AOS Classification Committee – North and Middle America

Proposal Set 2024-C

20 March 2024, revised 28 April 2024

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Treat Tyto furcata as a separate species from Barn Owl T. alba

Background:

Two recent proposals to NACC (<u>2018-C-13</u> and <u>2022-B-6</u>) have considered the taxonomic status of various taxa within the Barn Owl (*Tyto alba*) complex. Comments on both NACC proposals and one submitted concurrently to SACC (<u>#908</u>) raised concerns about the lack of analysis of vocal differences among taxa.

Although pointed out in comments under the previous proposals, we highlight here a distinctive and prominent flight call associated with mate attraction that is uttered by New World Barn Owls and is absent in Old World Barn Owls. Based on this and concordant genetic data, we recommend adoption of New World *Tyto furcata* as a separate species from the Old World taxa. Work that might refine understanding of the Barn Owl complex both within the New World and separately in the Old World is discussed along with what is known about vocal and plumage differences. Genetic data presented in the previous proposals are included for the sake of completeness.

The cosmopolitan Barn Owl (*Tyto alba*) has a long and complex taxonomic history, with the American, African, southeast Asian, Australian, and many insular taxa being considered separate species at various points. The current AOS taxonomy (AOU 1998) is largely based on Peters (1940) who lumped many previously recognized species under a cosmopolitan *Tyto alba*, with 34 then-recognized subspecies. When the AOU expanded coverage to include the West Indies and Middle America, *T. glaucops* (previously subsumed under *T. alba* by Peters 1940) was recognized as a separate species based on its sympatry with *T. a. pratincola* (AOU 1983). More recently, some authors have opted to consider the American *furcata* clade and the southeast Asian + Australian *javanica* clade as two species separate from the *alba* clade of Europe and Africa (e.g., Gill et al. 2024). Additionally, three insular taxa from the Macaronesian islands are occasionally elevated to species level (Robb 2015), as are some insular taxa in the Indian Ocean and Indonesia. Many of these insular taxa are much darker than their mainland counterparts, including some with dark facial disks. These are all outside our area but highlight that species limits in the complex are highly dynamic, and that insular taxa especially are treated as distinct species by some authors.

For reference *pertinent to this proposal*, select taxa and subspecies groups (based on Clements 2023) along with their respective distributions are listed below:

- *alba* (Scopoli, 1769). Subspecies group (4 taxa) in Europe, n. Africa, and Middle East east to Iran (hereafter *alba* ssp. group); the *alba* clade as a whole includes the *alba* ssp. group plus six other subspecies that occur on islands off Africa (5 taxa) and across sub-Saharan Africa (1 taxon, *T. a. poensis*), each regarded as a separate subspecies group by Clements (2023).
- *javanica* (Gmelin, 1788). Subspecies group (6 taxa) in Pakistan east across s. Asia to Australia; also referred to as *javanica* clade.

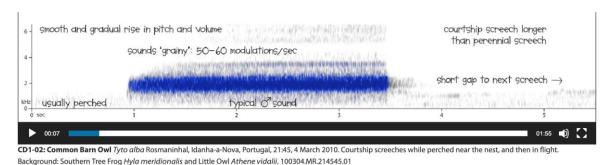
- *furcata* (Temminck, 1827). In *sensu stricto* (*s.s.*) refers to *T. a. furcata*, a monotypic subspecies group, White-winged Barn Owl (Clements 2023), of Cuba, Isle of Pines, Cayman Islands, and Jamaica; elevated to species rank based on osteological differences by Suárez and Olson (2020); sometimes regarded as part of *tuidara* subspecies group. For this proposal, *furcata* clade or simply *furcata* refers to all 11 subspecies in the Americas, including *tuidara* group, currently classified under *T. alba* (*sensu lato*, *s.l.*) and proposed to be split as *T. furcata*.
- *tuidara* (J. E. Gray, 1827)*. Subspecies group (6 taxa) ranges from Canada to Tierra del Fuego. Type locality of *tuidara* is Brazil. [* see footnote on publication year]
- punctatissima (Gould & G. R. Gray, 1838). Galápagos.
- *pratincola* (Bonaparte, 1838). Mainland North America south to southern Mexico, recently to Hispaniola. Part of the *tuidara* subspecies group.
- glaucops (Kaup, 1852)*. Hispaniola. [* see footnote on publication year]
- *insularis* (Pelzeln, 1872). St. Vincent south to Grenada. With *nigrescens* grouped as Lesser Antilles Barn Owl (Clements 2023) or as a species (Suárez and Olson 2020); regarded as subspecies of *T. glaucops* by Bruce (1999) and Gill et al. (2024).
- *nigrescens* (Lawrence, 1878). Dominica. With *insularis* grouped as Lesser Antilles Barn Owl (Clements 2023) or as a subspecies under *insularis* (Suárez and Olson 2020); regarded as subspecies of *T. glaucops* by Bruce (1999) and Gill et al. (2024).

New information:

VOCALIZATIONS:

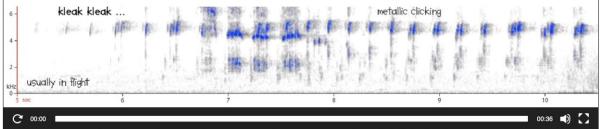
A primary issue raised by committee members in response to previous proposals is the lack of analysis of vocalizations in the Barn Owl complex. Although no formal analysis is yet published, we think that the qualitative analysis provided here is sufficient to elevate the *furcata* clade to species rank. Across the genus *Tyto* and within the Barn Owl complex there are a wide array of both vocal and mechanical sounds. Here we focus on the context of vocalizations associated with breeding, which is also the time when these owls are most vocal. Two specific types of vocalizations are defined below: *Screech* and *kleak-kleak*.

- Screech: Categorized as either courtship or perennial (Robb 2015). Recordings below are from <u>https://soundapproach.co.uk/species/common-barn-owl/</u>
 - (1) Courtship screech: Used by males of the alba clade (here specifically alba ssp. group), typically given when perched but also in flight. Courtship screech in addition to perched context is also longer and with shorter gaps between calls compared to the perennial screech. Existence and context of this courtship screech is unknown in the *furcata* clade (G. Vyn *fide* Robb 2015). Notably, none of us has ever experienced a bird of the *furcata* clade screech from a perch. This needs further investigation.



