



Black-headed
Caique

Caiques:

A SUPERSPECIES

By Tom Marshall

In 2014, most parrot aficionados understand well that one of the most personable of all the species of parrots in aviculture is the Caique. They have become very popular as pets and Caique breeders have found them to be excellent parents, willing to breed at around three years of age. Caiques are unique with their white bellies and are easy to house, given their relative small sizes, between 9 to 10 inches and their negligible weight of between 145 to 175 grams, less than 6 ounces, which allows them to be kept as pets in apartments or houses and as breeders, indoors or outside. They are not inexpensive. However, at retail pet bird stores they sell for anywhere from \$800 to \$1,100. Obviously, size doesn't matter. They are a superb species.

In the US, and I assume elsewhere outside of South America, there are two largely representative species/two races of

Caiques seen in captivity: the Black-headed Caique (*Pionites melanocephalia melanocephalia*), and the White-bellied or Yellow-thighed Caique (*Pionites leucogaster xanthomeria*).

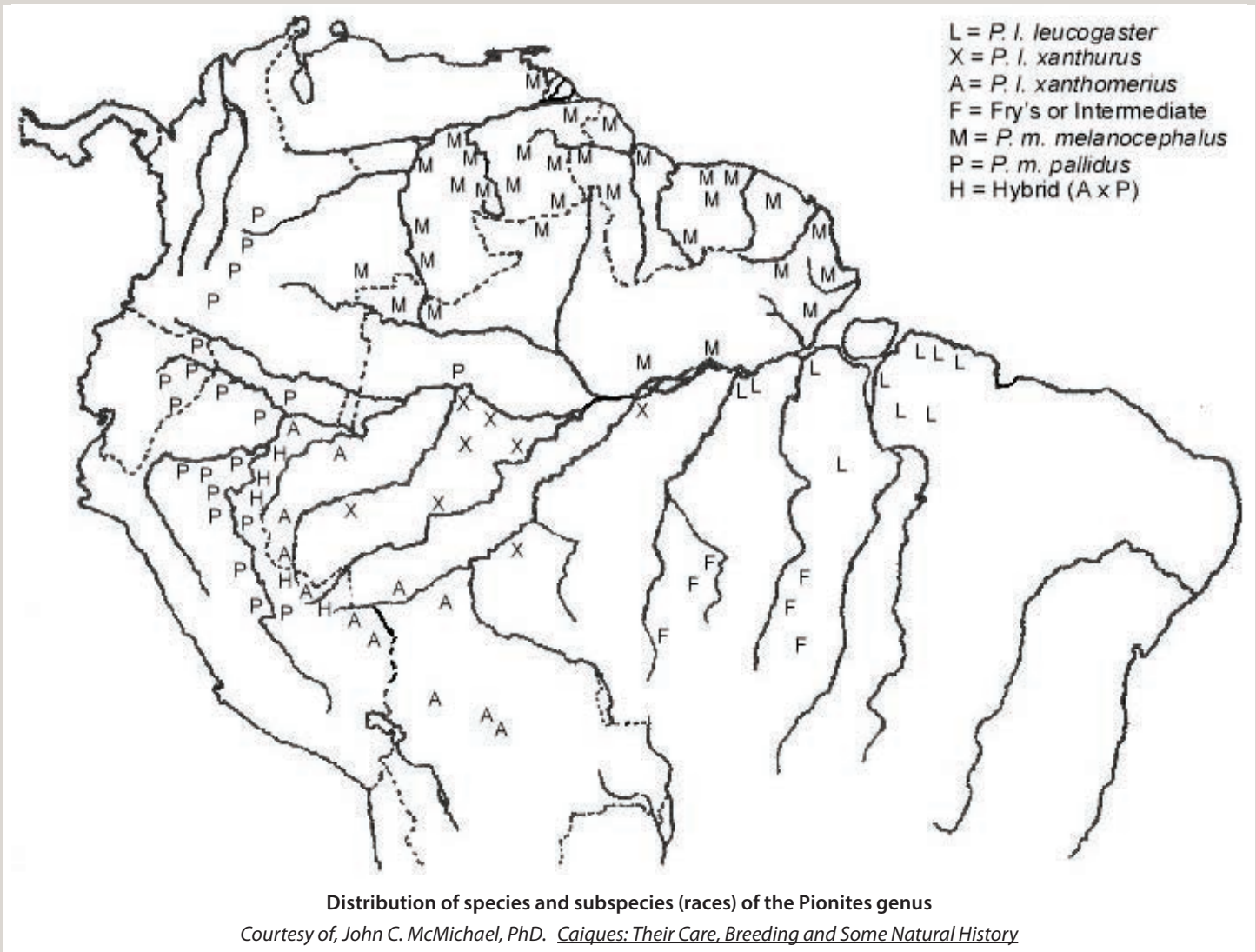
The *Pionites* as a single genus is restricted in its natural distribution to the northern half of South America, mostly in the tropical zone called Amazonia. The countries in South American where most Black-headeds are found include: Peru, Ecuador, Venezuela, Columbia, the Guianas and parts of Brazil, north of the Amazon River. Moving inland, away from the Atlantic coastline, the Black-headed Caiques start to change appearances, gradually losing the rich orange color to the thighs. Caique populations found near the foothills of the Andes Mountains are black headed with clear yellow thighs. This race is called the Pallid Caique.

