

**AOS Classification Committee – North and Middle America**

**Proposal Set 2021-B**

**revised 6 February 2021**

No. Page Title

- |    |    |  |
|----|----|--|
| 01 | 02 | Change the type locality of Black-throated Bobwhite <i>Colinus nigrogularis</i>  |
| 02 | 04 | Treat Crested Caracara <i>Caracara cheriway</i> as conspecific with <i>C. plancus</i>                                  |
| 03 | 09 | Recognize extralimital <i>Thamnistes rufescens</i> as a separate species from Russet Antshrike <i>T. anabatinus</i>    |
| 04 | 13 | Recognize extralimital <i>Forpus spengeli</i> as a separate species from Green-rumped Parrotlet <i>F. passerinus</i>   |
| 05 | 20 | Recognize extralimital <i>Anthus peruvianus</i> as a separate species from Yellowish Pipit <i>A. lutescens</i>         |
| 06 | 23 | Recognize extralimital <i>Catharus maculatus</i> as a separate species from Spotted Nightingale-Thrush <i>C. dryas</i> |
| 07 | 37 | Revise the linear sequence of passerine families   |
| 08 | 43 | Recognize <i>Basileuterus delatirii</i> as a separate species from Rufous-capped Warbler <i>B. rufifrons</i>           |
| 09 | 49 | Change the spelling of <i>Porphyrio martinicus</i> to <i>P. martinica</i>  |
| 10 | 52 | Treat Andean Duck <i>Oxyura ferruginea</i> as conspecific with Ruddy Duck <i>O. jamaicensis</i>                        |

**Change the type locality of Black-throated Bobwhite *Colinus nigrogularis***

AOU (1983, 1998) listed the type locality for *Colinus nigrogularis* as “Mexico = Yucatán”, which follows Peters (1934). This designation was the result of a somewhat convoluted set of circumstances. This species was found by Samuel Cabot, who described the appearance of the bird in the zoological appendix to Volume 2 of Stephens’ *Incidents of Travel in Yucatan* (1843). Cabot, however, did not provide a scientific name for the species. Gould (1842), in a paper actually published in 1843, described the species, on the basis of a male specimen in a private collection, as *Ortyx nigrogularis*. He noted the habitat of the species as “Mexico; locality unknown. In the collection of the Earl of Derby.” In later references, e.g. Peters (1934), the species is listed as *Colinus nigrogularis* (Gould), with the type locality of “Mexico = Yucatan” appending Cabot’s information to Gould’s.

In a paper on new birds of Yucatán, van Tyne and Trautman (1941) looked into this situation in some detail. They had found two forms of *C. nigrogularis* in Yucatán and planned to describe one of them as a new subspecies, and therefore needed to determine the identity of the type specimen, which was held at the Liverpool Museum. The label of the type specimen stated that the bird had actually been procured alive in Honduras and shipped to England, where it became part of the aviary of Lord Derby, which meant that it might well pertain to the dark southern subspecies *segoviensis*, described by Ridgway in 1888 from the Segovia River, Honduras, rather than to one of the forms in Yucatán. Comparative material not being available in Liverpool, van Tyne and Trautman sent specimens of the two forms from Yucatán (from Progreso and Chichen Itzá, respectively) and *segoviensis* (from Petén, Guatemala) to Liverpool so that the type could be compared. It was determined that the type was virtually identical with the specimen of *segoviensis* from Guatemala.

Van Tyne and Trautman (1941) concluded that Gould’s name *nigrogularis* applies to the dark southern form that Ridgway had later described as *segoviensis*, synonymizing Ridgway’s name, and that the type locality of *nigrogularis* is Honduras rather than Mexico or Yucatán. They then proceeded to describe the two forms from Yucatán as *persiccus* and *caboti*.

**Recommendation:**

We recommend that we change the type locality of *C. nigrogularis* to Honduras, in keeping with the findings of van Tyne and Trautman (1941).

The question arises as to why this change hadn’t been made previously, and whether van Tyne and Trautman (1941) were intentionally not followed. As stated above, the type locality for *nigrogularis* in AOU (1983), the first edition that included this species, was “Mexico = state of Yucatán”, following Peters (1934) rather than van Tyne and Trautman (1941). Our guess is that this was an oversight; certainly no reasons were provided for not making the change either in the 1983 checklist nor in any supplement issued before or after the 1983 edition. Most global references do not list type localities, but in sources that list subspecies (e.g., Dickinson and Remsen 2013, IOC list, Clements list), the range of *nigrogularis* is consistently given as Belize,

Guatemala, and/or Honduras rather than Yucatan, and the ranges of *persiccus* and *caboti*, the two subspecies described by van Tyne and Trautman, are the ones listed in Yucatan, indicating that van Tyne and Trautman are being followed on this and, presumably, that there are no known problems with their conclusions. Alan Peterson's listing for this species at the zoonomen website also includes van Tyne and Trautman's two subspecies from the Yucatan.

**References:**

- Dickinson, E. C., and J. V. Remsen, Jr. (eds.). 2013. The Howard and Moore Complete Checklist of the Birds of the World. Fourth Edition. Volume 2. Non-Passerines. Aves Press, Eastbourne, United Kingdom.
- Gould, J. 1843 [1842]. On various new species of *Ortyx*. Proc. Zool. Soc. London, Part X: 181-184.
- Peters, J. L. 1934. Check-list of Birds of the World, Vol. II. Harvard Univ. Press, Cambridge.
- Stephens, John L. 1843. Incidents of Travel in Yucatan, Vol. 2. Harper & Brothers, New York.
- van Tyne, J., and M. B. Trautman. 1941. New birds from Yucatán. Occ. Pap. Mus. Zool. Univ. Michigan 439: 1-11.

**Submitted by:** Terry Chesser and Michael Patten

**Date of Proposal:** 11 January 2021

**Treat Crested Caracara *Caracara cheriway* as conspecific with *C. plancus***

**Note:** This proposal is a slightly modified version of SACC Proposal 878, which passed unanimously. Approval of this proposal would result in replacement of *Caracara cheriway* on the NACC list with *C. plancus*.

**Background:**

The traditional treatment of *C. p. plancus* and *C. p. cheriway* as subspecies was supported by both Hellmayr and Conover (1949: 283-284) and Vuilleumier (1970), who agreed that there is intergradation between the two forms in Brazil. Dove and Banks (1999), however, on the basis of several plumage features, considered *C. plancus* to comprise three biological species, with birds of northern South America assigned to *C. cheriway* and the extinct species *C. lutosa* of Guadalupe Island, Mexico. This was based primarily on patterns in five characters of contour plumage: 1) breast; 2) vent area; 3) upper back/scapulars; 4) lower back; and 5) upper tail coverts. Their study of 23 specimens in the contact zone of *cheriway-plancus* showed highly mixed characters (Dove & Banks 1999; see their Table 2), even when multiple specimens from the same locality were concerned, with the presence of each defined character indiscriminately mixed in different specimens over a very large area.

The biometrical analysis performed by Dove and Banks (1999) showed that variation was extensive, with the largest specimens coming from the extreme south of South America, and that there was a clinal increase in wing chord, bill length, and bill depth as each taxon was recorded further away from the equator. They also found that females were larger in the Northern Hemisphere, but not in the Southern Hemisphere.

**New information:**

Fuchs *et al.* (2012) conducted a molecular phylogenetic analysis on all members of the Polyborinae, finding many interesting relationships in the systematics of the subfamily. Divergence between *plancus* and *cheriway* proved to be a recent event estimated at 0.2-0.5 MYA.

Moreover, Fuchs *et al.* 2012 (p. 529) found the following:

"The two species of the genus *Caracara* differed by a mitochondrial uncorrected p-distance of 0.5%, which is one of the smallest divergences among Falconidae species based on similar sequence data (e.g. tRNA-Leu to ND2; the smallest being 0.08% between the Saker Falcon *Falco cherrug* and Gyrfalcon *Falco rusticolus*, J. Fuchs, J.A. Johnson, D.P. Mindell unpubl. data, as well as between *P. albogularis*/*P. megalopterus*, see below). Despite the low sequence divergence, the two *Caracara* taxa have been recognized as distinct species based on plumage characters (Dove & Banks 1999). Our samples of *C. cheriway* do form a

monophyletic group with respect to the single *C. plancus* individual in the mitochondrial and in some nuclear trees; however, the individuals for the two species used in this study were sampled from the extremes of their geographical distributions. Dove and Banks (1999) suggested that biometric measurements are correlated with latitude for wing chord, bill length and bill depth. Hence, the pattern of molecular differentiation we found here could also be the result of isolation by distance. To enable more robust conclusions to be drawn concerning the taxonomic affinities within *Caracara*, further sampling is required, including samples from areas close to the Amazon River, where the distributions of *C. cheriway* and *C. plancus* overlap and where individuals with mixed plumage characteristics have been collected (Dove & Banks 1999).”

This result is all the more remarkable given that the closest samples came from geographical extremes: the southernmost *cheriway* sample was from Nicaragua and the only *plancus* sample from Paraguay.

## Discussion:

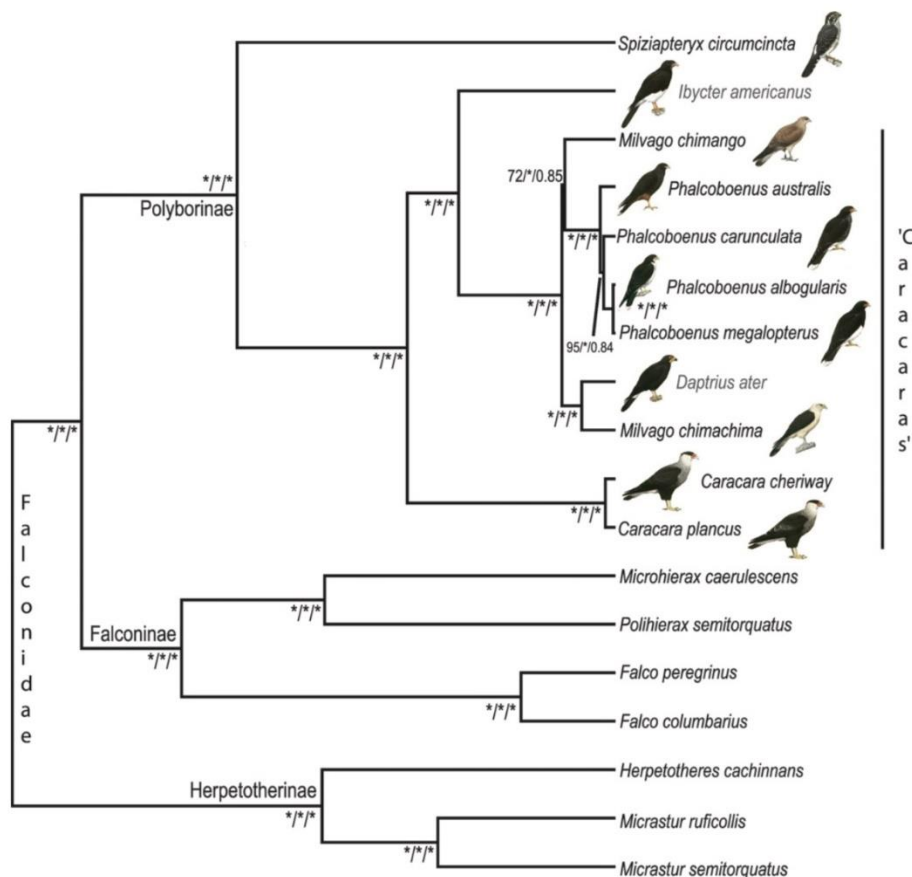
From what is known, *cheriway* and *plancus* share a broad number of indiscriminately mixed plumage characters in their area of overlap, a large and broad swathe of Amazonia. Furthermore, their mitochondrial DNA hardly differs despite a distance of 4300 km between the nearest samples (indeed, this is what would be expected if there was only isolation by distance, without any proper interbreeding barrier). Therefore, we do not see any supporting evidence for species-level differences and at most a subspecific relationship could be claimed, although we cannot rule out that the two forms are linked through a cline.

**Table 2 from Dove & Banks (1999):**

TABLE 2. Summary of plumage characters (numbers from Table 1) of specimens from the zone of contact between northern and southern continental populations of crested caracaras. Localities without specimen numbers are included on the basis of records mentioned by Hellmayr and Conover (1949). C = *C. cheriway*, P = *C. plancus*, I = intermediate, ? = unscored.

Locality	Museum #	Character				
		1	2	3	4	5
Óbidos	FMNH 101538	C	C	C	C	C
	FMNH 101539	P	P	C	C	P
	BMNH 1908.8.21.17	P	C	C	C	C
Igarapé Arriba	FMNH 101424	P	P	C	P	P
	FMNH 101425	P	P	C	P	P
	FMNH 101427	P	P	C	I	P
Diamantina Parintins	USNM 121077	I	P	C	P	P
	AMNH 276706	P	P	C	I	P
	AMNH 277572	P	C	C	I	P
Maicá Itiqui	AMNH 277573	P	C	C	I	P
	USNM 276906	P	P	C	C	P
	FMNH 101157	C	P	C	P	P
Agarapé Brabo (Rio Tapajós)	FMNH 101158	C	C	C	C	C
	AMNH 285747	P	P	C	C	C
	FMNH 100401	P	P	P	P	P
Santo Amaro Maranhão	MCZ 92682	I	?	P	P	P
Morros de Mariana	AMNH 241499	P	C	P	P	P
	AMNH 241500	P	C	P	P	P
	BMNH 73.3.19.4	P	P	P	P	P
Ilha Mexiana	MCZ 22996	P	I	C	C	P
Ilha de Marajo	UM 7504	P	P	P	P	P
Ilha Caviana		C	C	C	C	C
Santarem		C	C	C	C	C
Rhemes		C	C	C	C	C

Figure 3 from Fuchs et al. (2012):



**Figure 3.** Species tree obtained using the coalescent approach implemented in STARBEAST. Values close to nodes represent support values (ML Bootstrap Concatenated Data/Posterior Probabilities Concatenated Data/Posterior Probabilities Species tree). Asterisks indicate maximum likelihood support values and posterior probabilities 100% and 1.0, respectively. Taxa in grey (*Daptrius* and *Ibycter*) are the caracara species that are found in more forested habitats. Illustrations were modified from Del Hoyo et al. (1994).

## Recommendation:

We recommend that *cheriway* and *plancus* be considered as part of a single species (perhaps best considered as subspecies for the time being). A YES vote would lump *C. cheriway* with *C. plancus* and a NO vote would maintain the two as full species. If the merger is approved, *C. plancus* would once again be known as the Crested Caracara. The status of extinct species *C. lutosa* is not affected by this proposal, consistent with the taxonomic treatment of Hellmayr and Conover (1949).

## Literature Cited:

Dove, C. J. & Banks, R. C. (1999) A taxonomic study of Crested Caracaras (Falconidae). *Wilson Bulletin* 111: 330–339.

Fuchs, J., Johnson, J.A. & Mindell, D.P. (2012) Molecular systematics of the caracaras and allies (Falconidae: Polyborinae) inferred from mitochondrial and nuclear sequence data. *Ibis* 154: 520-532.

Hellmayr, C.E. & Conover, B. (1949) *Catalogue of birds of the Americas and adjacent islands*. Part 1. Number 4. Field Mus. Nat. Hist. Publ. 634. Zool. Series 13: 1-358.

Vuilleumier, F. (1970) Generic relations and speciation patterns in the Caracaras (Aves: Falconidae). *Breviora* 355: 1– 29.

**Submitted by:** Mark Pearman and Juan I. Areta

**Date of Proposal:** August 2020 (SACC proposal), modified by Terry Chesser for NACC on 15 January 2021

### **Votes and Comments from SACC:**

Comments from Stiles: “YES to consider *C. cheriway* and *C. plancus* as a single polytypic species given the evidently wide zone of introgression with many individuals of mixed plumage; the minimal genetic difference between birds at the extremes of the wide distributions of both could easily be a distance effect, and reverting to the name Crested Caracara is indicated.”

Comments solicited from William S. Clark: “The plumage differences between *Caracara cheriway* and *c. plancus* are minimal and well within the range of variation of subspecies of most raptors. Certainly, these differences are much less than the differences between Harlan’s Hawk and Red-tailed Hawk, which the AOS considers subspecies.

“I have watched Southern Caracaras in Brazil and found few differences in behavior or vocalizations with Crested Caracaras, with which I am very familiar. Both have the unique vocalization of throwing their heads back and calling.

“The data presented in the proposal further support treating them as two subspecies.”

Comments from Claramunt: “YES. The proposed “zone of contact” is actual a vast region with mostly intermediate forms, not a narrow hybrid zone, breaking down the apparent diagnosability and separate identities of northern and southern forms. Back to one species.

Comments from Robbins: “YES for treating *cheriway* as conspecific with *plancus* based on the Fuchs et al. genetic data set.”

Comments from Zimmer: “Mark me down as an enthusiastic YES! Having spent a lot of time with *cheriway* at the northern limits of its distribution, even more time with *plancus* in the heart of its range, and time in the “contact zone”, not to mention all of the time sorting through museum specimens trying to make sense of all of the plumage variation, I’ve never really been on board with accepting the split. Now, the Fuchs et al. data set makes clear just how little genetic separation there is between *cheriway* and *plancus*, even when sampling from near the distributional extremes of the two forms. As Santiago notes, the contact zone between these two is actually a broad swath of intergradation, which squares with my examination of many,

many, seemingly intermediate specimens from across Brazil. I would be relieved not to have to take too deep of a dive into the weeds of field separation of these two in the Brazil field guide – as Pearman and Areta suggest in the Proposal, there is enough evidence of clinality here, that one could make a case that *cheriway* and *plancus* should not even be recognized as different subspecies!”

Comments from Lane: “An emphatic YES on this one! I have been greatly bothered by how weakly the two “species” are differentiated, particularly given the added issue of which is invading western Amazonia at a rapid rate! From what I can tell, the original paper used historic specimens that didn't reflect the apparent introgression already being observed in Amazonia at the time of its writing, which really weakened the paper's punch for me considerably. I cannot see how such a split could be ratified without someone studying the current expansion by both populations into cleared lands between the two source populations. Given how hard it is to recognize hybrids, any such study would, by necessity, require a molecular aspect to show gene flow or a lack thereof. Until such time, I think the only prudent treatment is to consider them conspecific. How that affects the Guadalupe Caracara (RIP) is unclear, but that's also not SACC's problem to resolve!”