Spectrogram of courtship screech by T. a. alba (Robb 2015)

- (2) Perennial screech: Used by both sexes, uttered in flight and less often from perch in alba clade but perhaps never (or rarely?) given from perch in *furcata* clade. Further investigation of the perennial screech of the *alba* clade and the flight calls of the *furcata* clade is needed, especially in the context of whether the call is uttered when flying or perched.
- kleak-kleak (Vyn 2006): Given in flight by *furcata* clade, perhaps most often used by unpaired males (Gerrit Vyn, pers. comm. *fide* M. Robb) or males in vicinity of nest (Marti et al. 2020); presumed to have an important role in mate attraction. Absent in both *alba* and *javanica* clades. Sometimes categorized under terms like cackles, chirrups, or twitters.



CD1-06: American Barn Owl Tyto furcata, Oahe Dam, Stanley County, South Dakota, USA, 23:30, 13 April 2007. Kleak-kleak calls and bill-snapping during the courtship period. Background: Northern Pintail Anas acuta. Gerrit Vyn & The Macaulay Library at the Cornell Lab of Ornithology

Spectrogram of kleak-kleak by T. a. pratincola (Vyn 2006)

The *screech* (or *scream* in Marti et al. 2020) is the best-known vocalization. The *kleak-kleak* call was described under "*chirrups and twitters*" in Marti et al. (2020). We note that much published information on vocalizations draws on Old World studies. Thus, it is important to heed the warning in Marti et al. (2020):

"Other than anecdotal notes, only unpublished information is available on vocalizations by the North American race (E. McLean and B. Colvin pers. comm.). Some of the calls described [...] have not been positively documented for the North American race."

Indeed, much of the behavioral context and sounds ascribed to Barn Owls in the Americas is adopted from Old World literature. Our summary here is guided in large part by "*The Sound Approach*" (Robb 2015), with especially helpful material published by that author on Barn Owls of the *alba* ssp. group <u>here</u>. One of us (O.J.) perused the sonograms of all available Old World

recordings on Xeno-canto (1,080 *alba* clade and 62 *javanica* clade), plus a large selection in the Macaulay Library. **We found no examples of** *kleak-kleak* in either *alba* or *javanica* clades.

From listening to recordings of many *Tyto* species, including *glaucops* and various Masked/Grass owls it is clear that the loud screech call is fairly conserved across the genus. There is some variation in length of the call among species, and some have a whistled quality, but there is also much intra-taxon variation in call length, perhaps related to whether these are courtship or territorial, perennial screeches.

Typical screech calls of the three clades are given below. For the *javanica* and *alba* clades, the screech tends to fade out and fall in pitch at the end of the calls, unlike those of the *furcata* clade, which end more abruptly and rise slightly at the end:

alba: <u>https://macaulaylibrary.org/asset/301733691</u> *javanica*: <u>https://macaulaylibrary.org/asset/117266311</u> and <u>https://macaulaylibrary.org/asset/271631421</u> *furcata*: <u>https://macaulaylibrary.org/asset/50147</u>

European birds (*alba*) do tend to give longer screech calls than *furcata*, whereas those of *javanica* are generally shorter but with a subtly different quality than the calls of *furcata*. However, *alba* and *javanica* commonly have a harsh whistled quality to the notes:

alba: <u>https://macaulaylibrary.org/asset/235237551</u> and <u>https://macaulaylibrary.org/asset/367445881</u> *javanica*: <u>https://macaulaylibrary.org/asset/273379781</u>

Here is an exceptionally long screech call from *furcata*: <u>https://macaulaylibrary.org/asset/425012341</u>

Non-screech calls, when present, seem quite different among species. The Australian Masked Owl (*T. novaehollandiae*) utters a call called a *cackle* that is said to be given in courtship display flights by males circling over breeding territory (Higgins 1999, page 919). An example of that cackle call is here (<u>https://macaulaylibrary.org/asset/539506871</u>) and seems analogous to the *kleak-kleak* call of *furcata*. Likewise, analogous vocalizations exist in the two grass owls, *T. capensis* and *T. longimembris* (Robb 2015).

The *kleak-kleak* call of *furcata* is present across its range, with recordings from California, Florida, and Brazil. Here are a few examples:

https://macaulaylibrary.org/asset/172455681 https://macaulaylibrary.org/asset/245778421 https://macaulaylibrary.org/asset/554918181

Critically, this "*kleak*" call appears to be entirely absent from both *alba* and *javanica* according to *The Sound Approach* and our own perusal of recordings. Robb (2015), quoting Gerrit Vyn (pers. comm.), wrote that "unpaired males use this call most often...so it must have an important role in mate attraction." Marti et al. (2020) also reported that males give the "*kleak*" call in the vicinity

of the nest, soon after leaving the daytime roost, and when approaching with food deliveries. Given that analogous calls exist in *T. novaehollandiae* and other *Tyto*, we suspect it has been lost in *alba* and *javanica*. **Regardless, in our view this is a diagnostic vocal difference between the clades.**

In our personal experience, this "*kleak*" call is nearly always given in flight. For example, JLD recently witnessed (summer 2023) one bird giving the *kleak-kleak* call in fluttery flight almost nonstop for a few minutes as it circled a lit up area near a known nest. The only mention that we can find regarding the "*kleak*" call for *alba* is Bunn et al. (1982), who wrote that it is reportedly uncommon in Britain. This contradicts Robb (2015) who has extensive experience with the *alba* ssp. group in Portugal and elsewhere. Despite fairly exhaustive searches of databases online we were unable to find any recordings of this vocalization from the Old World. This reference of the *kleak* call in Britain appears anecdotal and could refer to another call that Bunn (1977) called the *kit-kit* call.

We feel it worth mentioning that no North American Field Guide or popular book on owls, including König et al. (1999) and Weidensaul (2015), mentioned the *kleak-kleak* call or its context in display. How did the birding community miss this characteristic sound of New World birds? The one source that does have it is Marti (1992), but none of us picked this up.

GENETICS:

A paper by Uva et al. (2018) analyzed two nuclear and five mitochondrial loci to estimate a phylogeny of Tytonidae. This paper was mentioned in the 2018-C-13 NACC proposal, and the proposal included a haplotype map based on a single mitochondrial gene but did not include the phylogeny based on the larger set of genes. That proposal did include the phylogeny from earlier work by Aliabadian et al. (2016) that was based on slightly fewer genes and many fewer taxa. Although comments from many committee members considered the genetic evidence inconclusive on its own, we include it in the current proposal for the sake of completeness. Relevant figures from Aliabadian et al. (2016) and Uva et al. (2018) are reproduced below.

