

Maryland Ornithological Society



Maryland / District of Columbia Records Committee Skins Workshop March 26, 2005

Edited by Phil Davis, MD/DCRC Secretary

1. General

On March 26, 2005, the Maryland/District of Columbia Records Committee (MD/DCRC) held a Skins Workshop at the Division of Birds, National Museum of Natural History, Smithsonian Institution, Washington, DC. Our hosts were Roger Clapp and Mary Gustafson, both with the US Geological Survey – Biological Resources/Patuxent Wildlife Research Center. Roger is resident at the museum and Mary is with the Bird Banding Lab in Laurel. The committee thanks Roger and Mary for the time they dedicated to our workshop.

2. Attendees

Committee members in attendance were: Phil Davis (Secretary), J.B. Churchill, Barry Cooper, Patty Craig, Matt Hafner, Hans Holbrook, John Hubbell, George Jett, Paul Pisano, and Sherman Suter.



Figure 1. Some of the attendees studying Calliope Hummingbird specimens: (left to right) Barry Cooper, Paul Pisano, Sherman Suter, Mary Gustafson, Patty Craig, George Jett, Hans Holbrook, Matt Hafner, and J.B. Churchill. Image by P. Davis.

3. Skins Studies

We began the workshop after our 9:45 am following security check-in. We assembled in the Bird Division specimen case area on the 6th floor. Our objective was to study specimen skins related to sighting reports that are currently in review or are expected to be reviewed over the next year or related to other potential identification problems for Maryland and DC. The following cases were examined:

3.1 Calliope Hummingbird (*Stellula calliope*)

Account by Sherman Suter.

Background: In November 2004, Maryland had its first report [MD/2004-173] of this species. It was banded in Laurel, MD and was reported as a HY female. The bird stayed into December 2004. This is the first report for Maryland / District of Columbia. Members wanted to take the opportunity to study skins of this species and compare them to other similar species.

Findings: This species is distinguished by its small size (males average 2.5 g; females, 2.8 g) and short-bill ("measurements diagnostic for MD bird, nothing else this short"—MG; however, the Bumblebee Hummingbird is even smaller and shorter-billed—SS.) which is also slender and thin (top-to-bottom). Adult males have unique streaked red gorget. For both sexes, adults and immatures, the central rectrix (R1) is "club-shaped" (widening from base to about 4/5 of length, then abruptly tapers to point), more so in adults. This species is shorter-tailed than other small hummingbirds (Rufous, Allen's, Black-chinned, Ruby-throated, and Broad-tailed). The tail does not reach wingtips when perched. The flanks are deep-buffy in color.

Juveniles are distinguished from older birds by corrugations (lengthwise wrinkles) on bill. The sex of juvenile and HY/SY birds is determined by wing chord (range), shape of P10, degree of tail-fork, pattern of central rectrix, and males have rufous on the sides at base. The color pattern of R1 on sub-adult Calliope Hummingbirds can be used to distinguish juvenile males from juvenile females (Baltosser 1994). White tips are present on R2 (small) or R3 through R5. The central rectrices have black-tips, but are all green in female Broad-tailed. The rufous color at the base of tail of females and immatures is less extensive than for Rufous and Allen's and is often hidden beneath tail coverts. On the Maryland bird, this could only be seen when in the hand; it was not visible in scope views while feeding.

Several comparison photographs were taken of female Calliope and Black-chinned (*Archilocus alexandri*) prepared with wings spread. Calliope is smaller; Black-chinned has a longer, clearly decurved bill. Also, several comparison photographs were taken with Ruby-throated (*Archilocus colubris*). The inner primaries of the Ruby-throated were narrow versus the broad, rounded P1 through P9 of Calliope.



Figure 2. A tray of hummingbird specimens. Image by P. Davis.

3.2 Cave Swallow (*Petrochelidon fulva*) vs. Cliff Swallow (*Petrochelidon pyrrhonota*) Account by Matt Hafner.

Background: Cave Swallows began appearing in the fall in the Middle-Atlantic area more than a decade ago. Maryland's first report was a single in 1996; however six were reported in 2002 and eighteen in 2004. The committee has reviewed first round reports from the 2002 sightings and all are to be recirculated. Reports from 2004, for which documentation was submitted, will also be circulated at the same time. Ed Boyd suggested at the annual meeting that the committee review the Mexican Cliff Swallow vs. Cave Swallow identification issue at the skins meeting, especially the southwestern/Mexican Cliff Swallow (*Petrochelidon pyrrhonota melanogaster*) and Caribbean Cave Swallow (*Petrochelidon fulva fulva*). The committee had reviewed Cave Swallow and Cliff Swallow specimens at the 2003 Skins Workshop, but not these subspecies and not in as much detail as this year.

