

by Kenn Kaufman photographs from VIREO

Scrub Jay and Gray-breasted Jay



THE CRESTLESS BLUE JAYS of the genus Aphelocoma have received a lot of attention from ornithologists. Certain Florida populations of the Scrub Jay (Aphelocoma coerulescens), and certain Arizona populations of the Gray-breasted Jay (Aphelocoma ultramarina), have been the subjects of exhaustive ongoing studies. They have revealed much of what we now know about cooperative breeding in birds.

In autumn 1989, jays received a lot of attention from birders in the West. Beginning quite early in the fall, Scrub Jays moved out of their usual haunts in the oaks to range across the deserts and invade areas where they are normally rare. Surprisingly, a few flocks of Gray-breasted Jays (which tend to be completely sedentary) also left their canyon strongholds to show up in the lowlands. These unpredictable movements gave observers a good reason to reconsider the field marks for separating these two jays.

In overall color the two are superficially similar, and a careless description of one might serve for either. But giving a more precise description can be tricky, because both of these jays vary according to geographic regions.

The difference in markings between the two, stated in simplest terms, is that the Scrub Jay has a more contrasting pattern than the Graybreasted Jay. In fact, birders from either California or Florida might look at their strongly-patterned local Scrub Jays and wonder how these birds could ever be confused with the Gray-breasteds. However, the Scrub Jays found in the interior of the West (in the Great Basin and Southwest regions) are much *less* colorful and contrasty than the races in Florida and on the Pacific Coast—in other words, somewhat closer to the appearance of Gray-breasted Jays.

The adult Gray-breasted Jay is blue above and pale gray below, with no areas of sharp contrast. Its upper back and scapulars are somewhat more washed with brownish-gray than the brighter blue wings and nape, but this is variable: it may show up as a noticeable gray back patch, or the bird may look uniform above. Among populations of Grav-breasteds in the United States, the birds found in the Big Bend area of Texas tend to look more richly colored than those of Arizona and New Mexico. The juvenile Gray-breasted Jay is a little grayer and duller than the adult, but its most noticeable difference is its bill color: mostly pale pinkish-yellow. The bill gradually darkens, but some paleness remains at the base of the lower mandible until the bird is nearly a year old. This tendency for young birds to have pale bills is a conspicuous trait in several of the tropical jays. In fact, even northern jays have pale areas on their bills when young, but only on the inside—on the roof of the mouth (this is not a field mark!), which blackens with age.

Scrub Jays of all forms show a more interesting plumage pattern. A thin white supercilium is usually short and inconspicuous on birds of the interior West, while on Pacific Coast birds it is usually more striking, and on Florida birds it merges into a pale forehead area. A gray-brown patch on the back



Adult Scrub Jay of the interior of the West, photographed in New Mexico. Only in a direct front view is the white throat patch really obvious. Photograph/Dale and Marian Zimmerman/VIREO (z01/4/013)



Adult Scrub Jay from the interior. In this side view, the bird shows relatively little contrast on the back and chest. Photograph/Dale and Marian Zimmerman/VIREO (201/4/011)

contrasts with the blue wings and nape—again, this is very noticeable on Pacific Coast birds and especially on Florida birds, less so on those of the interior. A white "bib" on the

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throat and upper breast is outlined in blue or blue-gray, breaking up into streaks along the lower edge. The dark outline tends to be duller, grayer, and less contrasty on the Scrub Jays of the interior West than on their Florida or California counterparts.

Thus, the Scrub Jays that are colored most like Gray-breasted Jays are also the ones most likely to overlap with them in range. However, these two jays will never be confused in life by birders who know them well, because their shapes, actions, and voices are very different.

As indicated by the simple measurement given in books, each of these species is about a foot in length. But they are *not* the same *size*: the Graybreasted Jay is a bigger bird but the Scrub Jay has a longer tail, making their total lengths come out about the

same. While the Scrub Jay looks slim and elongated, the Gray-breasted usually looks more stocky and robust, an impression that may be heightened by its very fluffy plumage.

The tail of Gray-breasted Jay is not only shorter than that of Scrub Jay, but also broader—each individual feather in the tail is much wider. (In both species, adults have wider tail feathers than first-year birds, but the difference is subtle.) The same is true of many of the flight feathers in the wings, which are quite broad in the Gray-breasted Jay.

The shapes of single feathers are not noticeable in the field, but they probably contribute to the very different flight styles of these two birds. Scrub Jays are flamboyant in the air, with a swooping, undulating flight, their long tails flopping behind them. Gray-

breasted Jays have a more solid-citizen look in flight, with steady wingbeats and level glides, their wide tails trailing stiffly behind them. Perched, an excited Scrub Jay may flip its tail back and forth expressively; a perched Gray-breasted Jay looks distinctly shorter-tailed, and its tail motion is rarely noticeable.

Jays should be heard as well as seen, of course, and Scrub Jays are appropriately raucous. Their repertoire includes a rapid *shek-shek-shek-shek-shek* and a slower *tchak*, *tchak*, and a characteristic rising *sherreeap*. Graybreasted Jays are quieter. Their typical call, heard frequently when a flock is on the move, is a querulous *wink*? or *whenk*? Some field guides describe this call as "loud" or "ringing," but it is surprisingly soft for such a large bird—especially for a jay!

Adult Gray-breasted Jay. This bird looks almost uniform blue above, but some individuals look grayer on the center of the back. Photograph/Dale and Marian Zimmerman/VIREO (201/7/007)





Portrait of a Scrub Jay of the interior population, to show details of face pattern. Photograph/Dale and Marian Zimmerman/VIREO (201/4/017)



Scrub Jay of the Florida population. This clean-cut bird has a well-defined tan patch on the upper back, but more diagnostic for a Florida bird is the pale whitish or silvery forehead. Photograph/Helen Cruickshank/VIREO (c03/7/274)

A Florida Scrub Jay, seen from the underside. Notice the pale forehead, and the rich blue surrounding the white patch on the throat and upper chest. Photograph/C. Heidecker/VIREO (h22/1/003)

Gray-breasted Jay. This worn-plumaged individual could be confusing because its back is contrastingly brownish-gray and because it appears to have a whitish chin and a trace of a pale line behind the eye, calling to mind some Scrub Jay field marks. However, the bird shows no outlined bib" pattern and no pale line above the eye, and its tail is proportionately much too short for Scrub Jay. Photograph/Helen Cruickshank/VIREO (c03/7/281)





Immature Gray-breasted Jay. Although this bird is several months old, it still shows the characteristic pale pinkish base to the lower mandible. Feather arrangements create a vague illusion of streaks on the underparts, but there is no outlined white throat patch as on Scrub Jay. Photograph/ Dale and Marian Zimmerman/VIREO (201/7/005)



A Scrub Jay from California, with sharp contrast in the plumage pattern. Notice especially the upper chest: outlining the white throat is an area of rich blue. There is also strong contrast between the tan back and blue wings, and the white line over the eye is long and conspicuous Photograph/Betty Randall/VIREO (r15/4/002)

VIREO (Visual Resources for Ornithology), at the Academy of Natural Sciences of Philadelphia, is the world's first and foremost scientifically-curated collection of bird photographs. Established in 1979, the collection now holds well over 100,000 images, representing nearly half of the world's bird species. For more background, see the feature on VIREO by J. P. Myers et al. in American Birds Volume 38, Number 3, May-June 1984.