Based on the genetic data, the current circumscription of *Tyto alba* comprises three major clades: *alba, furcata*, and *javanica*, with the former two being sisters. Uva et al. (2018) advocated elevating both *furcata* and *javanica* to species rank. Whether the *alba* and *javanica* clades should be treated as species is outside our purview and perhaps should await potential future contact (see Additional Considerations, below).

A few issues arise. First, *Tyto glaucops* is embedded within the *furcata* clade, being sister to *punctatissima* of the Galápagos, the two in turn being sister to the rest of the *furcata* clade. However, Uva et al. (2018) noted that "given the poor node support (0.77 PP/66 BS) putative genetic distinctiveness of Caribbean and Pacific populations needs further confirmation" and we agree with that assessment. Regardless, the species status of *punctatissima* should be left to SACC. Phylogeny from Aliabadian et al. (2016):

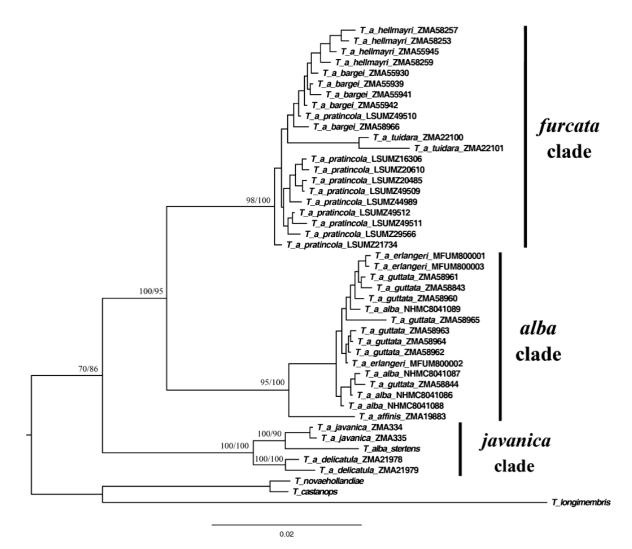
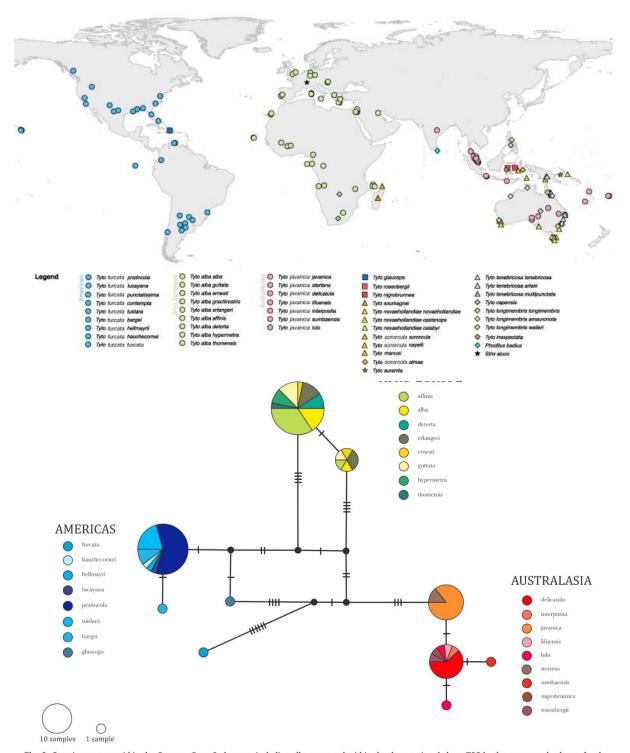


Figure 1. Fifty-percent majority-rule consensus tree sampled from the posterior distribution of the most-partitioned analysis based on 2838 bp of *16s*, *Cox1*, *Cytb*, and *Rag1*. Posterior probability values from the Bayesian analysis are indicated as the first number and the second number represents maximum likelihood bootstrap values.



Sampling map, haplotype network, and phylogeny from Uva et al. (2018):

Fig. 3. Genetic structure within the Common Barn Owl group, including all taxa nested within the three major clades – TSC haplotype networks drawn for the Mitochondrial Cytochrome *b* gene, following the classifications found in Gill and Donsker (2018).

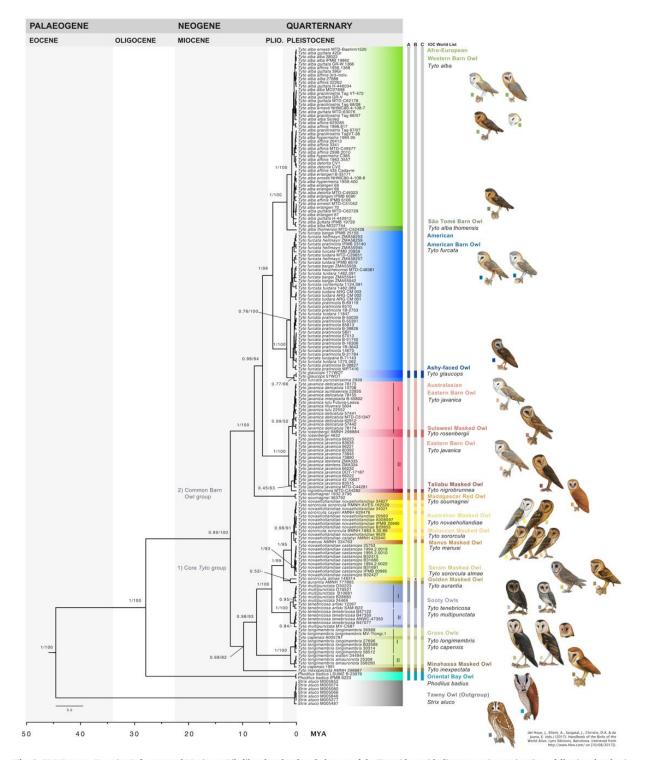


Fig. 2. BI/ML tree – Bayesian Inference and Maximum Likelihood molecular phylogeny of the Tytonidae, with divergence time estimations, following the classifications found in Gill and Donsker (2018) (IOC World List; scientific names and vernacular names at the right), based on the BEAST analysis of five mitochondrial and two nuclear markers. Numbers near the nodes refer to BI posterior probabilities (PP)/ML bootstrap support values (BS). Clades not supported by the ML approach are illustrated with a dash. Low support values towards the tips of the phylogeny are not shown. Colour codes correspond to Fig. 1; Coloured bars at the right of terminal clades show a comparison among species-level classifications according to three different authorities: A = del Hoyo and Collar (2014), B = Dickinson and Remsen Jr (2013; x = T. almae not listed), C = Clements et al. (2016); grey bars show taxa lumped under a polytypic species T. alba sensu lato (Common Barn Owl) by all three authorities.