Findings: The follow subspecies were reviewed at the meeting (Note: The literature conflicts on subspecies common names):

Cliff Swallow (*Petrochelidon pyrrhonata*):

P. p. swainsonii – breeds in Mexico north to SE Arizona and SW Texas also known as *melanogaster* in older literature

P. p. tachina – breeds in the SW United States from SW Texas to California and north to Central California and N New Mexico

Cave Swallow (*Petrochelidon fulva*):

P. f. fulva – breeds in S Florida and throughout the Caribbean

P. f. cavicola – breeds only on Cuba, known to be a vagrant to S Florida (Pyle)

P. f. pelodoma – breeds in Mexico and north to New Mexico and Texas also known as *pallida* in older literature

Comments on the review of specimens:

***P. p. swainsonii*:**

- The forehead and throat were the same brick red color
- The nape was a dark buffy, slightly paler than throat and forehead
- The throat consistently had dark blackish markings on the lower throat
- The forehead shape appeared variable, sometimes being limited, other times extending over the eye
- The upper chest and flanks showed buff color on some specimens, but never to the extent of *fulva*
- The rump was a very pale orange, much paler than forehead and throat

P. p. tachina

- Very similar to *swainsonii*
- The nape was generally paler
- The forehead color was variable, but almost always paler than *swainsonii*

P. f. fulva

- The forehead was brick red
- The throat was dark buffy creating a definite contrast with the forehead
- The nape was generally darker than the throat
- The upper chest and flanks were extensively colored buffy
- The rump was very dark, similar to the forehead color

P. f. cavicola

- Most specimens were very similar to *fulva*
- One specimen appeared more like *pelodoma* to our eyes

P. f. pelodoma

- The forehead was brick red as in *fulva*
- The throat was buffy, slightly paler than in *fulva*, contrasting heavily with the forehead
- The nape was buffy, similar to the throat
- The rump was a dark buffy, slightly paler than *fulva*, noticeably darker than all Cliff Swallows
- Some buffy coloring extended onto the upper chest, none on the flanks

Comments pertaining to the Carroll County bird:

Bob Ringle's video of a Carroll County individual [MD/2003-133] was viewed in direct comparison with the specimens. The throat appears very dark on the video and is described as brick red by the observers. There does not appear to be any contrast with the forehead. There is a noticeable buffy coloring on the flanks and chest. The rump and nape both appear very pale, but that could be a factor of the light. The descriptions of the lores differ between observer notes.



Figure 3. Swallow specimens. The two on the left are *fulva*, the three on the right are *swainsonii*. Note the dark rump of the *fulva* similar in color to the nape. On *swainsonii*, the rump is much paler than the nape. Image by M. Hafner.



Figure 4. Swallow specimens. The two on the left are *fulva*, the three on the right are *swainsonii*. Note the contrast between the forehead and throat on the *fulva* and the similarity on *swainsonii*. Image by M. Hafner.



Figure 5. Swallow specimens. The two on the left are *fulva*, the three on the right are *swainsonii*. Note the extensive buffy coloring extending onto the upper chest and flanks of *fulva*. The *swainsonii* show much less coloring. Also note the black feathers on the lower throats of *swainsonii*. Image by M. Hafner.

3.3 “Gambel’s” White-crowned Sparrow (*Zonotrichia leucophrys gambelii*) Account by Paul Pisano.

Background: Several years ago, the MD/DCRC added “Gambel’s” White-crowned Sparrow to its list of “subspecies or forms that are unusual” to the area. A number of this subspecies have been accepted by the committee, however, all have been adults. The committee now has a number of immatures to review and decided to study skins of immatures.