Comments from Bonaccorso: “YES. Evidence of clinal variation, what seems to be a broad contact zone, and small genetic differences support the lumping.”

Comments from Remsen: “YES. Evidence for the split was very weak, and all data suggest no barriers to gene flow. As for English name, broadly defined *Caracara plancus* was always known as Crested Caracara, as noted in the proposal, and so there is no need for a proposal on English name.”

Comments from Jaramillo: “YES – This has always been a weak one. Unless someone can come up with some vocal or behavioral display differences that could be construed as a barrier to willy-nilly gene flow, I think it is best to lump them. Note that I was puzzled by the comments by Bill Clark. Why would differences in Red-tailed Hawks be a basis for comparison to a Caracara? The two are not in the same group at all taxonomically. We have visually nearly identical forest falcons however!”



**Recognize extralimital *Thamnistes rufescens* as a separate species  
from Russet Antshrike *T. anabatinus***

**Note:** This proposal is a slightly modified version of SACC Proposal 758. Approval of this proposal would result in changes to the distributional statement and notes for *T. anabatinus*.

**Background and Analysis:**

The Russet Antshrike, *T. anabatinus*, is primarily a resident of foothills forests of the northern Andes (both slopes in Colombia and Ecuador) and Middle America. Six subspecies are currently recognized (Peters 1951). Historically its vocalizations were largely overlooked and poorly recorded as it is a participant in noisy mixed-species flocks of the lower canopy to the upper understory. Recent recordings expanded the vocal inventory and provided a basis for analysis of populations and consideration of taxonomic rank (Isler and Whitney 2017). As a result, multiple (five or more) vocal characters of two types of song of *rufescens*, the southernmost population, were found to differ diagnosably from all other populations. Currently scarce in recordings, the calls of *rufescens* are also likely to be found to differ diagnostically when a sufficient number of samples is acquired. The plumage of *rufescens* is also distinct (Zimmer and Isler 2003).

**Recommendation:**

Diagnosable differences in vocalizations and plumage meet our yardstick (Isler et al. 1998) for elevation of *rufescens* to species rank.

**English names:**

We recommend that Rufescent Antshrike be adopted for *T. rufescens*, reflecting its scientific name, and that Russet Antshrike be retained for the widespread species *T. anabatinus*. The rationale for retaining Russet Antshrike for *anabatinus* is based on differential usage and relative range size: its name is of long-standing usage, most references in the literature apply to this species, and the range of *anabatinus*, which occurs from Mexico to Ecuador, greatly exceeds that of *rufescens*, which is found only in the Andean foothills of Peru and Bolivia.

**[Note** that extensive further discussion of English names is contained in SACC Proposal 792, its variants 792.1 and 792.2, and the comments on these proposals, in which compound names and new English names for both daughters were considered:

- compound names: Northern Russet-Antshrike (for *anabatinus*) and Southern Russet Antshrike (for *rufescens*), and
- new names for both daughters: Tawny Antshrike (for *anabatinus*) and Rufescent Antshrike (for *rufescens*).

For further details, see <https://www.museum.lsu.edu/~Remsen/SACCprop792.htm>.]

### Literature Cited:

- Isler, M. L., P. R. Isler, and B. M. Whitney. 1998. Use of vocalizations to establish species limits in antbirds (Passeriformes; Thamnophilidae). *Auk* 115:577–590.
- Isler, M. L., and B. M. Whitney. 2017. Species limits in the genus *Thamnistes* (Aves: Passeriformes: Thamnophilidae): an evaluation based on vocalizations. *Zootaxa* 4291 (1): 192–200.
- Peters, J. L. 1951. Check-list of birds of the world, vol. 7. Museum of Comparative Zoölogy, Cambridge, Massachusetts. 318 pp.
- Zimmer, K. J., and M. L. Isler. 2003. Family Thamnophilidae (typical antbirds). Pages 448–681 in *Handbook of the Birds of the World. Volume 8: Broadbills to Tapaculos* (J. del Hoyo, A. Elliot, and D. A. Christie, Editors). Lynx Edicions, Barcelona, Spain.

**Submitted by:** Mort Isler and Bret Whitney

**Date of Proposal:** October 2017 (SACC proposal), modified by Terry Chesser for NACC 15 January 2021

### SACC Votes and Comments:

Comments from Areta: "YES. Vocal differences between *rufescens* and the remainder of subspecies in slow songs are diagnostic. So far, the recorded calls are also diagnostic between these two groups. The lack of recordings of rapid songs in trans-Andean populations is curious, but since *aequatorialis* possess a slow song presumably identical to those of trans-Andean birds it might be the case that they also share the same rapid song type. However, as stated by Mort and Bret, the status of *aequatorialis* will need to be assessed in the future once more vocal data is available."

Comments from Stiles: "YES to splitting *rufescens* from the rest of *T. anabatinus*; vocal, genetic and plumage data seem quite sufficient for this. However, I agree with Bret with regard to the "necessity" of giving both taxa hyphenated group names; "Rufescent Antshrike" (or something similar) while leaving all the rest as "Russet Antshrike" seems like a simpler and more sensible solution.

"This leads me to a comment on what I am coming to see as a rather excessive rigidity regarding the SACC stance on English (as opposed to scientific (Latin) names. Scientific nomenclature is governed by a strict set of rules (the ICZN code). Latin is no longer a "living" language (though due to ecclesiastical use, it was through the Middle Ages). However, such strictness is not as applicable to names in currently living languages, which evolve according to prevailing usage. Hence, if a new vernacular name is given to a species or group that is more descriptive or diagnostic and also acquires wide usage, I see no reason not to accept it. I am thus less than impressed by freezing a name according to its past "track record", especially

when the older name was given by authors with no field experience with the bird or group in question. This is in contrast to the perhaps overly-maligned “field-guide taxonomy”: the main users of English names may be better served by adopting the newer name, especially when suggested by authors with extensive field experience with the birds (and often the authors of field guides!). Although splitting of species is a taxonomic decision for which strict nomenclatural rules apply for assigning Latin names, the same need not be the case for applying English names – as living languages evolve, there may well be no perfect, permanent name in the long run, but newer and definitely more evocative names might have longer lifetimes and are more likely to approach stability, in at least the foreseeable future. I might note that the ICZN is somewhat flexible here as well, setting aside priority when a subsequent name has acquired sufficiently universal use for a sufficient time. An interesting point here is that unlike English, Spanish does have a governing body for assuring linguistic purity (The Real Academia), but even it recognizes that usage patterns change, to the point that it now publishes its authoritative dictionary on-line to accommodate such changes and additions to the Spanish language.”

Comments from Zimmer: “YES. Songs (and probably calls) of *rufescens* have been demonstrated to differ diagnosably from those of the other subspecies in the *anabatinus*-complex, and these differences are concomitant with diagnosable differences in plumage, thereby meeting the Isler et al (1998) yardstick for elevating thamnophilid taxa to species-rank. Given that there are only 2 species involved, I agree with others that it is better to retain the established English name of “Russet Antshrike” for the *anabatinus*-group, and to go with the streamlined “Rufescent Antshrike” for *rufescens*, as opposed to using a clunkier, hyphenated group-name.”

Comments from Remsen: “YES. Just handling specimens of these two makes me wonder why they were ever considered conspecific. Now, we have convincing vocal data that indicate that these two have diverged to the point that unrestricted gene flow would be unlikely. See photographs above for how distinctive is the plumage of *rufescens*: vaguely striped dorsally, and more rufescent ventrally. Also note that *aequatorialis* does group better with trans-Andean taxa than cis-Andean *rufescens*

“Regarding English names, clearly a separate proposal would be needed. The opposing view to Gary’s points is that stability should figure into any decision because any novel names make it difficult to negotiate older literature, just the way we have an unfortunately difficult time reading older English texts. Further, finding “better” names is a subjective exercise that is theoretically interminable.” Also, I think it’s a bad idea in this case for one of the daughters to retain the parental name. I may have a solution. The English name for nominate *anabatinus* used by Ridgway was Tawny Antshrike, and Russet was used for *saturatus* only; so, when Eisenmann (?) selected an E name for the species, he picked Russet. I think Tawny applies equally well. If we go with Tawny for *anabatinus* (the E name actually applied to that taxon) and Rufescent for *rufescens*, we can avoid the problems of compound names and the parent-daughter confusion problem.

Comments from Pacheco: “YES. The combination of consistent differences in vocal repertoire and in plumage is convincing to justify species rank treatment.”

Comments from Stotz: “YES. I am okay, but barely, with Rufescent and Russet antshrikes.”

Comments from Jaramillo: “YES, and I would avoid the hyphenated name and go for Rufescent and Russet Antshrikes.”

Comments from Robbins: “YES, the vocal data along with the plumage differences strongly support recognizing *rufescens* as a species.”

**Recognize extralimital *Forpus spengeli* as a separate species  
from Green-rumped Parrotlet *F. passerinus***

**Note:** This is a modified version of SACC Proposal 873, the relevant parts of which passed by 7-3 (recognition of separate species) and unanimous (retain the English name for *F. passerinus sensu stricto*) votes (<https://www.museum.lsu.edu/~Remsen/SACCprop873.htm>). Approval of this proposal would result in changes to the distributional statement and notes for *F. passerinus*.

**Background:**

The distinctive, morphologically homogeneous parrotlet genus *Forpus* is usually treated as being comprised of seven species (e.g. Forshaw 1973, Sibley and Monroe 1993, Dickinson 2003, Dickinson and Remsen 2013, Clements et al. 2019), although Peters (1937) only recognized five. Most are allopatric, with only one species (*F. modestus*) overlapping broadly geographically with other species. All are sexually dichromatic, and most are polytypic. Not surprisingly, species limits have long been contentious, and nomenclatural issues have caused further confusion (e.g., Collar 1997, Whitney and Pacheco 1999, SACC proposal #4).

The most widespread species as currently recognized by most authorities is Blue-winged Parrotlet *Forpus xanthopterygius*. Its member taxa were often treated as three different species: *F. xanthopterygius* (= *vivida*); *F. crassirostris*; and *F. spengeli* (e.g. Ridgway 1916, Cory 1918), while others (e.g., Hellmayr 1907, Peters 1937) considered them all races of Green-rumped Parrotlet *Forpus passerinus*. Gyldenstolpe (1945, not seen), however, showed that *crassirostris* and *passerinus* are narrowly parapatric in western Brazil, without evidence of intergradation (Juniper and Parr 1998, Whitney and Pacheco 1999), and on this basis and their obviously different rump colors, he and subsequent authors have mostly treated them as separate species (although with *crassirostris* as a subspecies of *xanthopterygius*). Collar (1997) and Juniper and Parr (1998) have suggested that *spengeli* may be more closely related to or conspecific with the broadly allopatric Mexican Parrotlet *Forpus cyanopygius*. For a more in-depth summary of the taxonomic history of *F. xanthopterygius*, see Bocalini and Silveira (2015) and Donegan et al. (2016).

**New information:**

Smith et al. (2013), in a phylogenetic analysis of mtDNA and nuclear loci of all species and most subspecies of *Forpus*, found that *spengeli* of northern coastal Colombia is embedded (on the basis of mtDNA only, no nuclear data being available) within *F. passerinus* rather than *F. xanthopterygius* (see their Fig. 1 below). Thus, though Dickinson (2003) had treated *spengeli* as a race of *xanthopterygius*, Dickinson and Remsen (2013) treated it as a race of *passerinus*, and Remsen et al. (2020) provide the rationale. However, this treatment does not address the seemingly considerable morphological disparity between *spengeli* and other races of *passerinus*, especially *F. p. cyanophanes* of arid north-eastern Colombia (between the Santa Marta and Perijá mountains). These two appear to be essentially parapatric, but *cyanophanes* has conspicuous, extensive violet-blue on upper- and underwing coverts, quite unlike those of

*spengeli* (see photo below), which also has a brilliant turquoise rump (vs. green in *cyanophanes*). In addition, this change to species attribution of *spengeli* appears to have been made solely on the basis of mtDNA.

Smith et al. (2013) also found evidence that *crassirostris* is sister to the clade comprised of most *Forpus* taxa, except *modestus* and *cyanopygius*. This result was strongly supported on the mtDNA tree but not well supported in the nuclear DNA and species tree.

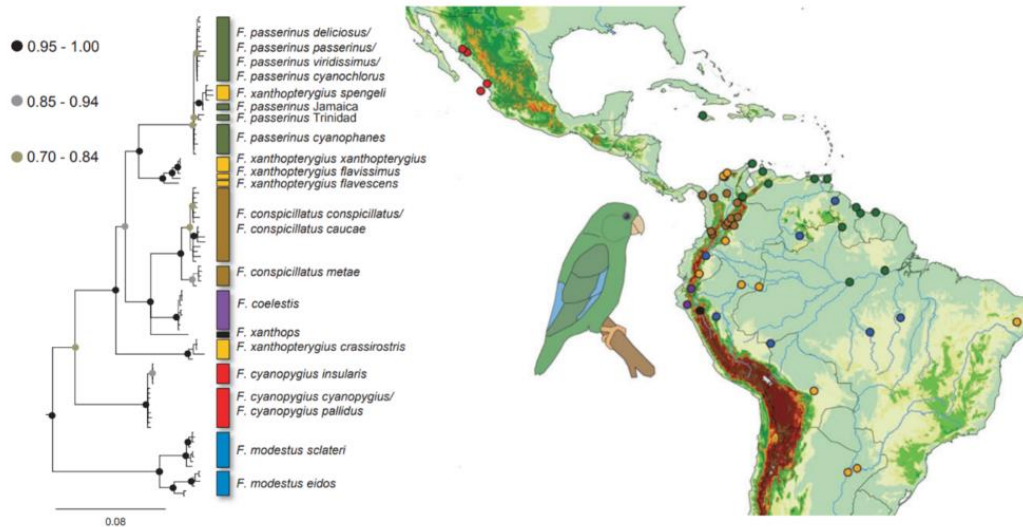


Fig. 1 of Smith et al., mtDNA

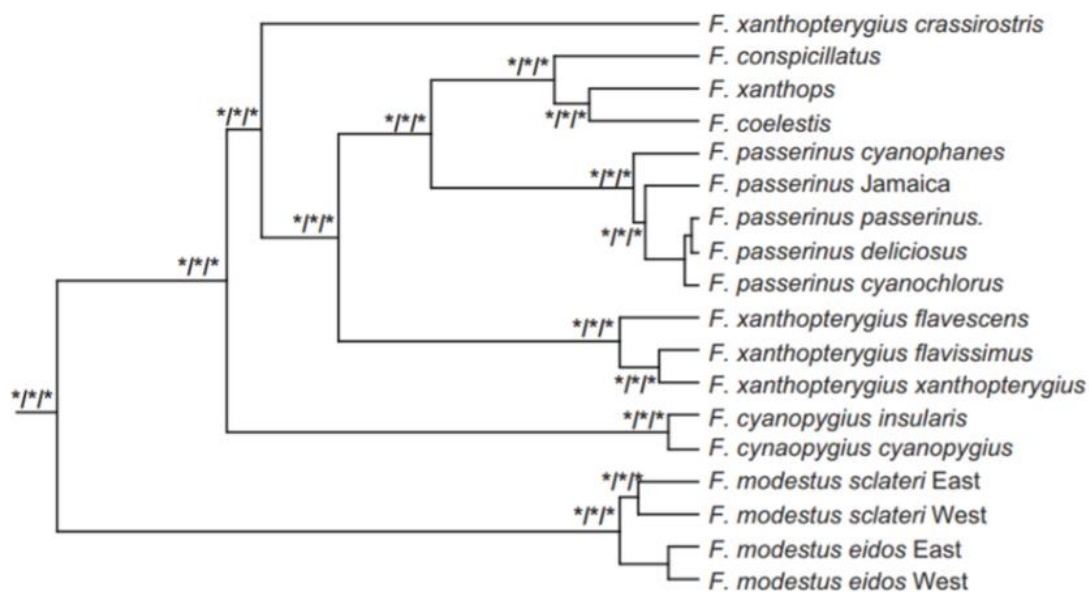


Fig. 3 of Smith et al., species tree

Bocalini and Silveira (2015) analyzed geographic variation in morphology of 518 specimens of the *F. xanthopterygius* complex and concluded that *spengeli* should be considered a distinct species (see their Fig. 1 below). However, their study did not evaluate the possibility that it may be conspecific with *F. passerinus*.

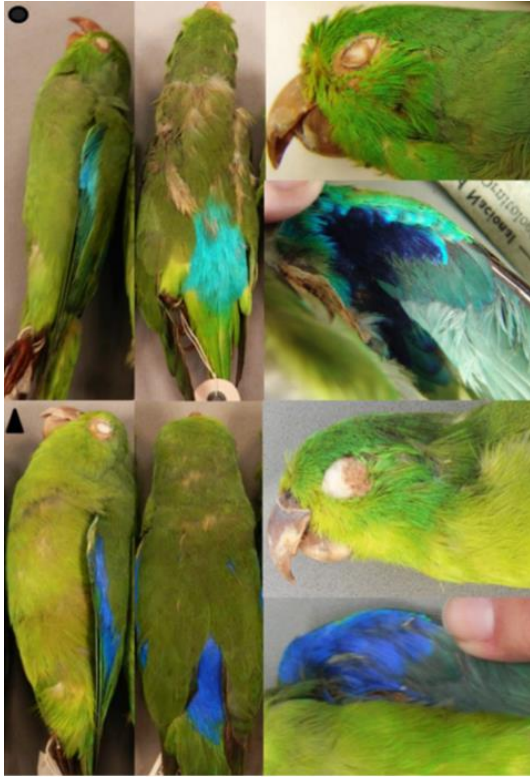
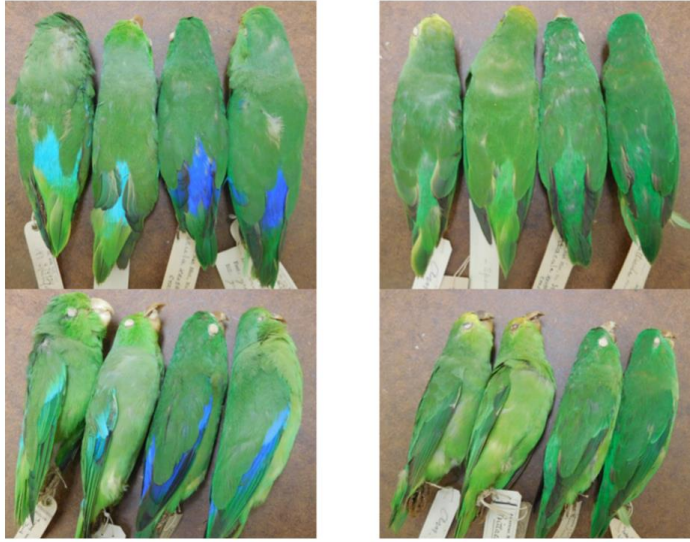


Fig. 1 (part) from Bocalini and Silveira (2015); *spengeli* above, *xanthopterygius* below.