Another issue is that two dark taxa of the Lesser Antilles, *nigrescens* and *insularis*, were not sampled by Uva et al. (2018); these taxa have been considered to be subspecies of *Tyto glaucops* or as their own polytypic species (Suárez and Olson 2020). Given the lack of genetic and vocal information on these taxa, we think it best to leave them as subspecies of *alba* (or *furcata* if this proposal is adopted) for now, pending further study. Also see Additional Considerations, below, regarding anecdotal information on Barn Owl calls heard on Grenada where *insularis* occurs.

A recent paper on Barn Owls of the West Indies by Suárez and Olson (2020) was the basis for NACC proposal 2022-B-6, which did not pass but focused on the species status of glaucops, nigrescens, and insularis plus some extinct forms. Suárez and Olson (2020) analyzed osteological data from extinct and extant Caribbean Tyto. They elevated the taxon T. a. furcata Temminck, 1827, of Cuba, the Cayman Islands, and Jamaica to species rank, leaving tuidara J. E. Gray, 1827, as the name for the American mainland species. However, their osteological comparisons were to alba of Europe rather than to pratincola of the United States, so the question of species rank for *furcata s.s.* is unresolved. With regard to the priority of *furcata* for American Barn Owls over tuidara if split from alba, see footnote establishing that furcata has priority. Also note that *furcata s.s.* is considered a separate subspecies group by Clements (2023) based on the paler white plumage, especially of the wings. If, in the future, furcata s.s. is elevated to species rank, then the name for the remaining American barn owls would be tuidara Gray 1827. We note that Uva et al. (2018) sampled one individual that they labeled as furcata s.s. (sample number IPMB 20859), but no list of detailed sample localities is given in the paper or supplementary data and there is no dot from Cuba, Jamaica, or the Cayman Islands (the distribution of *furcata*) on their sampling map; moreover, we do not recognize the museum acronym and were unable to find a relevant record on VertNet or GBIF. Thus, it is unclear to us if true *furcata* was sampled by Uva et al. (2018). Although it would be the nominate taxon of the American clade, we think it extremely unlikely that it would be more closely related to Old World taxa than to mainland North American taxa, so it should not affect the separation of the furcata clade from the alba + javanica clades. It may have implications for the taxonomy of other Caribbean Tyto, however, if those are elevated to species rank in the future.

PLUMAGE COLORATION:

Romano et al. (2019, Figure 2 reproduced here) showed that plumage coloration appears closely tied to rainfall and temperature. As can be seen in their maps, overall plumage coloration and spot size are not drastically different between the three clades (*furcata, alba, and javanica*). Nevertheless, the plumage and size of several taxa within the Americas do appear quite distinctive, e.g. *punctatissima* of the Galápagos, *bargei* of Curaçao, and *insularis/nigrescens* of the Lesser Antilles. Indeed, Ridgway (1914) separated these taxa and *glaucops* from *furcata s.s.* and the remaining mainland American Barn Owl taxa based on non-overlapping size, among other characters. Although not part of this proposal, we would not be surprised if more detailed studies suggest splitting more of these insular New World taxa. Interestingly, Ridgway (1914) noted that *bargei* is similar to nominate *alba* of Europe in coloration but is much smaller. We note that Uva et al. (2018) sampled *bargei* and found it nested within the *furcata* clade.

ADDITIONAL CONSIDERATIONS:

We currently consider *Tyto glaucops* unambiguously a separate species from *T. alba s.l.* based on sympatry on Hispaniola. Earlier authors, however, considered *glaucops* conspecific with *alba s.l.* (e.g., Hartert 1929, Peters 1940). On Hispaniola, *T. alba* either colonized sometime after 1930 or was overlooked before that (Keith et al. 2003). The source population is thought likely to have been *pratincola* from the mainland or Bahamas (Marti et al. 2020). Species limits considered by earlier authors were based on the same characters that we are dealing with currently, namely plumage and vocalization differences among allopatric insular populations (although now supplemented by genetic data). However, once colonization by *alba s.l.* occurred, it became clear that *glaucops* and *alba s.l.* were distinct species, a treatment followed ever since.

We listened to available recordings of *glaucops* (of which there are few, see examples below) and were not struck by major differences from *furcata*, which raises additional questions. If *furcata* and *glaucops* are sympatric, how are these being maintained as separate species

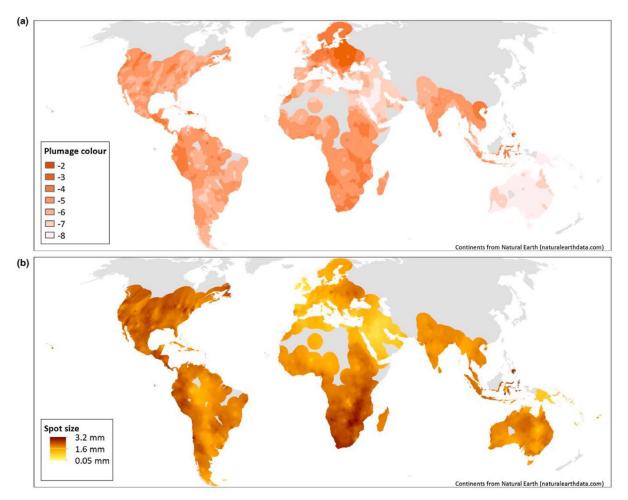


FIGURE 2 Geographical variation in plumage colour (a) and spot size (b) in the common barn owl group, the Western barn owl (*Tyto alba*), the American barn owl (*Tyto furcata*) and the Eastern barn owl (*Tyto javanica*). The three evolutionary lineages inhabit geographically separated ranges [Colour figure can be viewed at wileyonlinelibrary.com]

despite the lack of described vocal differences? The screech call of *glaucops* seems a bit longer and more descending compared to *furcata*, which is interesting. If that is the case, then there are some minor vocal differences in the screech. A similar *kleak* call to the *furcata* clade is uttered by *glaucops* and could be taken as further evidence that this is a major character separating all New World barn owls (broadly speaking) from Old World barn owls. This, then, would be more evidence for splitting *furcata*. On the other hand, if plumage differences are keeping *glaucops* and *furcata* separate, how does that fit into our understanding of species limits in the genus given that plumage seems to covary with all sorts of things not related to species limits? Perhaps the fast evolution of plumage in the genus allows for occasional evolution of drastically different-looking species?