If you drop further south from the foothills of the Andes, you are entering an area where there are no major physical obstacles separating the two species (races) of Caiques (eastern Columbia, northeastern Peru and northwestern Brazil). This could be a hybrid zone where only the smaller tributaries of the Amazon River separate the two races. Away from the Andes and back toward the Atlantic on the south side of the Amazon River, there is the more typically seen (in captivity), White-bellied Caiques, with yellow flanks and legs, mentioned above (*P. l. xanthomeria*). These popular parrots in aviculture inhabit areas south of the Amazon River, including eastern Peru, parts of northern Bolivia and northern Brazil.

As these parrots' populations move deeper into Brazil and farther east back toward the Atlantic side, the nominate race of the White-bellied Caiques (*P. l. leucogaster*), those with green thighs, are in residence. There are relatively few numbers of these White-bellied/Green-thighed-Caiques in captivity because Brazil was never a big exporter of their wildlife. The Yellow-tailed (also with yellow legs) subspecies is found only in the vicinity of northwestern Brazil.

Certainly you have noticed my tendency to vacillate in my descriptions from species and subspecies to races. I, like many others, believe the Black-headed and White-bellied species are races of Caiques within a superspecies (allospecies). We know it is geography and possibly the ecology favored by Caiques that have kept them separate allowing for some differentiation based on head, thigh/legs, and tail color and maybe some slight size differences.

The assumption behind the definition of species is that they could not, or would not interbreed with another species where their ranges overlap. It is known by aviculturist, however, that Caiques can and will breed between the species, or should I say races. We know macaw species will interbreed, but most conservationists resist the idea as unwise for their protection as a species. The progeny from a mixed pair of macaws or caiques can make an excellent pet and companion, but they would not be ideal breeders.



In September 1989, I wrote the first article on Caiques for the now defunct Bird Talk Magazine. In that article entitled, “Captivating Caiques”, I speculated on the hypothesis that Caiques’ closest relatives among all species of the parrots of the Americas might be the Hawk-headed Parrot, also a single genus. Here is what I wrote:

“Several ornithologists see a relationship between this genus (Pionites) and some conures based on the bone structure of their skulls. However, my observations lead me to consider that they might be closely related to the Hawk-headed parrot (Deroytus accipitrinus). Hawk-heads and Caiques populate the same general area of northern South America; they have identical coloration on their back, and they have similar vocalization patterns”.

After further reading, I should have added that both species are fearless and can be aggressive. My deductions were not scientific at all, but there are now recent studies that indicate my hunches had some validity.

In writing this article, I was fortunate to have as a resource the definitive book on caiques, “Caiques: Their Care, Breeding and Some Natural History” by John C. McMichael. Dr. McMichael, a microbiologist, reported the following:

“Recent karyotype studies indicate that there are three main groups of parrots in the Americas. In this case the caiques are included with the macaws and conures, a second group is comprised of the Amazons, and a third group contains the pionus parrots. From the known nuclear and mitochondrial DNA sequences, the most closely related genus (to the Caique) has been identified as the Hawk-headed parrot”.