Donegan et al. (2016) reexamined the question of whether *spengeli* should be split from *xanthopterygius* under the view that the best yardstick is whether differences exceed those between sympatric species of the same genus. From examination of AMNH specimens (see their Figs. 3-4, below) they determined that differences between *spengeli* and *xanthopterygius* were substantial, especially compared to those between *F. modestus* and *F. xanthopterygius*, and in addition noted that *spengeli* is found in drier habitat. They also compared *spengeli* with *F. passerinus viridissimus* at AMNH (see their Fig. 5 below) and noted further plumage distinctions, and they discussed the potential for a contact zone between *viridissimus* and *spengeli* and the lack of clear evidence for intergradation (Donegan et al. 2016).





Partial Fig. 3 (left, males) and 4 (right, females) from Donegan et al. (2016). In each, the two specimens on the left are *spengeli* and the two on the right are “*xanthopterygius*” (though the right-most male may be, and both females are *crassirostris*, based on locality).



Fig. 5 from Donegan et al. (2016). In each, the two specimens on the left are *F. passerinus viridissimus* and the two on the right are *spengeli*.



In summary, while mtDNA places *spengeli* within the *F. passerinus* clade, and it clearly does not belong with *F. xanthopterygius*, it is as distinctive morphologically as almost any other *Forpus* taxon treated as a species and it appears to be parapatric, without reported intergradation to my knowledge, with the quite different looking *F. passerinus cyanophanes*. While SACC (Remsen et al. 2020) has treated *spengeli* as a race of *passerinus*, Clements et al. (2019) maintains it within *xanthopterygius*, and del Hoyo and Collar (2014) and Gill and Donsker (2015) consider *spengeli* a full species, the Turquoise-winged Parrotlet.

Another option would be to reunite all these taxa under *Forpus passerinus*, as in Peters (1937), but that is argued against by the greater morphological disparity of this group relative to other *Forpus* species and the two zones of apparent parapatry (between *spengeli* and *cyanophanes* and between *crassirostris* and race *deliciosus* of *Forpus passerinus*). SACC 873C, to split *F. spengeli*, just passed (as did SACC 873A, to split *F. crassirostris* from the *xanthopterygius* group, which is entirely extralimital to the NACC area).

#### **Effect on AOS-CLC area:**

This issue only marginally impacts the NACC area, as Green-rumped Parrotlet *F. passerinus* (likely race *viridissimus* or nominate; del Hoyo and Collar 2014) was introduced to Jamaica, where it is now common. The major impact on NACC would occur in the unlikely event there was a movement to change the English name of *F. passerinus*. We would also need to modify some of the wording in the *Check-list Notes* section because the superspecies proposed by Sibley and Monroe (1990) mentioned therein does not accord closely with recent analyses cited here.

#### **English names:**

The English name Green-rumped Parrotlet is extremely well-established for *Forpus passerinus* s.s., which has a vastly larger range than the north-eastern Colombian endemic *spengeli*. It is also highly appropriate, especially without the turquoise-rumped *spengeli*.

#### **Recommendation:**

I recommend that we:

A) follow SACC (and IOC and HBW) in considering the Colombian endemic *spengeli* to be a distinct species from *F. passerinus*, which only occurs in the NACC area as an introduced species to one Caribbean island, and

B) retain the entrenched and appropriate English name Green-rumped Parrotlet for *Forpus passerinus*. Although the name Guianan Parrotlet given in the *Check-list* would also be reasonable, its range is not restricted to the Guianan region, and that name is not now widely used. SACC English name votes were unanimous for retaining Green-rumped, which seems by far the most sensible option.

## Literature Cited:

- Bocalini, F., and L. F. Silveira (2015). Morphological variability and taxonomy of the Blue-winged Parrotlet *Forpus xanthopterygius* (Psittacidae). *Revista Brasileira de Ornitologia* 23(1):64–75.
- Clements, J. F., T. S. Schulenberg, M. J. Iliff, S. M. Billerman, T. A. Fredericks, B. L. Sullivan, and C. L. Wood (2019). The eBird/Clements Checklist of Birds of the World: v2019. Downloaded from <https://www.birds.cornell.edu/clementschecklist/download/>
- Collar, N. (1997). Family Psittacidae (Parrots). In del Hoyo, J., A. Elliot, and J. Sargatal (Editors) *Handbook of the Birds of the World. Volume 4. Sandgrouse to Cuckoos*. Lynx Edicions, Barcelona.
- Cory, C. B. (1918). *Catalogue of Birds of the Americas. Part 2 No. 1*. Field Museum of Natural History Zoological Series 13(197).
- Donegan, T., J. C. Verhelst, T. Ellery, O. Cortés-Herrera, and P. Salaman (2016). Revision of the status of bird species occurring or reported in Colombia 2016 and assessment of BirdLife International's new parrot taxonomy. *Conservación Colombiana* No. 24:12-36.
- del Hoyo, J., and N. J. Collar (2014). *HBW and BirdLife International Illustrated Checklist of the Birds of the World. Volume 1: Non-passerines*. Lynx Edicions, Barcelona.
- Dickinson, E. C. (Editor) (2003). *The Howard and Moore Complete Checklist of the Birds of the World. Revised and enlarged 3<sup>rd</sup> edition*. Christopher Helm, London.
- Dickinson, E. C., and J. V. Remsen, Jr. (Editors) (2013). *The Howard and Moore Complete Checklist of the Birds of the World. 4<sup>th</sup> edition. Volume One. Non-passerines*. Aves Press Ltd., Eastbourne, UK.
- Forshaw, W. T. (1973). *Parrots of the World*. Doubleday, Garden City, New York.
- Gill, F., and D. Donsker (Editors) (2015). *IOC World Bird List (v 5.1)*.  
<http://www.worldbirdnames.org/>
- Gyldenstolpe, N. 1945. The bird fauna of Rio Juruá in Western Brazil. *Kongliga Svenska Vetenskaps-Akademins Handlingar* 22(3):1-338.
- Hellmayr, C. E. (1907). Another contribution to the ornithology of the lower Amazons. *Novitates Zoologicae* 14:1-39.
- Juniper, T., and M. Parr (1998). *Parrots. A Guide to the Parrots of the World*. Pica Press, Sussex.
- Peters, J. L. (1937). *Check-list of the Birds of the World. Volume 3*. Harvard University Press, Cambridge, MA.
- Remsen, J. V., Jr., J. I. Areta, C. D. Cadena, S. Claramunt, A. Jaramillo, J. F. Pacheco, J. Perez Emán, M. B. Robbins, F. G. Stiles D. F. Stotz, and K. J. Zimmer (Version 11 February 2020). *A Classification of the Bird Species of South America*. American Ornithological Society.  
<http://www.museum.lsu.edu/~Remsen/SACCBaseline.htm>
- Ridgway, R. (1916). *The birds of North and Middle America. Bulletin of the United States National Museum No. 50, Part 8*.
- Sibley, C. G., and B. L. Monroe, Jr. (1993). *A World Checklist of Birds*. Yale University Press, New Haven, Connecticut.
- Smith, B. T., C. C. Ribas, B. M. Whitney, B. E. Hernández-Baños, and J. Klicka (2013). Identifying biases at different spatial and temporal scales of diversification: a case study in the Neotropical parrotlet genus *Forpus*. *Molecular Ecology* 22:483–494.

Whitney, B. M., and J. E. Pacheco (1999). The valid name for Blue-winged Parrotlet and designation of the lectotype of *Psittaculus xanthopterygius* Spix, 1824. Bulletin of the British Ornithologists' Club 119:211-214.

**Submitted by:** Pamela C. Rasmussen, Michigan State University

**Date of Proposal:** 15 January 2021

**Recognize extralimital *Anthus peruvianus* as a separate species  
from Yellowish Pipit *A. lutescens***

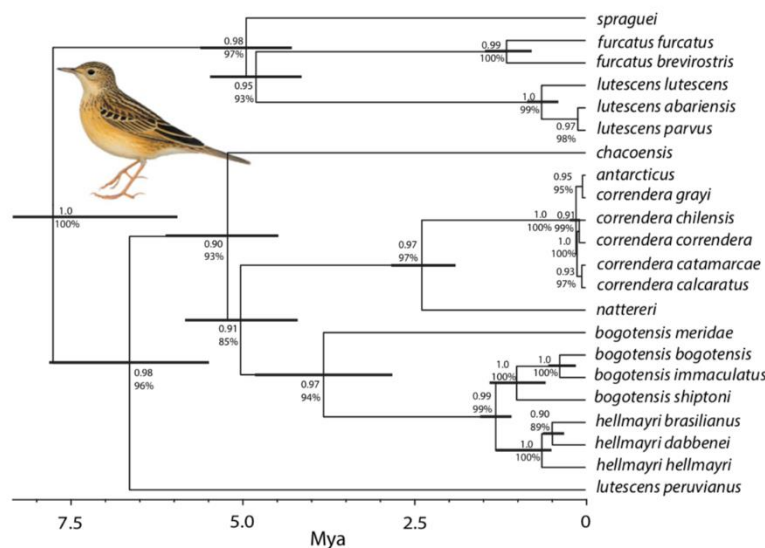
**Note:** This is a slightly modified version of SACC Proposal 765, which was approved unanimously. Approval of this proposal would result in changes to the distributional statement and notes for *A. lutescens*.

**Background:**

The current classification considers the taxon *peruvianus* to be a subspecies of *A. lutescens*, following most recent classifications.

**New information:**

According to new multilocus (ND2, ACOI9, MB, FGB5) genetic data (Van Els & Norambuena 2017; see tree below), the taxon *peruvianus* is not part of *A. lutescens*. Its exact placement is uncertain given rather low support values (despite full sequence sampling for the taxon), but a Shimodaira-Hasegawa test indicated that it is most likely sister to a group including *A. lutescens*, *A. furcatus*, and *A. spragueii*, rather than to a group including *A. chacoensis*, *A. nattereri*, *A. correndera*, *A. antarcticus*, and *A. hellmayri*. It is therefore best placed before *A. lutescens* in the linear sequence of Motacillidae, pending further evidence.



**Figure 2.** Multilocus phylogenetic hypothesis of Neotropical *Anthus* based on a \*BEAST 2 species tree generated from sequence data (3305 bp) of the ND2, ACOI9, FGB5 and MB genes. Upper numbers on nodes are posterior probability values from the Bayesian analysis; lower numbers are maximum likelihood bootstrap support values. Dark bars represent 95% highest probability density surrounding divergence times, time at bottom is in million of years before present. Outgroups are not shown. Inset illustration from Tyler (2004).

To back up the genetic data, songs of *peruvianus* differ consistently from those of *A. lutescens* (incl. subspecies *lutescens* and individuals from northern South America, referred to in the paper as subspecies '*abariensis*'; vocal data for subspecies *parvus* from Panama was unavailable). Within a vocal dendrogram of all Neotropical pipits, they do not cluster with *A. lutescens*, but are rather at the base of all individuals that have a buzz in their song.

Finally, *peruvianus* is geographically isolated from *A. lutescens* by the Andes, and it occupies a rather different environment than that species. Where *A. lutescens* utilizes all sorts of grassy and agricultural, open habitats in (mainly) the tropical lowlands east of the Andes, *peruvianus* is restricted to a fairly narrow coastal strip of fog-induced desert vegetation in Peru and extreme northern Chile.

As a side-note, del Hoyo and Collar (2017) recognized *A. peruvianus* based on the Tobias yardstick method and the fact that it “differs in its clearer whitish supercilium; slightly broader, more diffuse dark streaks on upper breast, without buff fringes, and extending onto flanks; stony-white vs yellowish-white underparts; longer wing but shorter tail; very different song and call.”

#### **Recommendation:**

We recommend splitting *peruvianus* from *A. lutescens*, and using the English name Peruvian Pipit (the species' range is almost entirely within Peru, and a comprehensive biogeographical name for the entire coastal arid strip from northern Peru to the Peruvian-Chilean border would have been more appropriate but is apparently not available). Given the facts stated above, *A. peruvianus* should precede *A. lutescens* in the linear sequence of Motacillidae.

#### **Literature Cited:**

- del Hoyo, J. & Collar, N. (2017). Peruvian Pipit (*Anthus peruvianus*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.). Handbook of the Birds of the World Alive. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/1344119> on 15 July 2017).
- Van Els, P. & H.V. Norambuena. 2018. A revision of species limits in Neotropical pipits *Anthus* based on multilocus genetic and vocal data. *Ibis* 160: 158-172.

**Submitted by:** Paul van Els & Heraldo V. Norambuena

**Date of Proposal:** July 2017 (SACC proposal), modified by Terry Chesser for NACC on 15 January 2021

**Votes and Comments from SACC:**

Comments from Stiles: "YES, again supported by multiple lines of evidence: genetic, vocal, ecological and biogeographical."

Comments from Areta: "YES. A long-known split that was awaiting for a serious job. The drastic vocal and plumage differences coupled to molecular phylogenetic data leave no doubt."

Comments from Remsen: "YES. Seldom is a decision so easy. Also, on English names, this is a case in which the "new names for daughters" guideline does not apply. First, *peruvianus* is not a daughter species of *lutescens* in the taxonomic sense. It's not even in the same branch as *lutescens*. Further, even in the non-taxonomic sense, *lutescens* is such a widespread species with such a well-established English name, compared to narrowly distributed *peruvianus*, that I object to destabilizing the English name for the species."

Comments from Zimmer: "YES. This is about as close to a 'slam-dunk' in my opinion, as we can expect to find when it comes to sorting out species-limits in oscine passerines. The song of *peruvianus* is off-the-charts different from that of *lutescens* everywhere else, which, combined with the noted genetic, morphological and ecological differences, makes for an airtight case. I remember commenting on the vocal distinctiveness of *peruvianus* (relative to Yellowish Pipits elsewhere) to Dan Lane 15-20 years ago when he joined our group for a morning north of Lima, and expressing the opinion that there was no way that *peruvianus* was the same species. I'm glad to see the authors nail this one down. I agree with Van's reasoning that this is one of those cases where we should not mess with the English name of the widespread species (in this case, *lutescens*), and just worry about the coining of an English name for *peruvianus*. "Peruvian Pipit" makes perfect sense to me."

Comments from Jaramillo: "YES. Years ago, when I first heard and saw *peruvianus*, my jaw dropped. This was the "Yellowish Pipit" that I had been looking for in northern Chile? I was confused, and at first thought, well surely this cannot be the Yellowish Pipit that is found here, maybe it is something altogether different, perhaps even new. Obviously, it was a case of two entirely different creatures being lumped under one species, and I am glad that we can finally give species status to *peruvianus*."

Comments from Claramunt: "YES. The evidence is overwhelming."

Comments from Pacheco: "YES. All available evidence from multiple data corroborates this split."

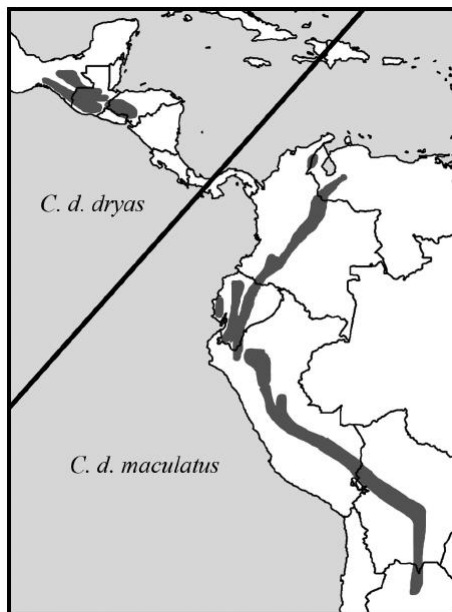
Comments from Robbins: "YES, for recognizing *peruvianus* as a species, based on all data sets."

**(A) Recognize extralimital *Catharus maculatus* as a separate species from Spotted Nightingale-Thrush *C. dryas***

**Note:** This is a two-part proposal. Part A is a slightly modified version of SACC Proposal 865, which was approved unanimously, although English name issues were not resolved at that time. If Part A is approved, then Part B (see p. 30 below), which focuses on English names for the daughter species (after SACC Proposal 899), should be considered.