Here is an example of the cackling *kleak* call by *glaucops*: <u>https://macaulaylibrary.org/asset/175146681</u>

And recordings of its screech: https://macaulaylibrary.org/asset/163149861 https://macaulaylibrary.org/asset/180725

We note in passing that Alvaro Jaramillo suggested that Barn Owls on Grenada (*insularis*) gave vocalizations "much more like Ashy-faced Owl than Barn Owl" (Norton et al. 2005, page 512). Jaramillo's analysis was repeated by Wiley (2021, page 209), who himself reviewed the taxonomic history of Barn Owls in the eastern Greater Antilles through the Lesser Antilles. Note that east and south of *glaucops* on Hispaniola (and formerly Puerto Rico; Suárez and Olson 2020), Barn Owls occur on Dominica (*nigrescens*) and then on St. Vincent, some islands in the Grenadines, and south to Grenada (*insularis*), with no confirmed records for intervening Martinique and St. Lucia (Wiley 2021). To our ears, the calls of *T. glaucops* do not sound that different from the *furcata* clade so opining about calls of *insularis* on Grenada might be difficult without careful analysis. Some recordings of *insularis* sound similar to vocalizations of mainland *furcata* (https://macaulaylibrary.org/asset/541151851) but others do sound quite different and rather like some recordings of *alba s.s.* (https://macaulaylibrary.org/asset/317964701).

Given that the node separating *glaucops/punctatissima* from *furcata* is 1.75 Ma (Uva et al. 2018), it seems to us a reasonable yardstick to consider the much older splits of *alba* and *javanica* as different species from *furcata* (*javanica* vs. *alba/furcata* is 6.25 Ma, *alba* vs. *furcata* is 4.35 Ma). The alternative here is that *glaucops/punctatissima* are a recent offshoot from *furcata* that (unambiguously in *glaucops*) evolved reproductive isolation, whereas *furcata* and *alba* have not. We think that this is unlikely given that *glaucops* seems to have evolved reproductive isolation despite limited or no differences in vocalizations, whereas the limited vocal data we have indicate very distinct vocalizations between *furcata* and *alba* + *javanica* (primarily the lack of a "*kleak*" call in the latter as well as existence of courtship screech in at least *alba* ssp. group in *alba* clade). We also note that the node uniting *glaucops* and *punctatissima* has lower support (0.77 posterior probability/66% bootstrap) than most other nodes in that part of the tree, so the *furcata* clade may not be paraphyletic with broader genomic sampling. The node separating *glaucops* and *punctatissima* is 0.44 Ma. Uva et al. (2018) did not provide confidence intervals on these node date estimates.

There is also limited evidence that at least *furcata* and *javanica* are reproductively isolated. Populations from each of those clades were introduced onto Lord Howe Island to control rats: *T. a. delicatula* from the Australian mainland in 1923, and *T. a. pratincola* from the San Diego Zoo in 1927 (Hindwood 1940). Birds from these two taxa were not known to interbreed, and this was taken as evidence that the two should not be considered the same species (Bruce 1999). The only Barn Owl specimens collected from Lord Howe are of the Australian population, and no Barn Owls are known to have persisted past the mid 1980s (McAllan et al. 2004). It is presumed the American birds died out soon after introduction. This contact between the *javanica* and *furcata* clades could suggest that assortative mating was taking place, but the period of sympatry was brief compared to the longer period of sympatry between *pratincola* and *T. glaucops* on Hispaniola. We do note that *javanica* is the more distant clade in the phylogeny and does not provide direct evidence of species rank for the *alba* clade versus the *furcata* clade. However, it does suggest that multiple species exist within the cosmopolitan Barn Owl.

Finally, the International Ornithologists' Union Working Group on Avian Checklists (WGAC) has recently split Barn Owl into three species, elevating the *javanica* and *alba* clades in addition to *furcata*. Although recognizing two Old World species is outside our purview, support for this is based on morphological differences (Dick Schodde *fide* T. Chesser) and genetic evidence showing that the *javanica* and *alba* clades are not sisters (Uva at al. 2018). It is important to note, however, that Barn Owls have expanded east across much of Iran starting in the 1990s (Osaei et al. 2007). Prior to this, when the species was rare in Iran, specimens were ascribed to *T. a. erlangeri* of the *alba* clade (Vaurie 1965). The easternmost record in Iran (subspecies unknown) is at Bam, Kerman Province (Osaei et al. 2007), which is 900 kilometers (560 miles) west of the western limit of *T. a. stertens* of the *javanica* and *alba* is possible, and further research would help to elucidate whether reproductive isolating mechanisms such as vocalizations exist to maintain species-level differences. Nevertheless, we think it is worth separately considering elevating *javanica* to species rank to align with this global checklist.

Recommendation:

Please vote on these two options:

- (a) Split *Tyto alba* (Scopoli, 1769) into two species to recognize the vocal and genetic distinctiveness of New World taxa as American Barn Owl, *Tyto furcata* (Temminck, 1827).
- (b) Split *Tyto alba* into three species: *T. alba* (Scopoli, 1769) for European, Middle East, and Afrotropical clade; *T. javanica* (Gmelin, JF, 1788) for south Asian and Australian clade; and *T. furcata* (Temminck, 1827) for American clade.

<u>English names</u>: American Barn Owl is in wide usage by authorities that split *furcata* from *alba*, and we recommend that it be adopted. American Barn Owl was used by Ridgway (1914) for *pratincola*. Because of the possibility of paraphyly with *glaucops* and various other taxa embedded within *javanica*, we think that "Barn Owl" should not be hyphenated unless there is interest in renaming *glaucops* to "Ashy-faced Barn-Owl". "American" in this context refers to the two continents on which this species occurs.

