

Tattletails:

How to Tell the Sex and Age of Purple Martins By Their Undertail Coverts

James R. Hill, III

*Purple Martin Conservation Association
301 Peninsula Dr Suite 6
Erie, PA 16505*

Purple Martin landlords are asked to sex and age the parents at each active martin nest when participating in Project Martinwatch, the *PMCA's* ongoing cooperative research project. Sexing and aging Purple Martins can be a challenge for some participants, particularly those without binoculars or a spotting scope (an absolutely essential tool for all martin landlords, in my opinion!). To landlords without optics, the five distinctive sex/age plumages of martins look alike, especially the four *NAM* ("not adult male") plumages (i.e., subadult male, subadult female, adult female, and fledgling).

The view from a tripod-mounted spotting scope is as close-up and detailed as these hand-held martin shots. It's truly like having the martin in your hand.

The purpose of this brief photo guide is to help landlords better distinguish among martin plumages using just the birds' undertail coverts, also known as the "crissum," which is the large triangular area of feathers *under* the martin's tail. For information on how to sex and age martins using their *entire* plumage, see the 1997 article: "A Color Guide to Sexing and Aging Purple Martins" published in *Purple Martin Update*

ASY-M
adult male



SY-M
subadult male



ASY-F
adult female



8(1):15-17. That useful article is also available on-line at: www.purplemartin.org/update/ColorGuide.html

The Purple Martins in these photos were all captured alive during the PMCA's ongoing diet study work, and were released unharmed after being photographed. The fledgling was hand captured as a returning kleptoparasite in a wooden T-14.

ASY-M (after second year male = adult male, 2 years old or older): This, of course, is the easiest of the four *breeding* plumages to recognize. The crissum of adult males is solid purple, or sometimes, purple fringed with tan borders (as in this photo). There is no mistaking the sex/age category of an adult male.

SY-M (second year male = subadult male, 1 year old): The crissum of subadult males is quite variable in the amount of purple feathering it has. Some birds have several purple feathers, others have very few. Every crissum is different. Note the purple and gray colors on the crissum of a subadult male compared to the browns of the adult and subadult females.

ASY-F (after second year female = adult female, 2 years old or older): The crissum of adult females is also quite variable. Most adult female martins have a crissum like this individual, with lots of rich brown coloring on the feather *vanes* themselves. A few adult females have a crissum with only faint brown feather vanes. When aging 'difficult' females, it's best to use the bird's *entire* plumage (including the bird's back color).

SY-F (second year female = subadult female, 1 year old): Like the crissum of subadult males, the crissum of subadult females is highly variable. We show two examples here. The crissum can be pure white (right SY-F photo), or with just the feather *shaft* (quill) chocolate colored (left SY-F photo). If you see a female with either of these two crissum patterns, it's clearly a bird that fits into the subadult female sex/age category.

AHY-F (after hatching year female = age unknown (SY? or ASY?), ≥ 1 year old): No photo shown. Females that can't be aged accurately by plumage are put into this category. Some females have crissums that are intermediate between the adult female and subadult females shown here. In these cases, use the *entire* plumage (including the back color) to determine the age category of the bird. Adult females are purple on back, subadult females are brownish. Use caution; the sun bleaches out the back color of female martins from purplish to brownish by late summer. When in doubt about female age, use AHY-F.

HY-U (hatching year, sex unknown = fledgling, ~ 30 days old): This, the fifth sex/age category that landlords will encounter on the breeding grounds at season's end, is an undertail shot of a free-flying fledgling. Note that the crissum is similar in color to a subadult female, but the tail is much shorter and is still growing in length. This particular bird is about 28-30 days old. When seen again in North America next spring, it will have acquired an SY plumage. 