**Background:**

During the 1850s, two species were recognized by Gould (1855) and Sclater (1858), diagnosed by their coloration within the genus *Catharus* (= *Malacocichla*): *C. dryas* in Central America and *C. maculatus* in South America, respectively. However, Salvin and Godman (1879) proposed that *C. maculatus* should be treated a subspecies of *C. dryas*, because they proposed that variation in coloration between the two could be due to post-mortem fading. This suggestion was adopted in all subsequent classifications, from Hellmayr (1934) through Dickinson & Christidis (2014), i.e., a single species with two disjunct subspecies. Below is distribution of the species with the two disjunct subspecies separated by the dark line (taken from Halley *et al.* 2017, which is based on NatureServe InfoNatura)



**New Information:**

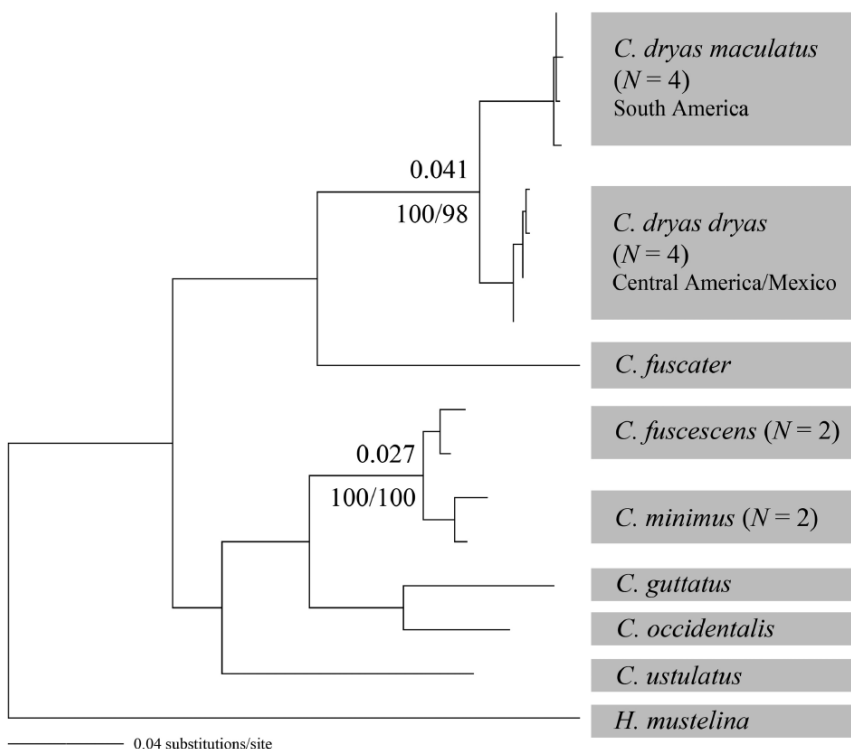
Recent research by Halley *et al.* (2017) provided multiple lines of evidence to support the treatment of the two populations as separate species. The two species were 100% diagnosable by genetic, vocal, morphometric, and plumage characters. Furthermore, Ecological Niche Modeling indicated divergent ecological niches (see figures below from Halley *et al.* 2017 of the

genetic, whistled song and ENM evidence). Halley *et al.* (2017) found that the two groups were reciprocally monophyletic (although  $n=8$  individuals sampled) sister species, with independent and divergent evolutionary lineages including different ecologies.

### Recommendation:

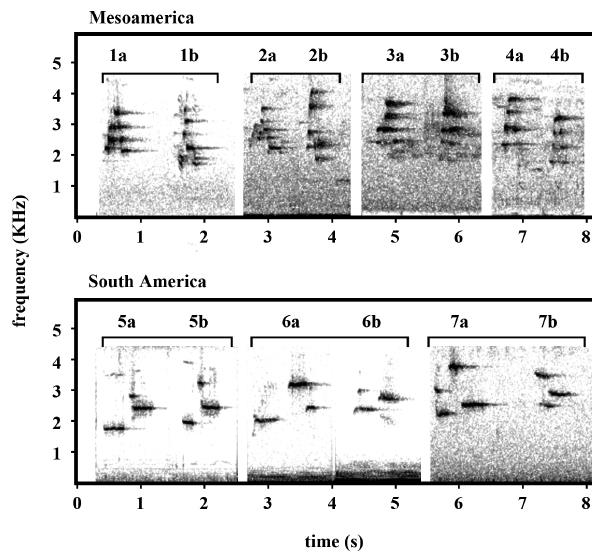
Based on the recent data provided by Halley *et al.* (2017), we recommend that the South American population of the current *C. dryas* being treated as the separate species *Catharus maculatus*.

As to English names, new names for both species were proposed in SACC 865. The rationale to discontinue use of “Spotted” in the name was well-justified by Halley *et al.* (2017), because at least five other species in the genus are spotted in adult plumage (and all juveniles indeed are spotted). The SACC proposal formally proposed Sclater’s Nightingale-Thrush, a name from Hellmayr (1934), for *maculatus*, and suggested Gould’s Nightingale-Thrush as a possible new name for *dryas sensu stricto*. For various reasons these names received little support from SACC (see comments below). David Donsker and Tom Schulenberg made additional suggestions for English names that were more favorably received (see comments and rationale below). These alternatives and others have now been formalized into SACC Proposal 899, which is covered by the next proposal, 2021-B-9.

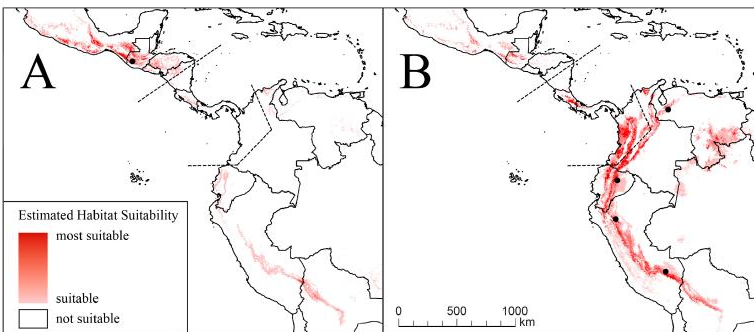


**FIGURE 2.** Maximum Likelihood Tree reconstructed from ND2 sequences of 17 individual thrushes, obtained via heuristic search under the GTR+I substitution model (see methods). Branch lengths (MP/ML) are proportional to substitutions per site. The topology of the MP tree was identical. Average uncorrected  $p$ -distances are shown above the nodes of interest, and bootstrap values (MP/ML) are shown below.





**FIGURE 6.** Audio spectrograms showing variation in whistled songs from Mesoamerica (*C. d. dryas*), and South America (*C. d. maculatus*). Two songs each are shown (a, b) from the repertoires of 7 singers (1–7), representing Mexico (1–4), Peru (5), Bolivia (6), and Ecuador (7).



**FIGURE 7.** Maxent projected models of estimate ecological niche distributions for Mesoamerican (A) and South American (B) populations of *C. d. dryas*. Dotted lines indicate the approximate southern and northern range boundaries of the populations in Mesoamerica and South America, respectively. Black circles represent collection localities of genetic samples used in this study.

## Literature cited:

- Gould, J. 1855. Description of a new bird from Guatemala, forming the type of a new genus. *Proceedings of the Zoological Society*, 22, 285.
- Halley, M. R., J. C. Klicka, P. R. S. Clee, And J. D. Weckstein. 2017. Restoring the species status of *Catharus maculatus* (Aves: Turdidae), a secretive Andean thrush, with a critique of the yardstick approach to species delimitation. *Zootaxa* 4276: 387–404.
- Hellmayr, C.E. 1934. Catalogue of birds of the Americas and the adjacent islands in Field Museum of Natural History, including all species and subspecies known to occur in North America, Mexico, Central America, the West Indies, and islands of the Caribbean Sea, the Galapagos Archipelago and other islands which may be included on account of their faunal affinities. *Field Museum of Natural History, Zoological Series*, 13 (7), 1–531.
- Salvin, O. and F. D. Godman. 1879. *Biologia Centrali-Americana*. Vol. 1. Aves. R.H. Porter, London, 512 pp

Sclater, P.L. 1858. Notes on a collection of birds received by M. Verreaux of Paris from the Rio Napo in the Republic of Ecuador. Proceedings of the Zoological Society of London, 26, 59–78.

**Submitted by:** Natalia J. Pérez-Amaya and Orlando Acevedo-Charry

**Date of Proposal:** July 2020 (SACC proposal), modified by Terry Chesser for NACC on 21 January 2021

### **Votes and Comments from SACC:**

Comments from Robbins: “YES. The Halley et al. (2014) paper clearly demonstrates that Mexican and Central American birds are distinct in multiple parameters from South American birds. Thus, I vote to recognize nominate and *maculatus* as species.”

Comments from Areta: “YES. A comprehensive data set that provides compelling evidence of two species. The reciprocal monophyly and the differences in vocalizations are to me the two most important lines of evidence of the many provided by Halley et al. (2017).”

Comments from Claramunt: “YES. Subtle but diagnostic plumage and song differences plus some morphometric differentiation and reciprocal mitochondrial-lineage monophyly provide good evidence for species status.

Comments from Stiles: “YES -- *maculatus* clearly deserves species status, and Sclater's N-thrush seems OK as an E-name.”

Comments from Bonaccorso: “YES. The phylogenetic evidence separates both taxa with good support, and the genetic divergence between them is much higher than that between *C. fuscescens* and *C. minimus*. Also, there is a substantial geographic gap between both, which suggests that gene flow is absent. Together with differences in plumage, voice, morphology, and ecological niche, I think that species status is clear-cut.”

Comments from Pacheco: “YES. Multiple evidence converges on the treatment of these two taxa as separate species.”

Comments from Zimmer: “(A) YES. Halley et al. (2014), using multiple data sets, demonstrates conclusively that South American *maculatus* should be considered a species distinct from Mexican/Central American *dryas*. (B) “YES” to using “Sclater’s Nightingale-Thrush” as the English name for *maculatus*. This would represent not only the resurrection of a name used by Hellmayr, but it would also be nicely symmetrical should NACC revert to “Gould’s Nightingale-Thrush for *dryas*, as has been suggested.”

Comments from David Donsker: “If we’re going to try to avoid the obvious eponyms, Gould’s and Sclater’s Nightingale-Thrush, for the two species it’s a bit tricky.

"I see that the SACC wants to avoid "spotted" since that's used for the parent species and since that feature doesn't help distinguish either of the two daughters much from virtually all of the other *Catharus* thrushes.

"But adopting the adjective "maculated," for the South American species, a direct borrowing from the Latin epithet *maculatus*, might be helpful. That adjective, which essentially means the same as "spotted", but at least to me has a shade of meaning that suggests more obvious, heavier, or larger spots, might be acceptable. So, perhaps Maculated Nightingale-Thrush for *C. maculatus* would do.

"The Middle American species is trickier, for sure. Translations of none of the species or subspecies Latin epithets is particularly helpful. One is an eponym, another a localized toponym and the species epithet, *dryas*, which I assume refers to "oak" in this case, doesn't really describe its favored habitat, I believe.

"When stumped, I like to see what these species are called in the languages other than English that may apply. According to Howell & Webb, the Spanish name for *C. dryas* is Zorzalito Pechiamarillo, "Yellow-chested Thrush". Using that name as a model, Yellow-throated Nightingale-Thrush wouldn't be bad. No other *Catharus* has a clear yellow throat, and the clear yellow throat distinguishes it from *C. maculatus*, which has a dark or heavily-spotted throat.

"That would open the door for another choice for *C. maculatus*: Spot-throated Nightingale-Thrush. This name might be a more preferable choice than "Maculated Nightingale-Thrush", which invokes the unfamiliar and uncommonly used adjective 'maculated'.

"So, these are my best shots:

*C. dryas* Yellow-throated Nightingale-Thrush

*C. maculatus* Spot-throated Nightingale-Thrush or Maculated Nightingale-Thrush

"I'd like to clarify why I've recommended 'Yellow-throated' rather than 'Yellow-chested/breasted' for *C. dryas* because it does affect the rationale for the English name suggestion 'Spot-throated Thrush' which was an alternative choice submitted for *C. maculatus*. It's not to rigorously describe the extent of yellow on the underparts of *C. dryas*, but rather to focus on a plumage characteristic that distinguishes *C. dryas* from the very similar *C. maculatus*. Both have yellowish breasts, but it's the clear yellow throat of the former as opposed to the spotted throat of the latter that is a feature which sets them apart in this regard.

"Similarly the name 'Spot-throated' Thrush for *C. maculatus* is not to suggest that the spots are only limited to the throat, only to contrast their distribution in that species to the clear yellow throat of *C. dryas*."

Comments from Lane: "A) Yes. The vocal differences between this group and the *dryas* group are notable, and given the geographic distance between them, it seems like the isolation of the two must have been long. B) NO. I am heartbroken to consider using eponyms for these two

stunning thrushes, arguably the most attractive in the Americas! Their startlingly peach-colored breasts--a color that fades quickly after death, and so not appreciated by most museum-based ornithologists until the latter part of the 20th century!--would seem a character worthy of use in a name for one. Alternatively, "*maculatus*" can translate to "*speckled*" which still aptly describes the unique plumage (within the tropical *Catharus*, anyway). I can understand David Donsker's interest in focusing on the throats of the two sister species, but similarly to calling *Pheucticus chrysogaster* "Golden-bellied Grosbeak," this seems to me a bit too myopic when the average observer is taking in these two glorious birds. I would probably prefer "Speckled Nightingale-Thrush" for *C. maculatus*, and float some more glitzy name such as "Glowing Nightingale-Thrush" or "Sunset Nightingale-Thrush" some such to NACC for *C. dryas*. Just my two cents."

Comments from Schulenberg: "B. YES. I have a vote, via SACC, on the English name for *Catharus maculatus*. I don't have a vote on the English name for *Catharus dryas*, which is a question for NACC; but I hope that some of the discussions on this page filter up to NACC when this comes before them. So, with regard to what I guess is SACC Proposal 865B (English name for *Catharus maculatus*), I am fully on board with David's suggestion of Spot-throated Nightingale-Thrush: put me down for a big YES.

"As far as *Catharus dryas* is concerned, I'm also happy with the direction that David pointed us in by focusing on the base color of the underparts of *Catharus dryas*. I'm also glad that David steered clear of 'Yellow-chested'. Whatever the merits of this formulation in terms of the fidelity of the translation. '[color]-cheded' in English bird names usually refers to a discrete and high contrast patch of color on the upper breast: think of Black-chested Tyrant, Black-chested Buzzard-Eagle, White-chested Swift, Blue-chested Hummingbird, and so on. This clearly is not appropriate for the nightingale-thrush.

"The next best options that I can think of then are 'Yellow-throated' or 'Yellow-breasted'. '[Color]-throated' can refer either to a patch of color limited to or closely centered on the throat, as in Blue-throated Macaw or Chestnut-throated Seed-eater; or, less commonly, it is used for color patterns that include not only the throat but also the upper breast (Yellow-throated Toucan) or even most of the underparts (Yellow-throated Antwren). '[Color]-breasted' usually refers to a pattern where the throat and breast are the same color (many examples, e.g. Ash-breasted Tit-Tyrant), although much less commonly it refers to a color that is different from that of the throat (such as Orange-breasted Bunting). David went with 'Yellow-throated' at least in part to contrast this to 'Spot-throated' for *maculatus*. My guess is that this point may be too subtle in light of the broader picture of how -throated vs -breasted are used. That said, I could live with either formulation, but my preference would be 'Yellow-breasted', as I see this as more consistent with how the color pattern of the underparts of *Catharus dryas* typically is described in bird names".

Comments from Remsen: "A. YES, based on the vocal differences. The rest of the information used to support species rank by Halley et al. is insufficient without the vocal data. Morphological diagnosability serves only to show that they are valid taxa, species or subspecies. To use "reciprocal monophyly" as a criterion when there is a grand total of 4 individuals from each population is nearly ludicrous. The awesome-sounding criterion "reciprocal monophyly" is greatly over-rated in my opinion. This criterion is always one

additional sample away from being reversed, and given the presence of rare alleles, small samples are simply insufficient to assess reciprocal monophyly. Additionally, unless those samples come from the populations closest to each other, the interpretation must be cautious – those samples are the ones most likely to reflect shared alleles due to past gene flow. As for niche modelling data .... numerous taxa treated as species have populations that occupy radically different niches. Differences in habitat preferences etc. among populations within taxa that are universally treated as species, often without any subspecies designation, are rampant --this is just a widespread feature of many bird populations and has no taxonomic value. Biologically interesting, of course, but taxonomically irrelevant in my opinion.”

“B. NO. I like Donsker’s names better, and I think we need a separate proposal on English names, submitted simultaneously to SACC and NACC. Further, I might be in favor of an eponym for someone not yet honored or intimately tied to the species beyond a description. But Sclater already has two eponymous English names (Sclater’s Antwren, Sclater’s Tyrannulet) as well as 11 species epithets in scientific names (*sclateri*) on the SACC list. He was an important contributor to the taxonomy of birds but has already been profusely honored. Finally, if there were not distinctive phenotypic characters from which to derive a name, that would be one thing, but this distinctive species is loaded with color and pattern.”

**(B) Establish English names for daughter species *C. maculatus* and *C. dryas sensu stricto***

**Note:** This proposal was recently considered by SACC, which voted to adopt Speckled Nightingale-Thrush for *C. maculatus*. If NACC votes to recognize *C. maculatus* as a separate species, then NACC will take primary responsibility for the new English name for *C. dryas sensu stricto*. NACC members should vote on the new name for *C. dryas* and can also vote in an advisory capacity or comment on the name for *C. maculatus*. Comments from SACC, including some interesting comments about whether using “yellow” for *dryas* does the bird justice, are appended to the end of the proposal.

**Background:**

The initial SACC proposal to split *Catharus dryas* into two species (SACC 865) included the recommendation that the current English name for *C. dryas (sensu lato)* be discontinued “because at least five other species in the genus are spotted in adult plumage (and all juveniles indeed are spotted)” (Halley et al. (2017). The SACC proposal formally proposed Sclater’s Nightingale-Thrush, a name from Hellmayr (1934), for *maculatus*, and suggested Gould’s Nightingale-Thrush, also from Hellmayr, as a possible new name for *dryas sensu stricto*. These names have also been used by other sources (e.g., [Ridgway 1907](#) for *dryas*, and HBW/Birdlife Taxonomic Checklist v. 5 and IOC World Bird List v. 10.2 for both *dryas* and *maculatus*). For various reasons, however, these names received little support from SACC (see the comments from SACC that follow Proposal 2021-B-8).

For this reason, we would recommend that the AOS Classification Committees consider other options. The species epithet for *C. dryas* is a toponym that translates as “oak”, which really doesn’t adequately describe its favored habitat. However, the morphonym *C. maculatus*, which translates as “maculated”, “spotted”, or “speckled”, is very appropriate for that species, especially amongst the other South American *Catharus* species, given the degree of its heavily spotted underparts. To retain a certain symmetry between the names of the two sister species we recommend that similarly constructed morphonyms be used for both of the newly split forms, as follows:

*Catharus dryas*:

Option 1a: Yellow-throated Nightingale-Thrush

Option 1b: Yellow-breasted Nightingale-Thrush

Option 1c: Yellow-chested Nightingale-Thrush

*Catharus maculatus*:

Option 2a: Spot-throated Nightingale-Thrush

Option 2b: Speckle-throated Nightingale-Thrush

Option 2c: Speckled Nightingale-Thrush

The name “Yellow-breasted” or “Yellow-chested” for *C. dryas* is a direct translation of the vernacular Spanish name for this species, *Zorzalito Pechiamarillo* (Howell & Webb 1995). In the absence of an established English name, the adoption of a translation of the Spanish vernacular name would seem appropriate. However, no other *Catharus* thrush has a clear yellow throat, and the clear yellow throat distinguishes *C. dryas* from *C. maculatus*, which has a dark, or heavily spotted throat. The intent of using “Yellow-throated,” therefore, is to focus on the one plumage characteristic that best distinguishes *C. dryas* from the very similar *C. maculatus*, rather than attempt to describe the full extent of the yellowish underparts of this species.