If the *javanica* and *alba* clades are retained as conspecific, then Common Barn Owl is typically used for the Old World taxa. However, the IOC (Gill et al. 2024) recognizes *javanica* and *alba* as Eastern Barn Owl and Western Barn Owl, respectively. Clements (2023) uses Eastern Barn Owl, Eurasian Barn Owl, and American Barn Owl for the subspecies groups. These English names are not ideal and potentially misleading (e.g. "Eurasian" occurs in Africa, and "Eastern" and "Western" could be confused with eastern and western North America). Therefore, consideration or solicitation of alternative names for the Old World taxa is merited.

Acknowledgments and Footnotes:

David Donsker helped research publication dates for relevant taxa. Alan Peterson's Zoonomen.net website provided notes and insights on the publication dates of original descriptions.

* *tuidara* (J. E. Gray, 1827): This name was published at earliest 1 December 1827. Gill et al. (2024), among others, use 1828, whereas Bruce (1999) and Peters (1940), for example, use 1829. The name *Tuidara Owl* of John Edward Gray appeared in part 14 of Griffith's Animal Kingdom, and this part was published 1 December 1827 (see table <u>here</u>). Temminck's "*Strix furcata*" was published 30 June 1827 in livraison 73, plate 432 of the "*Nouveau recueil de planches coloriées*" (see table <u>here</u>) and would therefore have priority regardless of the confusing dates ascribed to *tuidara*. The date of 1827 was used for *tuidara* by Suárez and Olson (2020), presumably based Cowan (1969). We use it here for the same reason.

* *glaucops* (Kaup, 1852): We found conflicting dates for this publication. The fourth edition of Howard and Moore checklist (Dickinson and Remsen 2013), Bruce (1999), and AOU (1998) used 1853. Gill et al. (2024), Peters (1940), and older publications used 1852. Note that Murray Bruce later agreed that 1852 is the correct date (see notes <u>here</u>).

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Submitted by: Louis Bevier, Carla Cicero, Jon L. Dunn, Rosa Alicia Jiménez, and Oscar Johnson

Date of Proposal: 2 February 2024

Treat Anthus japonicus as a separate species from American Pipit A. rubescens

Background:

The taxonomy of pipits in the genus Anthus has long been especially challenging due to the highly conserved nature of plumage, morphology, and to some degree, vocalizations, in the genus. The taxonomic history of Anthus rubescens, A. spinoletta, and A. petrosus is no exception; historically these were all long treated as conspecific under an expanded A. spinoletta. However, these are now generally regarded as three separate species (e.g., Beaman 1994, Inskipp et al. 1996, Sangster et al. 2002): the American Pipit A. rubescens, which breeds in tundra and alpine habitats of North America and eastern Asia; the Water Pipit A. spinoletta, an alpine breeder in Europe and central Asia; and the Rock Pipit A. petrosus, which breeds mainly on rocky coasts of northern and western Europe. In addition, there have been further challenges in classification within A. rubescens, with the subspecies japonicus sometimes being considered distinct enough to warrant species status, at least since an early mtDNA study showed substantial divergence between it and the *rubescens* group (Zink et al. 1995). Indeed, the possibility of treating the eastern Asian subspecies of A. rubescens, which is of somewhat regular occurrence in western Alaska (see, e.g., Lehman 2019) as a full species has been extensively discussed over many years, including in a 2015 NACC proposal (https://americanornithology.org/wp-content/uploads/2020/02/2015-C.pdf) by Dunn and Gibson. That proposal, however, focused its recommendations solely on the potential change of the English name from "American" (long entrenched in the AOS area) to "Buff-bellied" (extensively used in Old World literature, e.g., in the influential Svensson et al. 2023), as no published analysis existed at the time that would have allowed taxonomic committees to change the species status quo with confidence. The 2015 NACC English name proposal failed 4:7 (see comments, https://americanornithology.org/about/committees/nacc/current-priorproposals/2015-proposals/comments-2015-c/), due to a combination of preference for stability within the NACC region and the assumption that the split of *japonicus* would eventually happen anyway. The proposal and comments contain much information not repeated here.

New information:

Garner et al. (2015) provided further details on the complex, focusing on species limits within *A. spinoletta* as presently defined (including *coutellii* and *blakistoni*, both candidate splits), but they also included information on vocalizations of the broader "*A. spinoletta*" complex (including Rock and American pipits) and other closely related species, and a COI phylogeny for the complex, which included both *japonicus* and *rubescens* in the tree (see below). These authors stated that flight calls of nominate *rubescens* sounded somewhat intermediate between those of Meadow Pipit *A. pratensis* and Gray Wagtail *Motacilla cinerea*, whereas those of *japonicus* sounded more like Meadow Pipit, and they suggested that taxonomic reanalysis of *A. rubescens* is needed (Garner et al. 2015).

Now, an integrative analysis advocating for the specific status of *Anthus japonicus* (Doniol-Valcroze et al. 2023) is finally available (<u>https://www.biotaxa.org/Zootaxa/article/view/zootaxa.5343.2.4</u>). The study affirms that

japonicus is indeed very similar to the *rubescens* group (including subspecies *rubescens*, *pacificus* [sometimes merged with nominate], and *alticola*) in breeding plumage (unlike nonbreeding plumage, as is well-known), as well as in common call types, but that *japonicus* often gives a more divergent call type (the "M-shaped call") not produced by the *rubescens* group, and that the two have diverged in mtDNA to an extent typical of (and greater than some) species in the broader "*A. spinoletta*" complex (Doniol-Valcroze et al. 2023). The figures and tables included herein are from Doniol-Valcroze et al. (2023), except for the tree in Fig. 5 of Garner et al. (2015).