I needed some clarification on the significance of the nuclear and mitochondrial DNA. Whereas all cells contain organelles (characteristics) within them, only two contain DNA—the nucleus and the mitochondrial. Dr. McMichael provided the following explanation:

“The nuclear DNA is found in the nucleus and comprises the bulk of the DNA of the cell. This is what most of us think of when we think about inheritance. Mitochondrial DNA is found in a different organelle—the mitochondria, the organelle that metabolizes food and produces the energy the cell uses. Mitochondria are thought to be relict bacteria that managed to “infect” the cells eons ago and brought about life as we know it today.”

Animals and birds receive their mitochondria, and hence it's DNA, from mothers, while nuclear DNA is provided by the fathers. Both forms of DNA can mutate, and the inheritance of the modified DNA thus produced can be tracked. The research indicated that there was a greater similarity of both forms of DNA between Caiques and Hawk-heads. This may not be the last word on the relationship between the two genera, as the science in these areas is still evolving.

The next thing I expect to see resulting in the increased interest in breeding Caiques is the development of some mutations. When I speak of mutations, I am referring to color mutations and am not talking about hybridization, which would be mating two different species. According to Linda Rubin, a frequent contributor to WATCHBIRD and former AFA committee chairperson,

“mutations may be caused by a variety of factors, but generally arise in aviculture as a sudden onset of a variation known as spontaneous mutation which produce anomalous (deviation or departure) from the usual color or pattern that differs from the nominate (wild form) of the species.”

These color mutations, once formed, can be retained in future offspring through an understanding of genetics and through selective breeding over a period of time.

“Viable mutations are able to reproduce because the genes—when inherited in the progeny (offspring)—are either passed on as visuals (homozygous), or carried as splits (heterozygous).”

Splits are individual birds that do not show the color mutation, but do carry the gene for that color, which can reveal itself through selective breeding and the resulting future generations. There have been unsubstantiated reports that there have been some color mutations such as the lutino (yellow) and melanistic (dark) forms produced, but not yet established.

I can't wait and see what develops, but I am content with the original colors of the species or races we have currently in this unique genus. Caiques are beautiful birds to be cherished and appreciated for what they are, a super species of wildlife and aviculture.



White-bellied Caique.

References:

- Deutsch, Robin. Good Parrotkeeping. TFH Publications, 2009.
McMichael, John C. Caiques: Their Care, Breeding and Some Natural History. Avian Publications, 2010.
Rubin, Linda “Top 10 Genetic Myths in Avian Genetics” AFA Watchbird, Vol XL, #2 & 3, 2013.



www.premiumpinecones.net

Premium Pine Cones, Ltd.
“... the greatest bird toys on Earth”™
New crop, Sanitized, Bird-ready™
No fertilizers, no pesticides
GOT PLUCKER? GET HELP ... Ask about Natty New-feather's™ NO-PLUCK Collars and Rejuvenating Kits
801-463-0300 **Madeleine Franco**



Member of AFA Since 1979

Lima's Exotic Birds

www.limaexoticbirds.com

Ralph Lima • P.O. Box 6496 • Woodland Hills • CA 91365



Birdjewelry.com
Exquisite Handmade Avian Art

* Unique Gifts * Custom Orders * Wholesale Welcome

Birdjewelry byDawn
Phone: 707 845-5211
birdjewelrybydawn@gmail.com

www.avitec.com

Premium Nutritional Supplements



- AviAgra, •AviVita+, •AviVita Gold, •Avibios, •AviCal+, •AviCalm, •AviFlax, •AviGlo, •AviGreens, •AviGain, •Formula One, •AviImmune, •Avilina, •AviPow, •Cal-D-Solve, •Electrovites+, •Featheriffic, •Feather In, •AviVera, •Coco Loro, •AviKelp, •AviPollen

The AviQuarium Aquarium-Top Brooder

- Safe Infrared Heat
- Electronic Thermostat
- Scrubbable
- Disinfectable
- Safety Air Vent
- No Air Blower
- No Filter to Clean



AviQuarium 10
Fits 10 gallon
aquarium \$149.99

AviQuarium 20
Fits 20 gallon
aquarium \$169.99
Aquariums not included

Cal-D-Solve Calcium Supplement

- Calcium, Vit.D, Magnesium
- Helps Chronic Egg Layers
- Dissolves Clear in Water



Aviagra Fertility Supplement

- More Fertile Eggs
- Boosts Male Virility
- Breeders Favorite



AFA members use coupon code "AFA14" for a 10% discount

www.avitec.com