Similarly, we favor the use of “Spot-throated” or “Speckle-throated” Nightingale-Thrush for *C. maculatus* over “Speckled” Nightingale-Thrush because it’s the heavily spotted throat that best distinguishes this species from its sister species. The alternative, Speckled Nightingale-Thrush, does not do so because both species have spotted/speckled breasts.

*Catharus dryas*:

<https://macaulaylibrary.org/asset/70482851>

<https://macaulaylibrary.org/asset/118117251>

*Catharus maculatus*:

<https://macaulaylibrary.org/asset/44486871>

We recommend that the committees adopt Option 1a for *C. dryas* and Option 2a or Option 2b for *C. maculatus*.

#### **Literature Cited:**

- Halley, M. R., J. C. Klicka, P. R. S. Clee, and J. D. Weckstein. 2017. Restoring the species status of *Catharus maculatus* (Aves: Turdidae), a secretive Andean thrush, with a critique of the yardstick approach to species delimitation. *Zootaxa* 4276: 387-404.  
<https://doi.org/10.11646/zootaxa.4276.3.4>
- HBW and Birdlife Taxonomic Checklist. v 5. <http://datazone.birdlife.org/species/taxonomy> (downloaded 1/10/2021). Birdlife International.
- Hellmayr, C. E. 1934. Catalogue of birds of the Americas and the adjacent islands. Field Museum of Natural History, Zoological Series, 13 (7). Chicago.
- Howell, S. N. G. and S. Webb. 1995. A Field Guide to the Birds of Mexico and Northern Central America. Oxford University Press.
- IOC World Bird List. Version 10.2. <https://www.worldbirdnames.org/new/> (downloaded 1/10/21).
- Ridgway, R. 1907. The Birds of North and Middle America. Bulletin of the United States National Museum. No. 50. Part IV. Smithsonian Institution. Washington, DC.

**Submitted by:** David B. Donsker and Thomas Schulenberg

**Date of Proposal:** January 2021 (SACC proposal), modified by Terry Chesser for NACC on 25 January 2021

## Votes and Comments from SACC:

Note on voting from Remsen: This is our first experiment in ranked-choice voting. Therefore, voting members should rank each option 1-2-3, 1 being the favored option. Also, our vote on Central American *C. dryas*, go ahead and do the same, but this is only advisory to NACC.

---

Comments from Lane: "For *C. maculatus*, my ranking from first choice to 3rd choice of the provided names is Speckled N-T, Spot-throated N-T, Speckle-throated N-T.

"Again, I am not enamored of the names that refer to the throat here, although I understand the rationale, given that the bird is not best identified by its throat pattern within its range, and it is such a dramatically appearing bird that drawing attention to its throat seems rather strange. Really, the only use of names invoking the throat is if one is presented with a photograph or specimen without knowledge of its origin. Otherwise, it seems we are missing the forest for the trees of this birds' glory. But rather than getting too flowery, I think paralleling the scientific name and using "Speckled" is appropriate.

"For *C. dryas*, I would vote for Yellow-breasted or Yellow-chested over Yellow-throated, but again, "Yellow" is too blasé for the color, and it actually is more washed with orange in life (fading to yellow, then white, shortly after being prepared as a specimen). I would consider "Saffron" or "Peach"... The bird is, again, so dramatic in appearance, it seems fitting to find a name that does this justice. Hence my searching for other descriptors in my last set of comments on English names. "Glowing" or "Sunset" would better capture the image the eye receives, in my opinion, but it will be up to NACC to decide in the end."

Comments from Steve Hilty: "Option 2a (Spot-throated Nightingale-thrush) sounds good to me."

Comments from Schulenberg: "With regard to *Catharus maculatus*, I would be quite satisfied with any of these three proposed names. Ranking them actually is difficult, precisely because the differences between them are so small. Of course I originally was on the side of 'Speckle/Spot-throated', but since have come around to just 'Speckled Nightingale-Thrush': this is shorter and more to the point, and of course parallels the old 'Spotted'. as a side note, my preference would be for an unmodified 'Speckled' to be reserved for species that speckled or spotted all over (as with [Speckled Rail](#) and [Speckled Tanager](#)). but there's obviously no point now in trying to make such a distinction. (At least this thrush *is* speckled or spotted: I don't understand how *Colius striatus* came to be called [Speckled Mousebird](#)). So, to complete this exercise, I rank the options as 1) Speckled; 2) Speckle-throated; and 3) Spot-throated. again, however, any of these will do.

"As for *Catharus dryas*, I rank 'Yellow-breasted' (1) over 'Yellow-throated' (2) because the yellow indeed extends well beyond the throat. 'Yellow-chested' (3) is a very distant third choice; 'Xxx-chested' is most often used for species in which the color of the breast contrasts with colors of the throat and belly (as with [Tawny-chested Flycatcher](#)). Substituting a more specific shade for



'Yellow' would be fine, but should be done with care; for example, the yellow of the throat and breast of this thrush doesn't seem to me to match that of, say, [Saffron Finch](#). but maybe others see this differently, or can conjure up another shade of yellow that works better. I'm not fond of 'Apricot' either, since this is a species name that already is laden with plenty of syllables. there must be other shades of yellow that I'm not thinking of, however. I know where Dan Lane is coming from on this, but I'd still be very leery of a name like 'Glowing'. For example, in the case of Rudolf (an individual reindeer, not a taxon), it was reported that the nose was 'very shiny' and that one could even say it glows; but Rudolf's well-known moniker referred to the *color* of the tip of the muzzle, not to any other attribute, no matter how striking or historically important. my view is that 'Glowing' just wouldn't be sufficiently explanatory to get the job done."

Comments from Zimmer:

1. Speckled Nightingale-thrush
2. Spot-throated Nightingale-thrush
3. Speckle-throated Nightingale-thrush

"I appreciate the previously made points that "Speckled" does not distinguish *maculatus* from *dryas*, but I would agree with Dan that taken in isolation, focusing on the spotting on the throat, when the breast is so heavily and extensively speckled, does seem bizarre. Using "Speckled" as the sole modifier would be appropriate and pithy, although clearly not exclusive. However, there are tons of examples of birds with appropriate but non-exclusive descriptive names, so I don't see this as much of a problem.

"As regards *C. dryas*:

"My understanding is that we don't actually have a vote on this one, as it falls strictly within the purview of NACC, so I'm not going to bother to rank the choices presented. However, I did want to second Dan's comments that "Yellow-throated" "Yellow-breasted" and "Yellow-chested" fail to capture the color of this bird in life. Saffron-breasted", as suggested by Dan, would be an improvement in my opinion, although I personally feel that "Apricot-breasted" would be even better. I was interested to see that illustrations of "Spotted Nightingale-thrush" in HBW (and the subsequent illustrated checklist) show a bird that is only marginally yellowish below at all (more whitish than anything) – I'm guessing that these illustrations were based upon specimens that had lost their apricot color post-mortem, and that the artist had no actual field experience with these striking (in life) thrushes. Dan alludes to this post-mortem fading in his remarks, and I would note that the somewhat orange-yellow breast color of *C. dryas* can also be found in some *Poliophtila lactea* in life – another case where the color fades rapidly to white post-mortem.

"Okay, in that case here are my rankings in order, including 2 that weren't on the official list:

1. Apricot-breasted Nightingale-Thrush
2. Saffron-breasted Nightingale-Thrush
3. Yellow-breasted Nightingale-Thrush = Option 1b
4. Yellow-chested Nightingale-Thrush = Option 1c
5. Yellow-throated Nightingale-Thrush = Option 1a"

Comments from Hilty: "Here are my rankings:

1. Speckled Nightingale-Thrush
2. Spot-throated Nightingale-Thrush
3. Speckle-throated Nightingale-Thrush

Comments from Pearman: "1b and 1c also apply to *C. maculatus* though as the bird is washed yellow, so not a distinguishing feature between the species, albeit obscure. One is brighter yellow than the other.

"Then, in *maculatus*, the first two options Spot-throated and Speckle-throated are at odds with the fact that the throat is unspotted. And the final option Speckled N-T is valid for both species. So, this is all very, very confusing to me.... what am I missing here. *C. maculatus* is a bird I see every year. I would definitely go with Hellmayr's names."

Comments from Stiles: "As for *dryas*-1b>1c>1a. I don't like "Yellow-chested" because it implies a contrast between the chest and the rest of the underparts, and "Yellow-throated" is only useful to contrast *dryas* with *maculatus*, which seems unlikely to be used given the great distance between their ranges. Not having experience with *dryas* (it doesn't occur in Costa Rica, but given the photos, I could well go with Saffron-breasted").

"As for *maculatus*, 2b>2c>2a - although were 2a to be given as "Spotted-throated", I'd place it first - it is more accurate in that there are lots of spots, not just one on its throat (and it's no longer or harder to pronounce than "Speckle(d)-throated!")

Comments from Remsen: "*C. maculatus*:

1. Speckled Nightingale-Thrush. I like Dan's point that focusing on the throat seems odd when the breast markings are so much more conspicuous. Also, the markings on the throat are difficult to see, even in photos (see below). Further, with allopatric taxa, noting diagnostic differences between the two is not as important to me. Tom's point about Speckled empirically often referring to the entire bird is good, but we have counter-examples Speckled Spinetail, Speckled Chachalaca, and Speckled Hummingbird that are speckled only ventrally
2. Speckle-throated Nightingale-Thrush (the markings on the throat indeed look more like what I would consider speckles than spots, which I think of as more rounded; see photos below)
3. Spot-throated Nightingale-Thrush

Here are screen shots of 3 *C. maculatus* photos from Macaulay:

By Nick Athanas (Ecuador):



By Alex Mesquita (Argentina):



By Oscar Johnson  
(Bolivia):



### Revise the linear sequence of passerine families

#### Background:

Various parts of our linear sequence for passerine families have been revised since the 7th edition of the Checklist (AOU 1998) based on findings related to specific families or groups of families. More recently, as sequencing technology has advanced and better sampling has been possible, studies including complete or near-complete sequencing of passerine families have been published (e.g., Oliveros et al. 2019, Feng et al. 2020, Kuhl et al. 2021). Here we propose an updated linear sequence of passerine families based on this recent research.

Our current sequence of passerine families is as follows (reading down each column before proceeding to the next):

Sapayoidae	Certhiidae	Prunellidae
Thamnophilidae	Troglodytidae	Ploceidae
Conopophagidae	Poliophtidae	Viduidae
Grallariidae	Cinclidae	Estrildidae
Rhinocryptidae	Pycnonotidae	Passeridae
Formicariidae	Regulidae	Motacillidae
Furnariidae	Cettiidae	Fringillidae
Pipridae	Phylloscopidae	Calcaridae
Cotingidae	Sylviidae	Rhodinocichlidae
Tityridae	Zosteropidae	Emberizidae
Oxyruncidae	Leiothrichidae	Passerellidae
Onychorhynchidae	Acrocephalidae	Calyptophilidae
Tyrannidae	Donacobiidae	Phaenicophilidae
Laniidae	Locustellidae	Nesospingidae
Vireonidae	Muscicapidae	Spindalidae
Corvidae	Turdidae	Zeledoniidae
Monarchidae	Mimidae	Teretistridae
Alaudidae	Sturnidae	Icteriidae
Hirundinidae	Bombycillidae	Icteridae
Paridae	Mohoidae	Parulidae
Remizidae	Ptiliogonatidae	Mitrospingidae
Aegithalidae	Dulidae	Cardinalidae
Sittidae	Peucedramidae	Thraupidae

#### New Information:

The phylogenetic trees of Oliveros et al. (2019) and Feng et al. (2020 – family names are visible in, e.g., their Suppl. Fig. 3) are both based on UCE data and, as might be expected, are extremely similar, differing only in their placement of the Regulidae. The sampling in Oliveros et al. (2019) was more extensive, including representatives of nine families from our area not

included in Feng et al. (Mohoidae, Dulidae, Calyptophilidae, Phaenicophilidae, Nesospingidae, Spindalidae, Zeledoniidae, Icteriidae, and Mitrospingidae), although neither study sampled the Teretistridae.

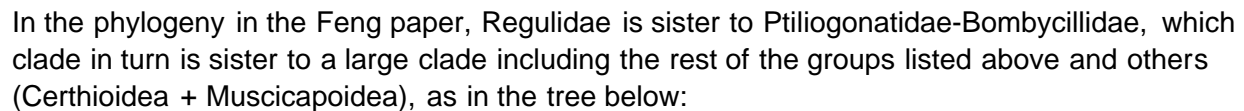
The tree of Kuhl et al. (2021) is based on noncoding 3-prime untranslated region (3'-UTR) sequences and is very similar to those of Oliveros et al. (2019) and Feng et al. (2020). The sampling in the Kuhl et al. tree lacked representatives from 15 passerine families in our area (Oxyruncidae, Onychorhynchidae, Melanopareiidae, Grallariidae, Formicariidae, Mohoidae, Dulidae, Rhodinocichlidae, Calyptophilidae, Phaenicophilidae, Nesospingidae, Spindalidae, Teretistridae, Icteriidae, and Mitrospingidae).

Our proposed new linear sequence, derived from Oliveros et al. (2019), Feng et al. (2020), and Kuhl et al. (2021), and checked against Harvey et al. (2020) for the suboscines, is as follows:

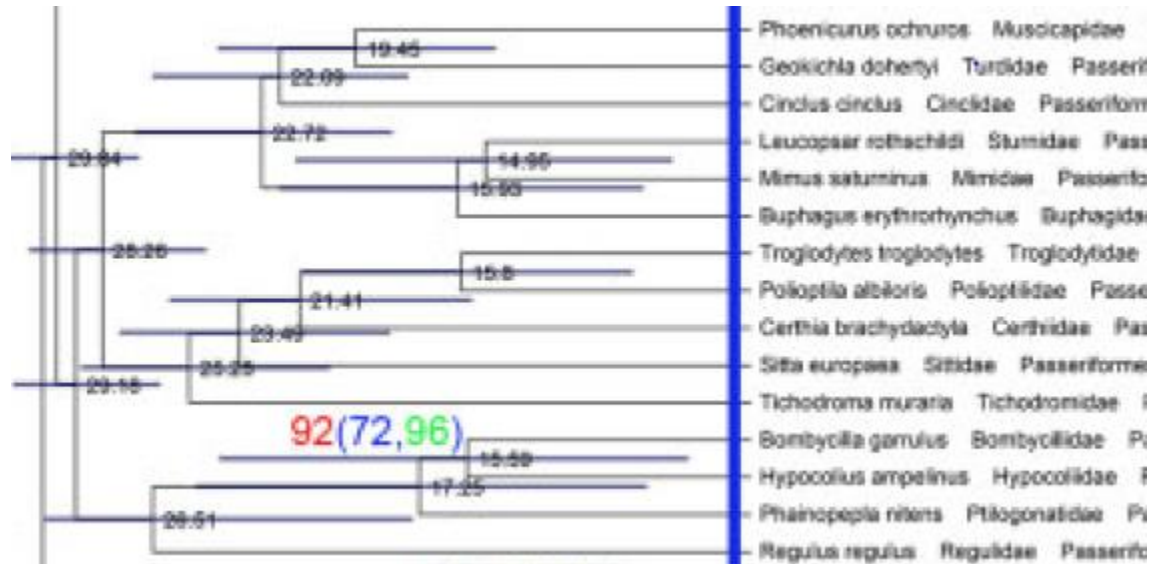
Sapayoidae	Hirundinidae	Ploceidae
Pipridae	Phylloscopidae	Viduidae
Cotingidae	Aegithalidae	Estrildidae
Tityridae	Cettiidae	Prunellidae
Oxyruncidae	Pycnonotidae	Passeridae
Onychorhynchidae	Sylviidae	Motacillidae
Tyrannidae	Zosteropidae	Fringillidae
Conopophagidae	Leiothrichidae	Rhodinocichlidae
Thamnophilidae	Regulidae	Calcariidae
Grallariidae	Dulidae	Emberizidae
Rhinocryptidae	Bombycillidae	Passerellidae
Formicariidae	Ptiliogonatidae	Calyptophilidae
Furnariidae	Mohoidae	Zeledoniidae
Vireonidae	Sittidae	Phaenicophilidae
Monarchidae	Certhiidae	Nesospingidae
Laniidae	Poliotilidae	Spindalidae
Corvidae	Troglodytidae	Icteriidae
Remizidae	Mimidae	Teretistridae
Paridae	Sturnidae	Icteridae
Alaudidae	Cinclidae	Parulidae
Acrocephalidae	Turdidae	Cardinalidae
Donacobiidae	Muscicapidae	Mitrospingidae
Locustellidae	Peucedramidae	Thraupidae

The most obvious change in the new linear sequence is the move of the Tyrannoidea (Pipridae, Cotingidae, Tityridae, Oxyruncidae, Onychorhynchidae, and Tyrannidae) to precede the Furnarioidea (Conopophagidae, Thamnophilidae, Grallariidae, Rhinocryptidae, Formicariidae, and Furnariidae). The traditional linear sequence of suboscines placed the furnarioid families first, but this violates our linear sequencing protocols, which mandate that sister groups be placed so that the group with fewer species precedes the group with more species. Thus, the Tyrannoidea, which contains roughly 580 species, has been moved to precede its sister group the Furnarioidea, which contains roughly 680 species.