Distributions

Distributions of the two taxa are relatively well-known except, unfortunately, in key areas of the breeding range that might be informative about species limits, e.g., far eastern Russia. It is simply unknown whether there is intergradation, parapatry, or even sympatry in this region, and not surprisingly there is considerable uncertainty and confusion in the literature regarding this. A putative Pribilofs breeding record of A. rubescens pacificus for St. Lawrence Island (Fay and Cade 1959 [not seen]) that was listed questionably for the island by Alström et al. (2003) has been shown to be a Red-throated Pipit A. cervinus, based on the juvenile taken (Lehman 2019). JLD has never heard a singing A. rubescens of either group at St. Lawrence in 45 years of leading birding groups there, although pacificus has bred a few times on St. Paul Island in the Pribilofs (D. Gibson pers. comm. to JLD). Gibson and Byrd (2007) stated that they "have seen nothing to suggest that the *japonicus* phenotype is manifest in any Alaska breeding population". However, they refer to "the few Alaska specimens resembling japonicus, as well as other western Aleutian specimens of less clear affinity (at UAM)", as japonicus x pacificus intergrades (Gibson and Byrd 2007), without providing further details on the specimens but citing Hall (1961), although it seems that Hall only mentioned *japonicus* "possibly intergrading with American races in the extreme north-east" of Siberia. Thus, it seems to be anyone's guess as to whether there are actually intergrades, but there does not seem to be strong evidence for their existence.

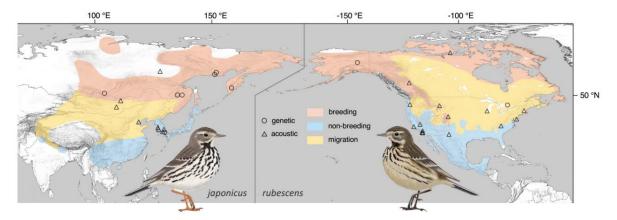
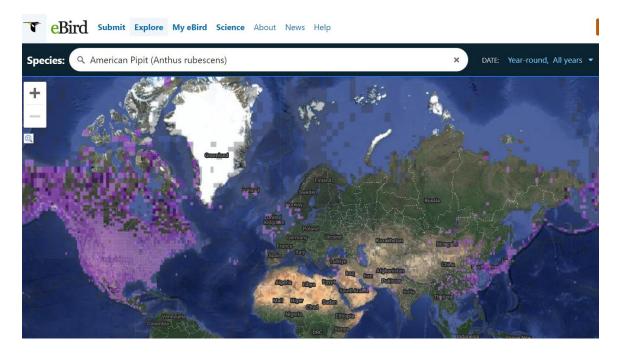


FIGURE 1. Breeding, migrating and wintering distributions of Palearctic *Anthus* [*rubescens*] *japonicus* and Nearctic *Anthus rubescens rubescens/alticola* subspecies groups (from BirdLife International 2022; illustration @Andrew Birch). Circles indicate origins of sequenced individuals and triangles indicate origins of analysed recordings of calls. Localities outside of the usual range of the species complex (e.g., Ireland, Oman and Israel) are not figured here.

External morphology

Because the species *s.l.* is a relatively frequent vagrant to e.g. western Europe (mainly *rubescens* group) and the Middle East (mainly *japonicus*), and both occur with regularity in western Alaska, there is a lot of published material on identification.



The morphological differences were summarized by Doniol-Valcroze et al. (2023) thus:

Period	Plumage trait	A. r. rubescens	A. [r.] japonicus	Remarks	
Year-round	Leg colour	Ruddy-brown to blackish	Pinkish to pale reddish-brown		
	White tip on P5	Most of the tip	Limited to external shaft	Large overlap	
Breeding	Breast streaking	Finely and weakly streaked	Rounder and more abundantly steaked	Both taxa very similar in breeding plumage	
Non- breeding	Breast streaking	Brown to dark brown, narrow, short and thin, evenly spaced, thinner along the flanks	Brown-black to black, large, clearcut and contrasting, reach far and merge on the upper breast, often forming a dark necklace	<i>japonicus</i> can show few and small streaks on the breast or thin streaks on the flanks and some <i>rubescens</i> dark or blackish streaks	
	Underparts colour	Warm buffish	Pale buffy	Both become white/whitish with feather wear, some whitish <i>rubescens</i> exist	
	Upperparts streaking	Almost plain, weakly streaked	Rather conspicuous and dark streaking		
	Upperparts colour	Grey-brown	Dark olive-brown		
	Malar patch	Dark brown, ill- defined shape	Large and dark, triangular shape		
	Median and greater coverts tips	Pale brownish (rarely whitish with wear), form a diffuse wing bar	Pale brownish when fresh and whitish from mid-October, form a conspicuous and crisp wing bar		

Vocalizations:

The common flight call type of both *japonicus* and the *rubescens* group is very similar, although they do form largely separate groups on a PCA (below), but the "M-shaped calls" exclusive to *japonicus* are distinctive, at least to those with good high-frequency hearing and on sonagrams. A key point here is that other, uncontroversial species in the complex (Meadow Pipit *A. pratensis* and Rock Pipit *A. petrosus*) exhibit approximately as much overlap in flight call parameters as do *japonicus* and the *rubescens* group, and can also be difficult to distinguish aurally, even for those with good hearing and experience with the group.

Song analyses could not be performed, as only one good-quality recording was available to Doniol-Valcroze et al. (2023) for *japonicus*, which evidently rarely sings away from the breeding grounds; recent field guides to birds of Japan (Brazil 2018, Chikara 2019) described calls but not song.

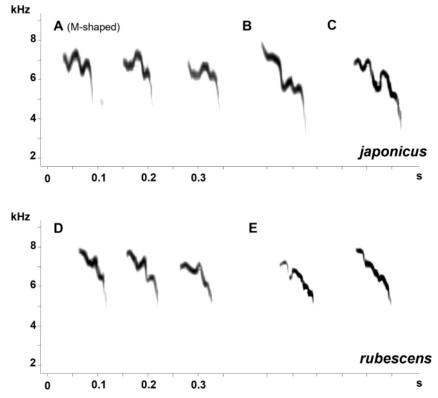


FIGURE 5. Sonograms of various calls from *Anthus [rubescens] japonicus*: A) M-shaped calls (xeno-canto.org: XC267502); B) and C) common calls (xeno-canto.org: XC437043 & The Sound Approach: 02.050. MR. 01938.02) and *A. r. rubescens*: D and E common calls (xeno-canto.org: XC598639, XC599314).