Findings: We looked at skins of the following White-crowned Sparrow subspecies: *gambelii*, *pugetensis*, *nuttalli*, *oriantha*, and *leucophrys*. The immediate conclusion based on the examination of *leucophrys* and *gambelii* skins is that the color of the subloral area for both is variable, and hence it was impossible to distinguish between these two subspecies based on supraloral color alone. The *leucophrys* supraloral area could be as light as *gambelii* and vice versa. This finding held true when *leucophrys* was compared to *nuttalli*, as well.



Figure 6. In this picture, the three skins on the left are *gambelii* and the three on the right are *leucophrys*. Image by Phil Davis.



Figure 7. In this picture, the birds are (from left to right): *nuttalli*, *leucophrys*, *nuttalli*, *gambelii*. Image by Phil Davis.

Again, it can be seen in this picture that supraloral color by itself is unreliable. This is supported in the article “White-crowned Sparrow Subspecies: Identification and Distribution” by Dunn, Garrett, and Alderfer (*Birding*, 25(3):182-200. 1995).

Since bill color is unreliable in skins, we were unable to study this feature. Back pattern could have been worthy of scrutiny; however, we did study that field mark. Based on the skins, there

was no appreciable difference in breast or flank color between subspecies. The conclusion is that subspecific field identification of immature White-crowned Sparrows should not be based on supraloral color alone, but should instead be based on a combination of other features, such as bill color, back pattern, underparts color, primary extension, and the many other factors captured in Table 3 of the *Birding* article.

3.4 White-winged Junco (*Junco hyemalis aikenii*)

Account by J.B. Churchill.

Background: In researching historical Maryland and DC records, Phil Davis found a published account (Beckham 1885) of a White-winged Junco specimen for Maryland [MD/2004-110]. The specimen, a male, is USNM #102219 and was collected by Beckham at Ilchester, Howard County, Maryland on 01 Feb 1885. This would constitute a remarkable record for Maryland. An earlier quick review of the specimen by Roger Clapp (USGS/SI) indicated that the specimen appeared to be a nominate junco (j. h. h.) with aberrant wing barring. The committee decided that since the original account was published in a peer-reviewed journal, the committee should study, photograph, and then formally review this specimen.

Findings:



Figure 8. Undertail pattern; Dark-eyed Junco, USNM #102219. Image by P Davis.

We examined several Dark-eyed Junco specimens of subspecies *J. h. hymnalis* and *J. h. aikenii*. The white in the tail is known to be more extensive in *aikenii*, the White-winged Junco. Beadle and Rising, (2002) indicate that on *aikenii* the 6th, 5th, and 4th rectrices are “white” or “largely white” with white “usually” on the 3rd. White-winged Junco is also known to be a larger bird than *hymnalis*, with a larger bill. The larger size could theoretically be detected in the field if birds could be compared one on one, but the larger bill is not thought to be generally useful in the field. White-winged Junco also shows a paler shade of gray on the breast, hood and upperparts than Slate-colored Junco.

We examined twelve male *aikenii*. All had some white on the R3 and completely white R6, R5 and R4 except for one that had some dark on R3 and R4 and one with all four (R3-R6) completely white. Some female immatures that we examined had dark on R3, as well. The specimens of *hymnalis* that we looked at had (at most) three white outer tail feathers (R4-R6) and R4 typically had at least some dark on the outer webs though they are known to often have some white on R3 (Beadle and Rising, 1996).

Our impression was and the photos show that the specimen is clearly a Slate-colored Junco (*J. h. hymnalis*) that had white wing-bars. This is known to occur occasionally in this subspecies.

3.5 Trumpeter Swan (*Cygnus buccinator*) vs. Tundra Swan (*Cygnus columbianus*) vs. “Trumpling” Swan (*Cygnus buccinator* X *Cygnus columbianus*)

Account by Hans Holbrook.

Background: Trumpeter Swans have been reported from various locations across Maryland and in different seasons, including summer. The most recent report is from Black Hill Regional Park (Montgomery County) in January of 2005. There are reintroduction programs around the Great Lakes and in eastern Canada and birds were also released in Maryland a few years. Determining origin is a problem since one must consider true vagrants, introduced birds, and escapes from private collections. Hybrids must also be considered from wild or captive origins.