The Regulidae occupies different phylogenetic positions in the published trees of Oliveros et al. (2019) vs. Feng et al. (2020) and Kuhl et al. (2021). In the Oliveros tree, the Regulidae is sister to a clade consisting of Tichodromidae, Sittidae, Certhiidae, Salpornithidae, Polioptilidae, and Troglodytidae, but support for this placement is not strong (bootstrap <70%):

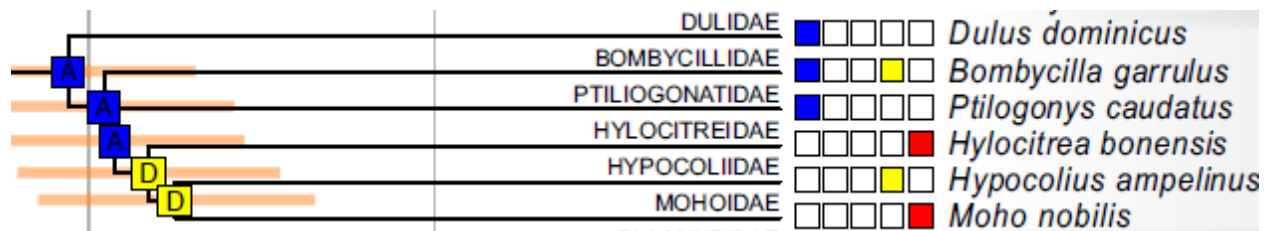


The position of the Regulidae in the Kuhl et al. (2021) tree:



is the same as that in the Feng et al. (2020) tree. Support values are not available for the Feng et al. tree, but SH-aLRT support values are available for the Kuhl et al. tree (SH-aLRT calculations were used instead of standard bootstrapping due to the size of the dataset). The node placing the Regulidae in the Kuhl tree received 100% support. Given that the alternate placement in the Oliveros tree was not strongly supported, we have placed the Regulidae as sister to the Certhioidea + Muscicapoidea, following Feng et al. (2020) and Kuhl et al. (2021).

A question also arises concerning the position of the Dulidae. This family was included only in the Oliveros et al. (2019) study, where it was sister to a clade consisting of the Bombycillidae, Ptiliogonatidae, Hylocitridae, Hypocoliidae, and Mohoidae, as below:

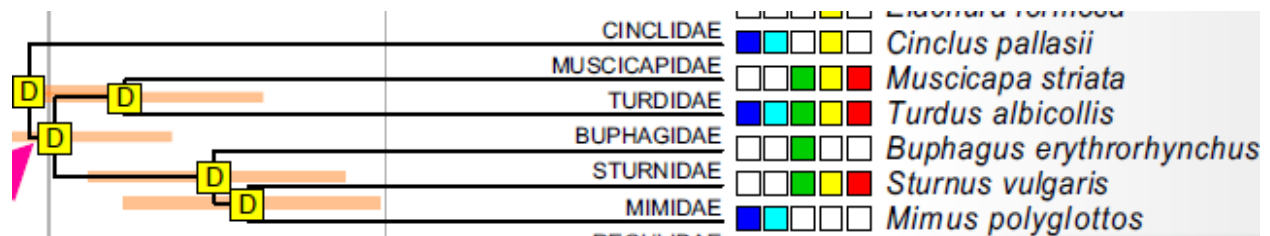


Note that this is the exact position of Regulidae in the Kuhl et al. (2021) and Feng et al. (2020) studies, except that Kuhl did not include Hylocitridae or Mohoidae, and Feng included neither these families nor Hypocoliidae. A decision must be made about the relative placement of the Regulidae and Dulidae, i.e., which is sister to the clade consisting of the Bombycillidae, Ptiliogonatidae, Hylocitridae, Hypocoliidae, and Mohoidae, and which is sister to that clade plus the other family (Regulidae or Dulidae). The support for the placement of the Dulidae in Oliveros et al. (2019) is strong, and the branch length to the clade consisting of the Bombycillidae, Ptiliogonatidae, Hylocitridae, Hypocoliidae, and Mohoidae is short, whereas the



the branch length in Kuhl et al. (2021) from the Regulidae to the Ptiliogonatidae-Bombycillidae-Hypocoliidae clade is long (branch lengths are not available in the Feng tree), so we have placed the Dulidae as sister to Bombycillidae-Ptiliogonatidae-Hylocitridae-Hypocoliidae-Mohoidae, and Regulidae as sister to the Dulidae + this clade. This position is further supported by two older studies that included Dulidae: in their study of the Bombycillidae and their close relatives, Spellman et al. (2008) found very strong support for Dulidae as sister to Bombycillidae-Ptiliogonatidae-Hylocitridae-Hypocoliidae (they did not sample Mohoidae). In the phylogeny presented by Alström et al. (2014), the specific relationships are not displayed, but Dulidae is shown as part of the clade that includes Bombycillidae, Hylocitridae, and Ptiliogonatidae, whereas Regulidae is outside of this group.

The final discrepancy concerns the placement of the Cinclidae. In Oliveros et al. (2019):



and Feng et al. (2020; see above), Cinclidae is sister to a clade consisting of the Muscicapidae, Turdidae, Buphagidae, Sturnidae, and Mimidae, whereas Cinclidae is sister to the Turdidae + Muscicapidae in the tree in Kuhl et al. (2021; see above). However, the support for the node uniting the five-family clade to the exclusion of Cinclidae in the Oliveros tree is only 84% (Fig. S1), whereas the node supporting the sister relationship of Cinclidae with Turdidae + Muscicapidae in the Kuhl tree received 100% support. Therefore, we have placed the Cinclidae as sister to (i.e., preceding) the Turdidae and Muscicapidae in the recommended linear sequence. We note in passing that several studies based on Sanger sequencing (e.g., Zuccon et al. 2006, Reddy and Cracraft 2007, Johansson et al. 2008) have also recovered the relationship Cinclidae + (Turdidae + Muscicapidae).

### Recommendation:

We recommend that NACC adopt the proposed linear sequence.

### Literature Cited:

- Alström, P., D. M. Hooper, Y. Liu, U. Olsson, D. Mohan, M. Gelang, H. Le Manh, J. Zhao, F. Lei, and T. D. Price. 2014. Discovery of a relict lineage and monotypic family of passerine birds. *Biology Letters* 10: 20131067.
- Barker, F. K., K. J. Burns, J. Klicka, S. M. Lanyon, and I. J. Lovette. 2013. Going to extremes: Contrasting rates of diversification in a recent radiation of New World passerine birds. *Systematic Biology* 62: 298–320.
- Barker, F. K., K. J. Burns, J. Klicka, S. M. Lanyon, and I. J. Lovette. 2015. New insights into New World biogeography: An integrated view from the phylogeny of blackbirds, cardinals, sparrows, tanagers, warblers, and allies. *Auk* 132: 333-348.

- Feng, S., J. Stiller, Y. Deng, et al. 2020. Dense sampling of bird diversity increases power of comparative genomics. *Nature* 587: 252-257.
- Harvey, M. G., G. A. Bravo, S. Claramunt, et al. 2020. The evolution of a tropical biodiversity hotspot. *Science* 370: 1343-1348.
- Johansson, U. S., J. Fjeldså, R. C. K. Bowie. 2008. Phylogenetic relationships within Passerida (Aves: Passeriformes): A review and a new molecular phylogeny based on three nuclear intron markers. *Molecular Phylogenetics and Evolution* 48: 858-876.
- Kuhl, H., C. Frankl-Vilches, A. Bakker, G. Mayr, G. Nikolaus, S. T. Boerno, S. Klages, B. Timmermann, and M. Gahr. 2021. An unbiased molecular approach using 3'-UTRs resolves the avian family-level tree of life. *Molecular Biology and Evolution* 38: 108-127.
- Oliveros, C. H., D. J. Field, D. T. Ksepka, et al. 2019. Earth history and the passerine superradiation. *Proceedings of the National Academy of Sciences of the USA* 116: 7916-7925.
- Reddy, S., and J. Cracraft. 2007. Old World shrike-babblers (*Pteruthius*) belong with New World vireos (Vireonidae). *Molecular Phylogenetics and Evolution* 44: 1352-1357.
- Spellman, G. M., A. Cibois, R. G. Moyle, K. Winker, and F. K. Barker. 2008. Clarifying the systematics of an enigmatic avian lineage: what is a bombycillid? *Molecular Phylogenetics and Evolution* 49:1036-1040.
- Zuccon, D., A. Cibois, E. Pasquet, and P. G. P. Ericson. 2006. Nuclear and mitochondrial sequence data reveal the major lineages of starlings, mynas and related taxa. *Molecular Phylogenetics and Evolution* 41: 333-344.

**Submitted by:** Terry Chesser and Shawn Billerman

**Date of Proposal:** 25 January 2021, revised 6 February 2021

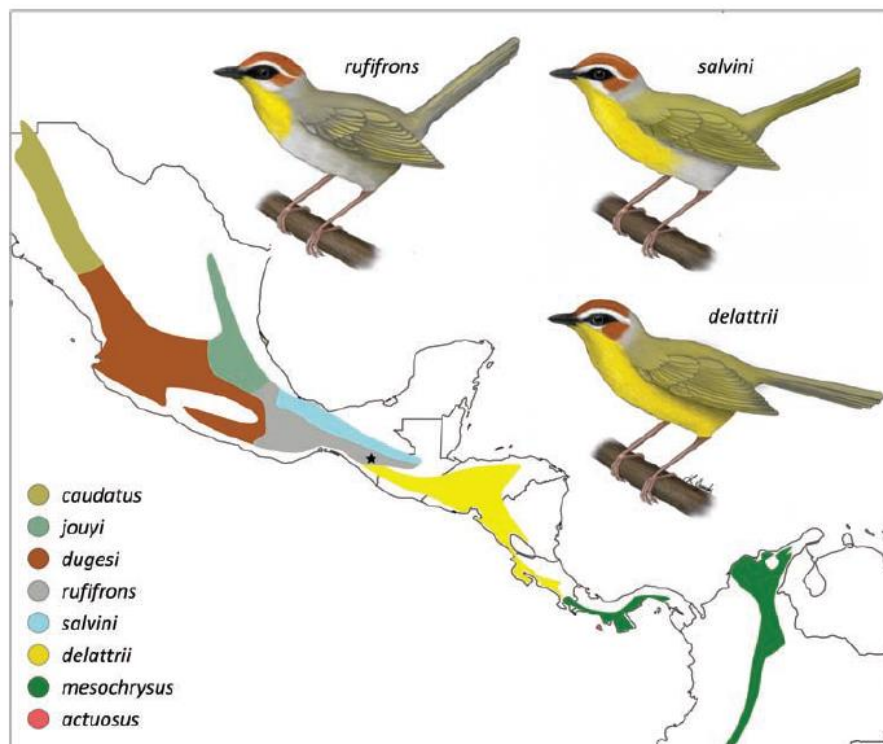
**Recognize *Basileuterus delatirii* as a separate species from  
Rufous-capped Warbler *B. rufifrons***

**Effect on NACC classification:**

Approval of this proposal would add a new species, *Basileuterus delatirii*, to the North American list.

**Background:**

*Basileuterus rufifrons* is currently considered to consist of eight subspecies distributed primarily in Mexico and Central America, but also including the southwestern US and northern South America (see map below; subspecies *actuosus*, difficult to locate on the map, occurs on Isla Coiba, off the Pacific coast of Panama).



**FIGURE 1.** Range distributions of the 8 recognized Rufous-capped Warbler subspecies. White-bellied *B. r. rufifrons* (light gray shading) and yellow-bellied *B. r. delatirii* (yellow shading) are sympatric in southern Chiapas, Mexico (black star). The *rufifrons* group includes *B. r. caudatus*, *jouyi*, *dugesii*, and *rufifrons*, and the *delatirii* group includes *B. r. delatirii*, *mesochrysus*, and *actuosus*. The range of intermediate-plumaged *B. r. salvini* (blue shading) adjoins that of *B. r. rufifrons*, but does not overlap with that of *B. r. delatirii*.

Subspecies are generally considered to form two groups: the *rufifrons* group, including *caudatus*, *jouyi*, *dugesii*, and *rufifrons* (we will hereafter refer to this group as simply “*rufifrons*” unless we specify otherwise), and the *delatirii* group, consisting of *delatirii*, *mesochrysus*, and *actuosus* (we will hereafter refer to this group simply as “*delatirii*”). In addition to plumage

differences, these groups also differ in vocalizations (e.g., Howell and Webb 1995, Demko and Mennill 2019). The eighth subspecies, *salvini*, is intermediate between the two groups in some plumage features, most notably the extent of yellow coloration on the underparts (see depictions above), but it has typically been considered part of the *rufifrons* group.

The taxonomic status of *rufifrons* and *delatirii* has long been debated due to the variation in plumage and other characters. Ridgway (1902) considered the two taxa to be conspecific, but Todd (1929) not only treated *rufifrons* and *delatirii* as separate species, but placed them in different genera based on differences in relative wing and tail length (placing *rufifrons*, including *salvini*, in *Idiotes*). Hellmayr (1935) also treated *rufifrons* and *delatirii* as separate species; he was uncertain about *salvini* but stated that it "seems to be a representative form of *B. rufifrons*." Eisenmann (1955) treated *rufifrons* and *delatirii* as separate species as well, although he noted that *delatirii* may be conspecific with *rufifrons*.

Monroe (1968) lumped the species based on intergradation in plumage and morphometrics between *rufifrons* and *delatirii*, stating that *rufifrons salvini* intergrades with *delatirii* over a wide area in eastern Guatemala, El Salvador, and western Honduras. Peters (1968), in a family account co-authored by Monroe, followed this single-species treatment, and the AOU (1983, 1998) also treated them as a single species based on the intergradation noted by Monroe (1968). AOU (1983) considered the species to consist of two groups (*rufifrons* and *delatirii*), whereas AOU (1998) treated *salvini* as a third distinct group within the species. Regardless of taxonomic treatment, the distribution of neither *rufifrons* nor *salvini* was listed as extending south of Guatemala (AOU 1983, 1998), casting doubt on Monroe's assertions of intergradation with *delatirii* in El Salvador and Honduras (which were nevertheless cited). In their field guide to birds of Mexico and northern Central America, Howell and Webb (1995) suggested that *rufifrons* and *delatirii* may be separate species, based on differences in plumage, morphology, and vocalizations, and noted that they are sympatric in southeastern Chiapas and western Guatemala. Nevertheless, most current references (IOC, Clements, Bird of the World) treat *rufifrons* and *delatirii* as a single species.

The status of *delatirii* has thus gone from species to subspecies of *B. rufifrons* due to perceived intermediate specimens from northern Central America. At the extremes of the distribution of the *B. rufifrons* complex, DFL can attest to the very different appearance and voices of the two main groups (*rufifrons* and *delatirii*), but the situation within the Chiapas/Guatemalan portion of the distribution has been the crux of the issue, with the supposed intermediate taxon *salvini* suggesting that these two groups are linked and interbreeding.

### **New Information:**

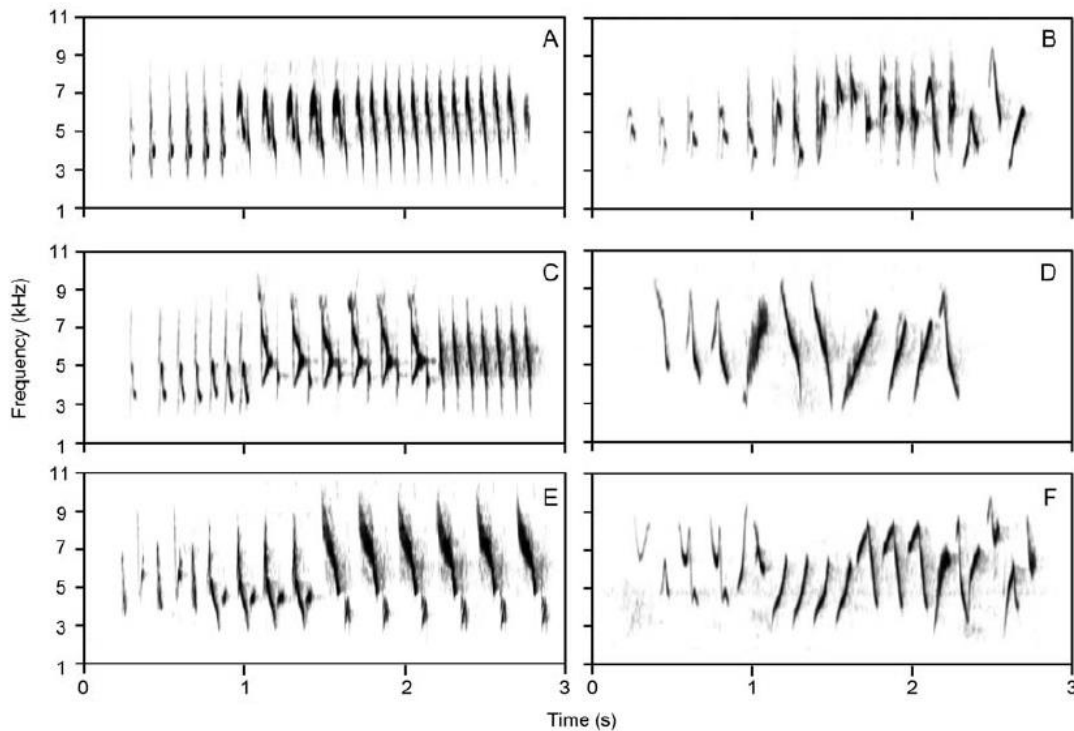
Demko and co-authors, in a series of studies culminating in Demko et al. (2020), have studied the complex through investigations of various aspects of the biology of *rufifrons* and *delatirii*. The stated purpose of Demko et al. (2020) was to use voice, morphometrics, and plumage characters to assess variation within *B. rufifrons sensu lato*, with a particular focus on determining whether *salvini* is intermediate to *rufifrons* and *delatirii*, or more similar to one or the other group. They took measurements of morphometrics and plumage from more than 400 specimens, focusing on the region of contact in southern Mexico and Guatemala, and also

measured more than 400 songs. One interesting finding, evident in the map above, is that the ranges of *salvini* and *delatirii* do not meet, meaning that *salvini* is unlikely to be an intergrade between *rufifrons* and *delatirii*.

In addition to their focus on *salvini*, Demko et al. also studied song and other behavior at a site in Chiapas, Mexico, where the *rufifrons* and *delatirii* groups are sympatric.

