest on the floor in the darkest corner, under some scrap timber and plywood. The nest was created through use of a thin layer of shavings. Another friend, Jergen Hare, of Copenhagen, has bred many South American parakeets. He found a successful method of providing acceptable nest boxes is to paint the inside of the box black. The birds, given a choice between a painted black one and a normal light colored wood, select the black box every time.

Many parrots do construct nests. I believe it is not generally realized how many different types of nests there are. Marie Louise Wenner, Napoli Zoo, has told me her pair of Spix macaws use small stones to construct a nest (unluckily, the eggs were smashed in this nest). My splendid grass-parakeets used strips of green leaf for their nest. Male caiques, and hens to a lesser degree, strip shavings from the inside of the



Pionites melanocephala pallida, this pale variety of the black-headed caique has lemon yellow color rather than the orange of the nominate race. Part of the author's collection.

nesting chamber to form an inch-thick mat for the bottom of the nest box. If I put sand, soil and twigs in the box to assist in the nest building, all such material is scraped out. Based on a recommendation of George A. Smith, I placed a small fistful of dry wood shavings in the box. I avoid the usually recommended damp, decaying vegetation. After the wood shavings were introduced into the box, the birds

chewed the shavings into smaller fragments. If you happen to have two birds (not a true pair — both hens) they will barely touch the nesting litter. Chewing the wood in the nest box sometimes takes place during the day. However, most of the chewing occurs at night. When the cock birds are chewing they interrupt their carpentry from time to time to give a characteristic "nest box call." Defecation never takes

Pionites leucogaster xanthurus in the Sao Paulo Zoo, Brazil. This yellow-tailed subspecies may be unknown outside of Brazil.



place in the roosting chamber. Even circumstances where caiques are not provided with a roosting box, they still practice this nocturnal continence. They seem to wait all through the night, then void a large, cumulative stool after they leave the box in the morning. Breeding males guard their box against other males, while the females guard against other females. The birds generally sleep in pairs. Several non-breeding hens, or one cock and several hens, may roost within the same cavity.

Dorothy Snyder, author of *The Birds of Guyana*, 1965, referred to the vocal sounds of the caique:

Crowing

Crowing is performed by both sexes when they are resting. The caique lifts the wings and momentarily poises them above the head. The raising of the wings reveals a patch of henna-colored, elongated flank feathers that are normally concealed by the folded wings. This signal marking, despite the variations of the body color in the different "forms," is always this same rich orange-red. When the wings reach their summit the caique gives a "piping toot," which can be a single or double "pipe." The wings are then closed. Crowing seems to be a contact, or "whereabouts" call. All caiques within earshot tend to reply with similar crowings. Two birds (a pair) may alternately crow, or even crow together. The noise is repeated at several minute intervals. A "low intensity" version also exists, in which the wings are not raised from the body. This could be described as just a "token raise," with the wings lifted and dropped, rather like a human shrug of the shoulders.

George A. Smith advises he has a strong belief only the cocks crow. He, at least, has never seen a hen "crow." Dr. Smith has about thirty individual caiques so his basis for comment is substantial. Similar observations have been made by other caique breeders.

Screaming

This is a most unpleasant noise. Miss Snyder describes the "scream" as "heeyah-heeyah" and "wheech-wheech." There is seemingly no purpose to this behavior, other than sheer exuberance. When the birds mob (flock) the shrieking is far worse than the "normal" scream. If, for example, I were to introduce another species of bird into the aviary, all of the caiques would start screaming. Luckily we live near the airport so the sounds aren't too disruptive for our neighbors. In addition to the sounds mentioned,

there is a "wheech-wheech-wheech," coupled with warning "skwarks." Males wing-whirr while making this noise while the hens sit by looking sleek and frightened.

Bathing

Caiques like to bathe and, if possible, they would bathe every day. They bathe in exactly the same manner as does a blackbird. The head is dunked under the water while the bird stands in the water and flutters water over itself. The birds are strongly mimetic. If one pair bathes, it is usual for the rest to follow suit.

Caiques also foliage bathe. This consists of rubbing themselves on rain-soaked branches. The birds have the unique habit of chewing a bit of bark from a twig and rubbing themselves with the moist wood surface. It is not clear whether such moist area stimulates the caique to rain-bathe or whether they peel off the bark that they may sap-bathe. Caiques have been seen to rub themselves on dry, projecting twigs. The birds rub (in a cat-like manner) the cheeks, sides of the neck and the belly. Usually alternate sides of the birds are rubbed in sequence. If caiques are housed outside with natural wood perches, the birds often have a dirty, soiled look caused by the habit of rubbing on branches. Rosemary Low, in her book *The Parrots of South America*, writes that so absorbed does the bird become in these vigorous, almost frantic, rubbing movements, that she is reminded of "anting," so engrossed do the birds seem in their actions. She has never witnessed like behavior in any other parrot species. When birds are "sitting" they will, a few days before the eggs are due to hatch, bathe more and more intensely. This activity is not limited solely to caiques. There is stupid nonsense about that damp and/or water is necessary for birds' eggs to hatch in an aviary situation. Those who have attempted such procedures must have added more clutches and sent more parent birds to death from pneumonia than all other factors of aviary mismanagement combined. If the birds believe their nest box is too dry, the birds will bathe enough to take care of the problem. The breeder cannot properly intervene.

Preening

A preening caique will often stimulate another adjacent bird to walk over and preen the first bird. The first bird will usually quit its own preening. Should the preened area be lower than the head of the first bird, the preening

position then assumed by the second bird, i.e., head bowed, often stimulates the first to preen the head of the second bird. All areas of the body may be preened by another bird yet attention seems to be settled mainly on the head. Two caiques may simultaneously preen one another, like mutually grooming horses. Preening is not exclusive to mated birds. All caiques preen other birds irrespective of sex, so preening is considered to be a social act. Highly excited caiques can be seen to "simmer down" (lower the level of excitement) in excitement when preening or being preened.

It was my original intention to keep our caiques in a colony system. That just didn't work out. Caiques, when sexable, are very aggressive. Mrs. E. Naundrup, Randers, Denmark, has been breeding black-headed caiques since 1970. She attempted to keep her birds in a colony system. A breeding pair produced three young and the parents and young all used the same nest. As soon as the oldest of the chicks reached sexable age the parents began to fight with the chicks. It was then necessary that the parents be separated from the young.

I keep my caiques in aviaries which have an out and indoor section. This means the birds can be outside the whole year round. Possibly they can, but I don't suppose these birds really like our Danish winters.

The size of the flight is unimportant. More relevant is the fact the birds seem to want to nest indoors. They prefer comparative darkness, rather than being out in the open and sunshine.

We caique keepers in Denmark have formed a breeding group. We have found it necessary to cooperate and coordinate our activities so we can maintain breeding stocks of the species.

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References

- Robert S. Ridgely, USA: Communication, "Current Distribution and Status Mainland Neotropical Parrots." Proceedings: Conservation of New World Parrots.
- Joseph M. Forshaw: Parrots of the World, 2nd edition, 1978.