Findings: The committee looked at several specimens of both Tundra and Trumpeter, and one hybrid collected in Alaska. While differentiating the two species in the field has its challenges, a hybrid would be very difficult to distinguish. Trumpeters are larger than Tundra in body size, thicker legged, and have longer bills. Billed structure is a key in separating the species. The Trumpeter forehead is V-shaped vs. the U-shaped in Tundra. Also the shape of the base of the bill between the eye and the lower mandible differs: Trumpeter shows a straighter line, while Tundra is more curved. The committee noted a fair amount of variation with in each species in regards to bill shape and structure. The Tundra X Trumpeter, commonly known as a “Trumpling” and found in the mid-Atlantic area, has intermediate characteristics in bill structure and body size.



Figure 9. Attendees studying swan specimens. From left to right, John Hubbell, Hans Holbrook, Patty Craig, Paul Pisano, and Sherman Suter. Image by P. Davis.

3.6 Western Grebe (*Aechmophorus occidentalis*) vs. Clark's Grebe (*Aechmophorus clarkii*)

Account by Sherman Suter.

Background: Examination was focused on whether the thickness of the black on back of the nape and neck provides a reliable identification criterion. This question was prompted by a recent report to the committee.

Findings: We looked at several complete specimens of each species. (For these, post-mortem changes in bill color seem to have lessened the distinctiveness of that trait, but color of face and, especially, lore was consistent with label in all cases.) We also looked at larger samples (10–15 each) of partial skins (specimens consisting solely of the skin from the crown down to the base of the neck), for which there were no independent criteria for confirming the ID on the labels. The thickness of the black stripe across these skins varied somewhat along the length of the stripe; because the flattened, unrolled skins did not have any distinctive landmarks for the start of the neck, we could only estimate how this longitudinal variation would have appeared on live birds. Our general impression was that the black stripe certainly tended to be thinner for Clark's than for Western. The extremes seemed easily separable, at least at the thin end. All the noticeable thin stripes were Clark's, and most of the thicker stripes belonged to Westerns. There was clearly a good deal of overlap in the middle, and in addition some committee members felt that a general recognition of "thinner" versus "thicker" would be hard to apply to a solitary bird.



Figure 10. Nape/back-of-the-neck skins from *Aechmophorus* grebes. Image by P. Davis.

We also looked briefly at a number of detached spread wings. Clark's tended to have a good deal more white on the dorsal surface, the secondaries and inner primaries were white along much of their length, producing a longer and broader white stripe compared to the Westerns, where the darker tips of these feathers were much broader and the resulting narrow white stripe did not continue as far towards the wing tip. Similarly, Westerns generally had much less white in the underwing. However, the depictions in Sibley (2002) seemed to fall toward the extremes and there seems to be a great deal of overlap between the species. (For these specimens, the wings with well-defined white patches were all Clark's, so this characteristic may provide a means of identifying some Clark's while being equivocal for birds with less extensive white.)

3.7 Western Wood-PeeWee (*Contopus sordidulus*) vs. Eastern Wood-Pewee (*Contopus virens*)

The committee studied and measured several putative Maryland Western Wood-Pewee specimens; however, we want to recheck several of these measurements and therefore are not summarizing our findings for this workshop. Our intentions are to remeasure these specimens at or before the 2006 Skins Workshop.

4. Adjournment

The Workshop ended at approximately 1:30 pm.

5. Literature Cited:

Baltosser, W.H. 1994. Age and sex determination in the Calliope Hummingbird. *Western Birds* 25:104-109.

Beckham, C.W. 1885. A White-winged Junco in Maryland. *Auk* 2(3):306

Bemis, C., and J. D. Rising. 1999. Western Wood-Pewee (*Contopus sordidulus*) in: *The Birds of North America*, No. 451 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Davis, P. 2003. Maryland / District of Columbia Records Committee Skins Workshop March 29, 2003. MD/DCRC Web site. < <http://www.mdbirds.org/mddcrc/pdf/rskins2003.pdf>>.

Hubbard, John. Year. Eastern Wood-Pewee specimens from New Mexico, plus a reevaluation of mensural criteria for identifying this taxon. *Occasional Papers Southwestern Biology* 9:1-13 pp)

Pyle P. 1997. *Identification guide to North American birds - part 1*. Slate Creek Press, Bolinas, CA. 732 pp.

Sibley, D. A. 2002. *The Sibley guide to birds*. Knopf. New York.

Respectfully submitted,

Phil Davis, Secretary
2549 Vale Court
Davidsonville, MD 21035
pdavis@ix.netcom.com