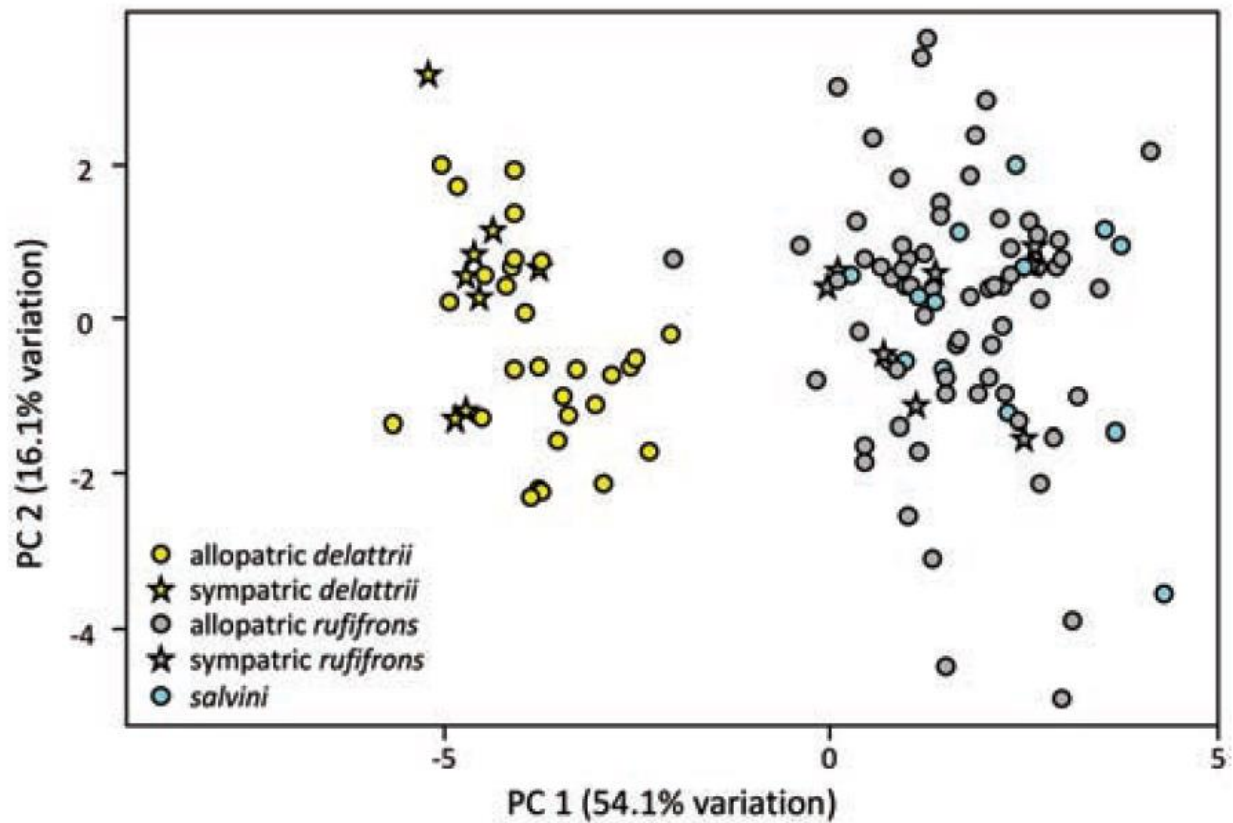
Morphometric analyses of wing and tail length showed that only wing length differed significantly among *rufifrons*, *salvini*, and *delatirii*, with wings of *delatirii* significantly longer than those of *salvini*, and *rufifrons* in between. Tail length was similar among groups, and wing-tail ratio averaged positive for *delatirii* but negative for *salvini* and *rufifrons*, as previously noted by Todd (1929). In plumage, *salvini* was more similar to one or the other group depending on the plumage character being analyzed.

The most persuasive and consistent distinctions were found in voice. Here's Fig. 5 from Demko et al. (2020), showing representative male songs of (A) *rufifrons* where allopatric to *delatirii*, (B, D) *delatirii* where allopatric to *rufifrons*, (C) *salvini*, and (E) *rufifrons* and (F) *delatirii* where the two groups are sympatric in southern Chiapas:



**FIGURE 5.** Song spectrograms of Rufous-capped Warbler male songs: allopatric *B. r. rufifrons*, Yagul, Oaxaca, Mexico (A); allopatric *B. r. delatirii*, Santa Rosa, Guanacaste, Costa Rica (B); allopatric *B. r. salvini*, Estación de Biología Los Tuxtlas, Veracruz, Mexico (C); allopatric *B. r. delatirii*, Mapastepec, Chiapas, Mexico (D); sympatric *B. r. rufifrons*, Finca La Victoria, Chiapas, Mexico (E); and sympatric *B. r. delatirii*, Finca La Victoria (F). Songs of *rufifrons* group (A, E) and *B. r. salvini* (C) are structurally similar to one another, and differ from *delatirii* group songs (B, D, F). Songs from sympatric *B. r. rufifrons* (E) and *B. r. delatirii* (F) resemble allopatric songs of their own subspecies rather than being intermediate or mixed.

Salient points from the figure are that (1) songs of *salvini* do not differ appreciably from those of *rufifrons* but are very different from those of *delatirii*, (2) songs of *delatirii* appear to be relatively consistent throughout its range, including in the zone of sympatry with *rufifrons*, and (3) songs of *rufifrons* in the zone of sympatry are very similar to those of *salvini* and *rufifrons* from outside of the zone of sympatry. These similarities and differences are further illustrated in their Fig. 6, a PCA of male song, in which songs of *salvini* and both allopatric and sympatric *rufifrons* group together apart from those of allopatric and sympatric *delatirii*:



Demko et al. (2020) concluded that these lines of evidence, particularly the vocal evidence, are sufficient to treat the two groups *rufifrons* (including *salvini*) and *delatirii* as separate species.

### English names:

A vote to recognize two species in this complex will raise the question of English names for the daughter species. Although *rufifrons* probably occupies a larger range than *delatirii*, the relative range size is similar enough that the default course of action would be to create new names for both daughter species. However, NACC's English name guidelines recognize that range size is a proxy for degree of association of the name with one daughter or the other, and that relative degrees of association, disruption, and confusion are actually the key factors in deciding whether to continue to use a parental name for one of the daughter species in cases of a species split. The relevant part of our guidelines states:



Strong association of names with particular daughter species may provide exceptions to the above policy [of providing new names for both daughter species]. In these situations, a change to the English name of one daughter species would cause much more disruption than a change to that of the other daughter species. In these cases, the potential confusion of retaining the parental name for the daughter species strongly associated with the name is weighed against the potential disruption of changing the name. Overall, the goal is to maximize stability and minimize disruption to the extent possible.

Dating back to Ridgway (1902), *rufifrons* has always been known as Rufous-capped Warbler, sometimes *sensu stricto* and sometimes *sensu lato*, whereas *delatirii* has been known as Delattre's Warbler (Hellmayr 1935), Chestnut-capped Warbler (Eisenmann 1955, Hilty and Brown 1986, Howell and Webb 1995), and Rufous-capped Warbler (when considered conspecific, as by Ridgway 1902 and Monroe 1968). Of particular note are the names provided to intraspecific groups in recent editions of the checklist (AOU 1983, 1998), which in this case are Rufous-capped Warbler for the *rufifrons* group and Chestnut-capped Warbler for the *delatirii* group. It's a bit of a gray area for NACC because of the strong association of Rufous-capped with the northern form (*rufifrons sensu stricto*) and the retention of Rufous-capped Warbler as one of the AOU group names, contrasted with the fact that this name has also sometimes been used for the southern form (when lumped with *rufifrons*).

Our recommendation, following consultation with global references such as the IOC World Bird List and the Clements Checklist, is that NACC retain Rufous-capped Warbler as the English name for *B. rufifrons* and adopt Chestnut-capped Warbler for *B. delatirii*. We consider that these English names for these taxa are well established in the literature, including Eisenmann (1955) and Howell and Webb (1995) in addition to their usage as AOU group names, and that little confusion will result from the past practice of sometimes including the southern form *delatirii* within Rufous-capped Warbler. If a new English name were to be proposed for *rufifrons*, we would recommend the name Rusty-capped Warbler, which is close enough to the original name as to be instantly recognizable, but different enough to distinguish it from the umbrella name for the parent species.

### **Recommendation:**

We believe the elegant study of Demko et al. (2020) makes a strong case that *rufifrons* and *delatirii* are best considered valid biological species. We recommend a YES vote on this split. If this split is supported, we recommend the use of Chestnut-capped Warbler as the English name for *B. delatirii* and Rufous-capped Warbler for the newly restricted *B. rufifrons*.

### **Literature cited:**

Demko, A. D., and D. J. Mennill. 2019. Rufous-capped Warblers *Basileuterus rufifrons* show seasonal, temporal and annual variation in song use. *Ibis* 161:481–494.

- Demko, A. D, J. R. Sosa-López, R. K. Simpson, S. M. Doucet, and D. J. Mennill. 2020. Divergence in plumage, voice, and morphology indicates speciation in Rufous-capped Warblers (*Basileuterus rufifrons*). *Auk* 137:1-20.
- Eisenmann, E. 1955. The Species of Middle American Birds. Transactions of the Linnaean Society of New York, Vol. 7.
- Hellmayr, C. E. 1935. Birds of the Americas. Field Museum of Natural History Zoological Series, Vol. 13, Part 8.
- Hilty, S. L., and W. L. Brown. 1986. A guide to the birds of Colombia. Princeton University Press, Princeton, NJ.
- Howell, S. N. G., and S. Webb. 1995. A guide to the birds of Mexico and northern Central America. Oxford University Press, New York.
- Monroe, B. L. 1968. A Distributional Survey of the Birds of Honduras. Ornithological Monographs No. 7. American Ornithologists' Union, Washington, D.C.
- Ridgway, R. 1902. The birds of North and Middle America. Bulletin of the United States National Museum No. 50, Part 2.
- Todd, W. E. C. 1929. A revision of the wood-warbler genus *Basileuterus* and its allies. Proceedings of the United States National Museum 74 (2752): 1-95.

**Submitted by:** Terry Chessser and Daniel F. Lane

**Date of Proposal:** 26 January 2021



**Change the spelling of *Porphyrio martinicus* to *P. martinica*****Background:**

SACC considered a proposal in 2016 (SACC Proposal 725) to change the species name of *Porphyrio martinicus* to *P. martinica*. The proposal consisted almost entirely of the SACC footnote on this species, as below:

Sibley & Monroe (1990) considered the species epithet to be an adjective and this changed its ending (from *martinica* to *martinicus*) to agree in gender with *Porphyrio*. David & Gosselin (2011) concluded that the correct name is indeed *martinicus*. Schodde & Bock (2016), however, provided evidence that the species epithet is a noun in apposition and should revert to its original formulation, i.e. *martinica*.

and the relevant text from Schodde & Bock (2016), which is as follows:

The epithet *martinica* David & Gosselin (2011) argued for treating *martinica*, the geographical name used by Linnaeus (1766: 259, 283, 325) and Hermann (1783: 229) for taxa from the French island of Martinique, as adjectival, without considering options or invoking Article 31.2.2. Yet Linnaeus ([ll.cc.](#)) also consistently quoted “Martinica” as the habitat for these species, opening their names to interpretation as geographical nouns in apposition. Latin place names usually end with the suffix -ia (see *bresilia* above), but many also end in -a after a consonant, e.g. Creta (Crete), Corsica (Corsica) and Palaestina (Israel, Palestine), as in *martinica*. Moreover, the conventional adjectival form of names based on Martinique is *martinicana*, as in *Coereba flaveola martinicana* (Reichenbach, 1853) or *martinicensis*, as in *Troglodytes aedon martinicensis* (Sclater, 1866). Neither Linnaeus’ nor Hermann’s usages of *martinica* were capitalized which, were they substantival, might have been expected from their authors’ practice of cap[i]talizing nouns. This clue is questionable, nevertheless, because both Linnaeus and Hermann capitalized nouns for place names inconsistently, as pointed out by David & Gosselin (2000, 2011: 110) and above for Linnaeus.

In the Aves, *martinica* is currently in use for four species (Dickinson & Remsen 2013; Dickinson & Christidis 2014): *Geotrygon montana martinica* (Linnaeus, 1766), *Porphyrio martinicus* (Linnaeus, 1766), *Chaetura martinica* (Hermann, 1783), and *Elaenia martinica* (Linnaeus, 1766). All four usages were originally published as *martinica* in combination with feminine genera, without any other inference about their grammatical status. Thus their identity as adjectives or nouns is ambiguous and open to interpretation as either. In a scan of other animal classes in Linnaeus (l.c.) and Hermann (l.c.), we found no other gender endings for *martinica* that could be construed as unambiguously adjectival, *pace* David & Gosselin (2011). Usage as noun or adjective being indecisive for the above four names, *martinica* becomes a noun in apposition under Article 31.2.2 of the Code, to be kept in its original form unless and until explicitly demonstrated as

adjectival. In the interim, *Porphyrio martinicus* (Linnaeus, 1766) should revert to *P. martinica*, a form widely familiar in classifications prior to David & Gosselin (l.c.).

Based on this information, SACC voted to accept the proposal and change the name to *Porphyrio martinica*.

#### **New Information:**

This has not been the last word on this issue. Elliott (2020), an appendix to the *All the Birds of the World* volume, investigated the relative claims of David and Gosselin (2011) and Schodde and Bock (2016) and concluded, *contra* SACC, that *martinica* is an adjective and that the species name should be changed to *martinicus* to conform to the genus name *Porphyrio*:

This is one of three broadly similar cases covered in this appendix which are subject to a debate that has been carried on over a number of papers disputing whether these names should be treated as adjectives or nouns. In all three cases, David & Gosselin (2011) concluded that the names were adjectives, while Schodde & Bock (2016) argued that they should be treated as nouns. The arguments for and against are lengthy and complicated (whence the lengthy exchange of views!), and this is clearly not the right place to go into them in detail. For the present we shall simply have to limit ourselves to expressing our opinion that we find the arguments in favour of their being treated as nouns unconvincing. In the present case, we accept that the name “*martinica*” could indeed, in principle, represent the name of the island itself (Martinique) as a noun, but in the context of Linnaeus’s name we do not believe that this interpretation is sustainable.

In addition to alerting me to the Elliott paper, Normand David has made the following additional points:

(1) David and Gosselin (2011) concluded that *martinica*, in the original combinations *Columba martinica*, *Fulica martinica*, *Muscicapa martinica*, *Hirundo martinica*, is an adjectival word.

- Note that Rothschild (1905) in BBOC 16: 14 also treated *martinicus* as adjectival in combination with *Anadorhynchus*.

(2) S&B (2016: 161) stated that “he [Linnaeus (1766)] unambiguously treated *dominicus*, –a, –um as an adjective there. Thus today, *Tanagra dominica* is correctly *Dulus dominicus* (Linnaeus, 1766) in *Dulus Vieillot*, 1816, masculine. David & Gosselin (2011) and David & Dickinson (2014) interpret the meaning of Article 31.2.2 correctly, but, as found here, may not [my emphasis] have applied it appropriately in every case.

- Note that, under art. 26 (Code 1999), *dominicus*, –a, –um must be treated as an adjectival word.

(3) What is “Martinica” as used by Linnaeus (1766)? Or should I ask: “What lies behind Martinica?” One answer is *Isla martinica*.

- Note that it has been suggested that Christopher Columbus may have sailed off Martinique on Saint Martin's Day, 11 November 1493 (just before sailing north), meaning that [Isla] martinica was derived from Martin. For example, Lucrèce (1933, p. 5) noted the following:

Christophe Colomb fit plusieurs autres voyages en Amérique. À son deuxième voyage, il découvrit la Martinique le 11 novembre 1493, jour anniversaire de la fête Saint-Martin. [...] On croit généralement que Christophe Colomb appela notre île Martinique en souvenir de la mémoire de saint Martin, évêque de Tours...

the English translation of which is:

Christopher Columbus made several other voyages to America. On his second voyage, he discovered Martinique on November 11, 1493, the anniversary of the feast of Saint Martin. [...] It is generally believed that Christopher Columbus called our island Martinique in memory of Saint Martin, bishop of Tours ...

(4) The case of *Fulica martinica* = *Porphyrio martinicus* is not a matter of prevailing past uses, but a matter of gender agreement of adjectival words. I then have to say that the argument of predominant anterior uses of "*martinica*" is irrelevant here.

#### **Recommendation:**

The additional information above, the fact that an independent expert has sided with David and Gosselin (2011), and the general uncertainty surrounding this issue persuade me that we should not change *Porphyrio martinicus* to *P. martinica* at this time. I recommend that the committee vote NO on this proposal.

#### **Literature Cited:**

- David, N. and M. Gosselin, M. 2011. Gender agreement of avian species-group names under Article 31.2.2 of the ICZN Code. Bull. Brit. Orn. Club 131(2): 103–115.
- Elliott, A. 2020. Differences in nomenclature: Selected cases where world lists use different names/spellings. Pp. 853-860 in: del Hoyo, J. ed. (2020). All the Birds of the World. Lynx Edicions, Barcelona.
- Lucrèce, J. 1933. Histoire de la Martinique: l'usage des cours supérieur et complémentaire des écoles primaires. Presses Universitaires de France.
- Schodde, R. and W. J. Bock. 2016. Conflict resolution of grammar and gender for avian species-group names under Article 31.2.2 of the ICZN Code: is gender agreement worth it? Zootaxa 4127(1): 161–170.

**Submitted by:** Terry Chesser

**Date of Proposal:** 28 January 2021

**Treat Andean Duck *Oxyura ferruginea* as conspecific with Ruddy Duck *O. jamaicensis***

**Note:** Approval of this proposal would result in changes to the distributional statement and notes for *Oxyura jamaicensis*. More significantly, it would align NACC with SACC on this largely South American issue, SACC having treated *ferruginea* as conspecific with *jamaicensis* from the inception of its list.

**Background:**

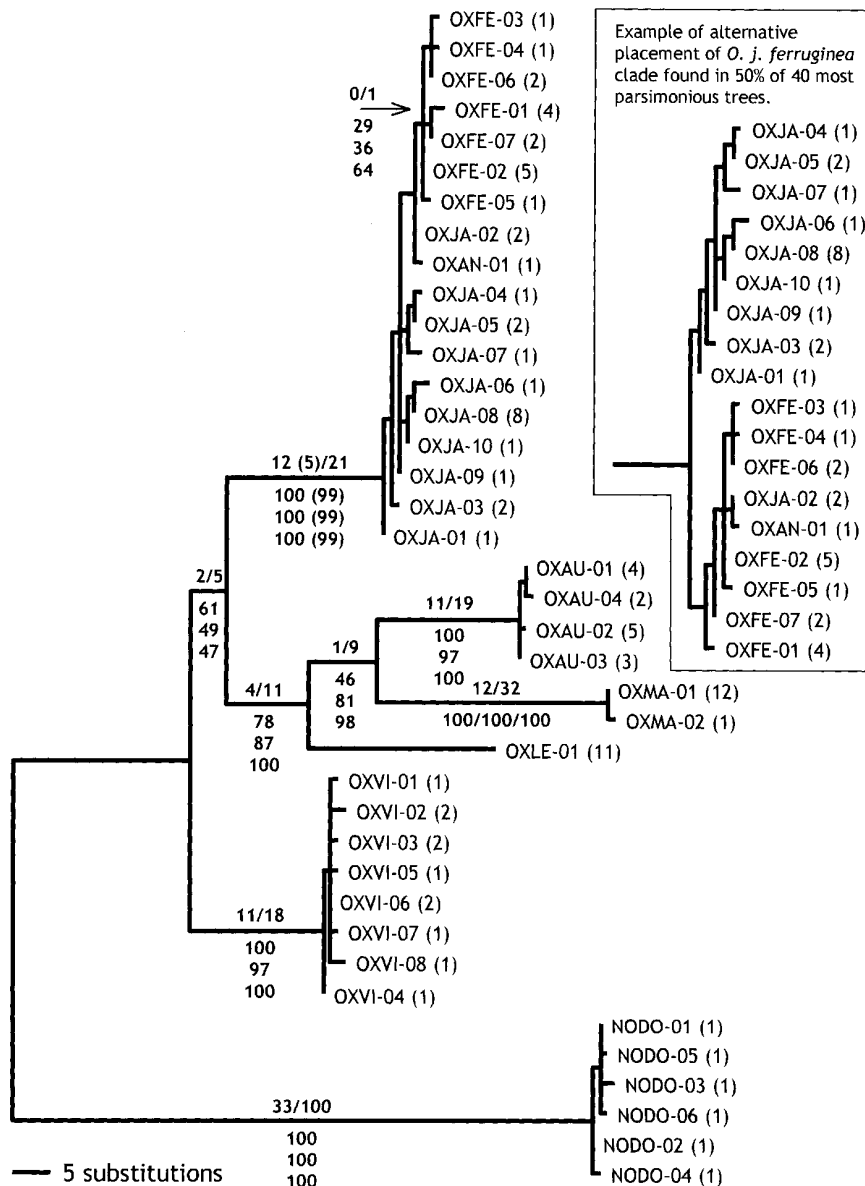
The taxonomy of the Ruddy Duck *O. jamaicensis* of North America, Central America, and the Caribbean, and the Andean Duck *O. ferruginea* of South America has a complicated and complex history. As currently recognized, *O. jamaicensis* is monotypic and widespread through North America, Central America, and the Caribbean, and *O. ferruginea* has two generally recognized subspecies: *O. f. ferruginea* of southern South America, from the Andes of extreme southern Colombia to southern Argentina and Chile, and *O. f. andina* of the Andes in Colombia. The two species are most distinct in male breeding plumage: *O. jamaicensis* males are characterized by a bold white cheek with a black cap whereas male *O. f. ferruginea* have entirely black heads; *O. f. andina* males show a range of phenotypes: some show white cheek patches like *jamaicensis*, some have entirely black heads like *ferruginea*, and some show intermediate amounts of black on the cheek (Fjeldså 1986, Donegan et al. 2015). Female *O. ferruginea* have darker heads than *O. jamaicensis*, with a less distinct stripe across the cheek.

The three taxa were considered conspecific in the sixth edition of the AOU Checklist (AOU 1983), but they were later split (current taxonomy) in the seventh edition of the Checklist (AOU 1998), likely largely based on the phylogenetic work of Livezey (1995). Using 92 morphological characters, Livezey (1995) found that *O. [jamaicensis] ferruginea* was more closely related to Lake Duck (*O. vittata*) of South America and Blue-billed Duck (*O. australis*) of Australia. Livezey (1995) did not include the subspecies *andina*, which he noted may be of hybrid status, in his analyses, but provisionally included it as a subspecies of *O. jamaicensis*. Siegfried (1976) also argued, largely on the basis of the non-breeding plumage of males, that *ferruginea* was closely related to *O. vittata*, *O. australis*, and Maccoa Duck (*O. maccoa*), and that *O. jamaicensis* was more distantly related to this entire group. However, not all authorities consider *jamaicensis* and *ferruginea* to be distinct species (e.g., Dickinson and Remsen 2013, Remsen et al. 2020). For instance, Johnsgard (1965) considered the taxa to be conspecific, based on the progressive transition from white-cheeked males in the north to black-headed males in the south.

**New Information:**

Since the publication of the seventh edition of the AOU Checklist (AOU 1998), additional research has helped to clarify the relationships of *jamaicensis*, *andina*, and *ferruginea*. In their molecular phylogeny of stiff-tailed ducks, McCracken and Sorenson (2005) found that *jamaicensis*, *andina*, and *ferruginea* formed a tight clade, and that *ferruginea* was more distantly related to *O. vittata* and *O. australis*, contrary to the findings of Livezey (1995). In addition to this, McCracken and Sorenson (2005) found that *andina* shared mitochondrial DNA haplotypes

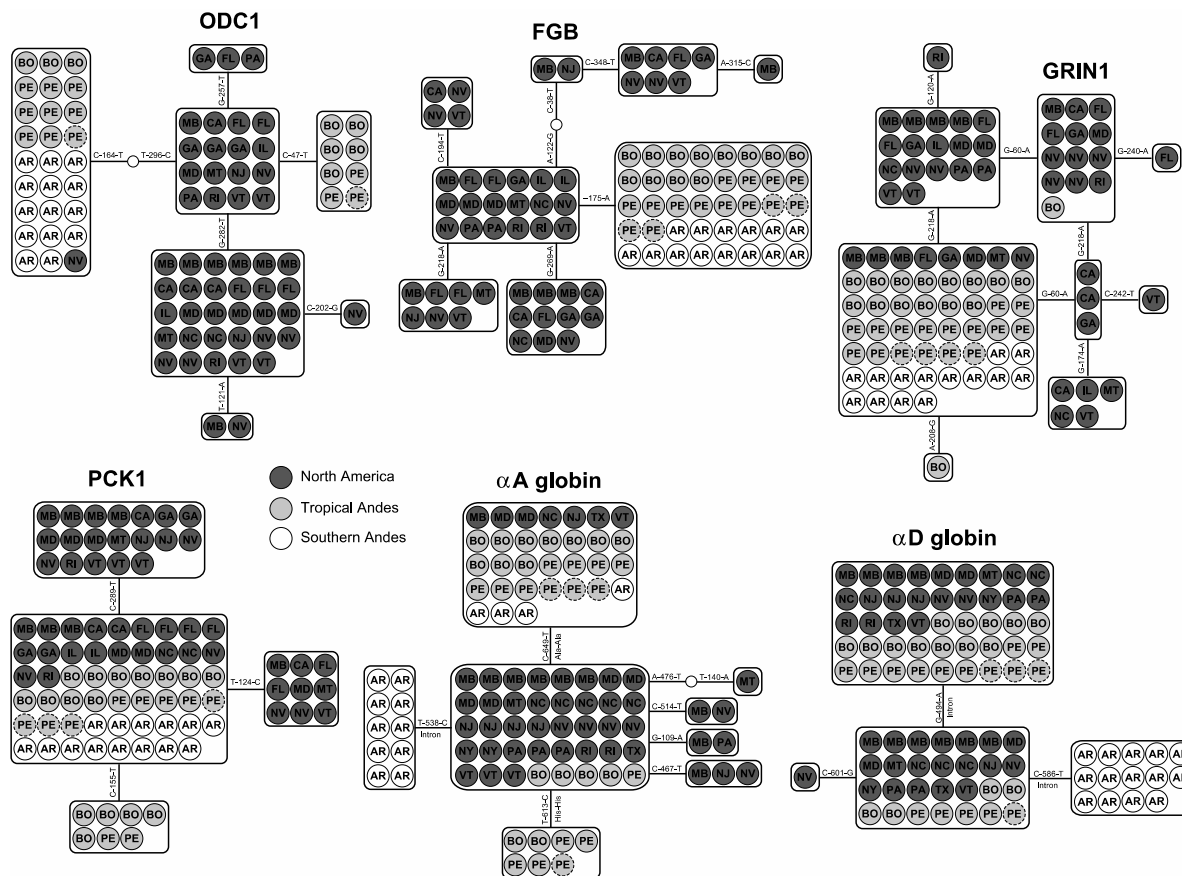
with both *jamaicensis* and *ferruginea*, supporting Fjelds s's (1986) argument that, based on extensive plumage variation in cheek color of males, *andina* may be a population of hybrid origin. In half of their phylogenetic reconstructions based on mtDNA sequence data, McCracken and Sorenson (2005) found a monophyletic *ferruginea* nested within *jamaicensis*, with *andina* scattered throughout *jamaicensis*; in other reconstructions, *ferruginea* was not monophyletic, and included one *jamaicensis* and one *andina* sample (Figure 1).



**Figure 1.** Phylogenetic tree based on 924 bp of mtDNA (control region and phenylalanine t-RNA genes) from McCracken and Sorenson (2005). Results show the results of parsimony and maximum-likelihood analyses. In these trees, the two alternate hypotheses for relationships among *jamaicensis* (OXJA), *andina* (OXAN), and *ferruginea* (OXFE). The other taxa

represented on this tree include *australis* (OXAU), *maccoa* (OXMA), *leucocephala* (OXLE), and *Nomonyx dominicus* (NODO).

Muñoz-Fuentes et al. (2013) later investigated the evolution of and relationships among *jamaicensis*, *andina*, and *ferruginea* by sequencing mtDNA, four nuclear introns, and three hemoglobin genes. Similar to McCracken and Sorenson (2005), Muñoz-Fuentes et al. (2013) found that *jamaicensis*, *andina*, and *ferruginea* were all very closely related, and that the South American taxa shared many alleles with North American *jamaicensis*; for the nuclear introns and mtDNA, *andina* typically shared more alleles with both *jamaicensis* and *ferruginea* (Figure 2). In addition to the sharing of many alleles among the three taxa, Muñoz-Fuentes et al. (2013) also found that northern *jamaicensis* had higher allelic richness than the two South American taxa.



**Figure 2.** Haplotype network of nuclear genes (introns and hemoglobin genes) for *jamaicensis* (dark gray circles), *andina* (light gray circles), and *ferruginea* (white circles) from Muñoz-Fuentes et al. (2013). Results show that many alleles are shared among the three taxa, with very few alleles unique to the South American taxa. In addition, North American *jamaicensis* tends to show greater allelic richness for these six genes, supporting the hypothesis of Muñoz-Fuentes et al. (2013) that Ruddy Ducks likely colonized South America from the north in a step-wise fashion, with these colonizations resulting in a reduction of genetic diversity from an ancestral northern population.

The authors also estimated gene flow between the three taxa, and more broadly between North America and South America. Although not strongly supported, they found evidence for gene flow from northern *jamaicensis* into *andina*. They found very little evidence for gene flow from south to north (either from *ferruginea* to *andina*, or *andina* to *jamaicensis*), with gene flow peaking at 0 in both cases in their models. Isolation-with-migration (IM) models looking more broadly at gene flow between North America and South America were stronger, and gene flow from North America was estimated to be four times greater into South America than in the opposite direction (Muñoz-Fuentes et al. 2013). Muñoz-Fuentes et al. (2013) argued that although there have been no definitive records of northern *jamaicensis* in South America, it is likely that during periods of population expansion during various glacial cycles, *jamaicensis* regularly occurred in northern South America, thus contributing to the levels of gene flow they found. Based on the models of gene flow, and the greater genetic diversity present in North American populations, the authors suggested that South America was colonized in a step-wise fashion from North America, with Ruddy Ducks first colonizing the northern Andes in Colombia (*andina*), and this population subsequently colonizing southern South America (*ferruginea*; Muñoz-Fuentes et al. 2013).

### **Recommendation:**

Based on the phenotypic data and the genetic studies of McCracken and Sorenson (2005) and Muñoz-Fuentes et al. (2013), we recommend that Ruddy Duck *O. jamaicensis* and Andean Duck *O. ferruginea* be treated as a single species. This would bring NACC into agreement with SACC and would be consistent with McCracken and Sorenson (2005), Muñoz-Fuentes et al. (2013), and Donegan et al. (2015), all of which considered *ferruginea* and *andina* to be conspecific with *jamaicensis*.

Although the South American taxa do not currently overlap or come into contact with North American *jamaicensis*, the apparently extensive admixture between *ferruginea* and *jamaicensis* in *andina* indicates at least historical hybridization; it appears that the entire distribution of *andina*, which extends many hundreds of kilometers from northeastern to southern Colombia, includes individuals with intermediate phenotypes, suggesting widespread admixture within *andina*. Although the genetic patterns discussed in Muñoz-Fuentes (2013) could also be present if the South American taxa were biological species, the fact that there are so few fixed genetic differences between these taxa, and the extensive mtDNA haplotype sharing, especially in *andina*, suggest that these taxa are probably best treated as subspecies.

Hybridization among ducks is common, including in species of *Oxyura*. Ruddy Ducks introduced to Europe hybridize extensively with the native White-headed Duck (*O. leucocephala*), and extensive introgression is a major threat to endangered populations of *leucocephala* in Spain and Morocco (Salvador et al. 2020). Although *jamaicensis* hybridizes with both *ferruginea* and *leucocephala*, there are several important differences between *jamaicensis* and *ferruginea* in South America, and *jamaicensis* and *leucocephala* in Europe. One is the level of genetic divergence between *jamaicensis* and *leucocephala*, which are not sister species; *leucocephala* appears to be more closely related to the other Old World taxa, Maccoa Duck (*O. maccoa*) and Blue-billed Duck (*O. australis*; Figure 1; McCracken et al. 2000, McCracken and Sorenson 2005). In addition to these genetic differences, *leucocephala* and *jamaicensis* also have

distinctly different vocalizations and courtship displays (Brua 2020, Salvador et al. 2020). Even without these differences, the *jamaicensis-leucocephala* and *jamaicensis-ferruginea* systems are still not directly comparable, because hybridization with *leucocephala* is the result of human introduction, and this artificial situation may be exacerbated by competitive asymmetry between the two species (Muñoz-Fuentes et al. 2007, Salvador et al. 2020). Although the courtship displays of *andina* and *ferruginea* have not been well-studied, current evidence suggests that they are not different from those of North American *jamaicensis*.

## Literature Cited:

- Adams, J., and E. R. Slavid (1984). Cheek plumage pattern in Colombian Ruddy Duck *Oxyura jamaicensis*. *Ibis* 126: 405-407.
- American Ornithologists' Union (1983). Check-list of North American Birds. Sixth Edition. American Ornithologists' Union, Washington, D.C., U.S.A.
- American Ornithologists' Union (1998). Check-list of North American Birds. Seventh Edition. American Ornithologists' Union, Washington, D.C., U.S.A.
- Brua, R. B. (2020). Ruddy Duck (*Oxyura jamaicensis*), version 1.0. In Birds of the World (P. G. Rodewald, Editor). Cornell Lab of Ornithology, Ithaca, N.Y., U.S.A.  
<http://doi.org/10.2173/bow.rudduc.01>
- Dickinson, E. C., and J. V. Remsen Jr. (Editors) (2013). The Howard and Moore Complete Checklist of the Birds of the World. Fourth Edition. Volume 2. Non-Passerines. Aves Press, Eastbourne, United Kingdom.
- Donegan, T., A. Quevedo, J. C. Verhelst, O. Cortés-Herrera, T. Ellery, and P. Salaman (2015). Revision of the status of bird species occurring or reported in Colombia 2015, with discussion of BirdLife International's new taxonomy. *Conservación Colombiana* 23: 3-48.
- Fjeldså, J. (1986). Color variation in the Ruddy Duck (*Oxyura jamaicensis andina*). *The Wilson Bulletin* 98(4): 592-594.
- Johnsgard, P. A. (1965). Handbook of Waterfowl Behavior. Cornell University Press, Ithaca, N.Y.
- Livezey, B. C. (1995). Phylogeny and comparative ecology of stiff-tailed duck (Anatidae: Oxyurini). *Wilson Bulletin* 107(2): 214-234.
- McCracken, K. G., J. Harshman, M. D. Sorenson, and K. P. Johnson (2000). Are Ruddy Ducks and White-headed Ducks the same species? *British Birds* 93(8): 396-398.
- McCracken, K. G., and M. D. Sorenson (2005). Is homoplasy or lineage sorting the source of incongruent mtDNA and nuclear gene trees in the stiff-tailed ducks (*Nomonyx-Oxyura*)? *Systematic Biology* 54(1): 35-55.
- Muñoz-Fuentes, V., M. Cortázar-Chinarro, M. Lozano-Jaramillo, and K. G. McCracken (2013). Stepwise colonization of the Andes by Ruddy Ducks and the evolution of novel  $\beta$ -globin variants. *Molecular Ecology* 22: 1231-1249.
- Muñoz-Fuentes, V., C. Vilá, A. J. Green, J. J. Negro, and M. D. Sorenson (2007). Hybridization between white-headed ducks and introduced ruddy ducks in Spain. *Molecular Ecology* 16: 629-638.
- Remsen, J. V., Jr., J. I. Areta, E. Bonaccorso, S. Claramunt, A. Jaramillo, D. F. Lane, J. F. Pacheco, M. B. Robbins, F. G. Stiles, and K. J. Zimmer (2020). A classification of the bird species of South America. American Ornithological Society.  
<http://www.museum.lsu.edu/~Remsen/SACCBaseline.html>



Salvador, A., J. A. Amat, and A. J. Green (2020) White-headed Duck (*Oxyura leucocephala*), version 2.0. In Birds of the World (S. M. Billerman and B. K. Keeney, Editors). Cornell Lab of Ornithology, Ithaca, N.Y., U.S.A. <http://doi.org/10.2173/bow.whduc1.02>  
Siegfried, W. R. (1976) Social organization in Ruddy and Maccua ducks. Auk 93: 560-570.

**Submitted by:** Shawn M. Billerman and Terry Chesser

**Date of Proposal:** 1 February 2021