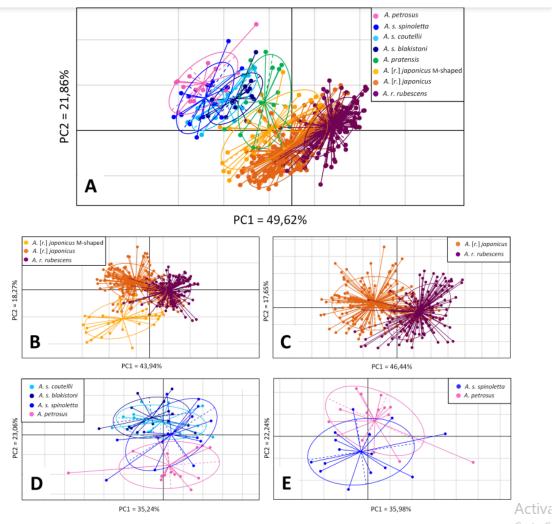


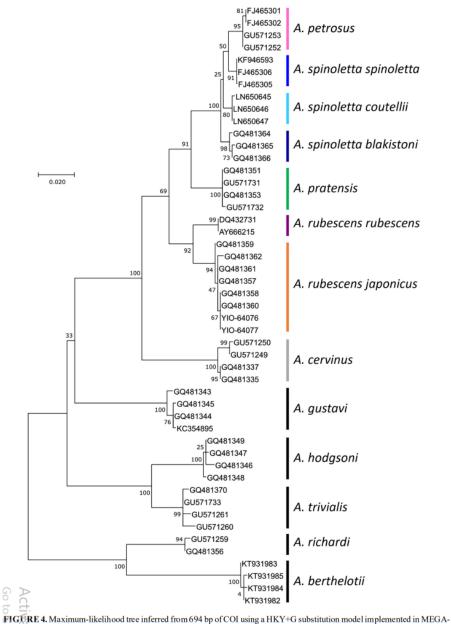
FIGURE 6. Principal component analysis of the nine call measurements for various species selections. A: all small *Anthus* Go to S species except *A. cervinus*; B: two types of calls of *A. r. rubescens* and *A.* [*r.*] *japonicus*. C: only common-type calls of *A. r. rubescens* and *A.* [*r.*] *japonicus*; D: *A. petrosus* and different *A. spinoletta* subspecies; E: *A. petrosus* and *A. s. spinoletta*.

In a study of the call notes of *A. pratensis* and *A. petrosus* (referred to in the study as *A. spinoletta*, but based on habitat and distribution, these were *A. petrosus*), closely related species with similar levels of genetic (see below) and vocal divergence to that seen between *japonicus* and *rubescens*, it was found in playback experiments in areas of sympatry that territorial males recognized and responded to the vocalizations of conspecifics, but only rarely responded to the call notes of heterospecific birds (Elfström 1992). This suggests that not only are these call notes different, but that they convey species-specific information that is important to the birds and potentially plays a role in species recognition. In a separate study, Elfström (1990) also compared songs of *A. pratensis* and *A. petrosus*, finding similar responses to those detected using only call-note playback (Elfström 1992). Interestingly, vocal discrimination did not occur away from the breeding grounds, where birds responded to both conspecific and heterospecific call notes (Elfström 1992). Broadly similar results were obtained in a study of call notes of European members of the complex (Dragonetti 2023).

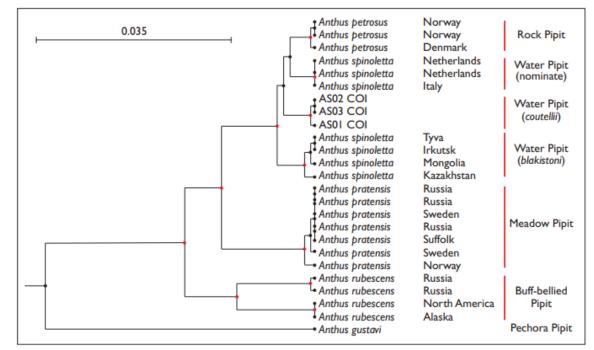
Although the work of Elfström (1992) involves different species pairs, it is important in demonstrating that the call note differences identified by Doniol-Valcroze et al. (2023) likely similarly convey important information that is used in species recognition by pipits.

Genetics

A key takeaway here is that the genetic divergence of *japonicus* from *rubescens* is similar to or more than that between the uncontroversial species pairs *petrosus/spinoletta* and even *pratensis/spinoletta*.



(Kumar et al. 2018). Bootstrap values are indicated on the nodes.



The COI tree of Garner et al. (2015) is very similar to that from Doniol-Valcroze et al. (2023) with respect to the positions and relative divergence of *rubescens* and *japonicus*:

Fig. 5. Relationships of taxa within the Rock *Anthus petrosus*/Water *A. spinoletta*/Buff-bellied Pipit *A. rubescens* complex. A preliminary phylogenetic tree based on 597 bp of *COI* gene sequence obtained for all taxa. Important branch points, which have extremely strong bootstrap statistical support (90–100%), are highlighted in red. The tree suggests that nominate *spinoletta* Water Pipits are most closely related to Rock Pipits (all examples here are *littoralis*), and that the three *coutellii* Water Pipits from Mount Hermon (AS01–03) form a tight genetic grouping roughly equidistant from the nominate Water Pipit/Rock Pipit grouping and the *blakistoni* Water Pipit grouping. There is a deep genetic split in Buff-bellied Pipit correlating with the Old vs New World subspecies, potentially indicating another future split. DNA sequence Accession Numbers: A. s. *coutellii* (AS01,AS02,AS03) respectively) = LN650645, LN650646 and LN650647; A. *petrosus* = GU571252, GU571253, FJ465301; A. s. *spinoletta* = KF946592, KF946593, FJ465306; A. s. *blakistoni* = GQ481363, GQ481364, GQ481365, GQ481366; Meadow Pipit A. *pratensis* = GQ481350, GQ481351, GQ481352, GU571731, GU571732, GU571734, JN801265; A. rubescens = GQ481357, GQ481362, DQ432731, AY666215; Pechora Pipit *A. gustavi* = KC354895. A fully annotated tree showing bootstrap support values for each node will be available on the BB website (www.britishbirds.co.uk/birding-resources/key-refs/).

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TABLE 2. Mean inter-group (species/subspecies) genetic divergence calculated from the CR mtDNA marker.

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	A. s. coutellii	A. s. blakistoni	A. petrosus	A. s. spinoletta	A. pratensis	A. [r:] japonicus	A. r. rubescens	A. roseatus	A. cervinus	A. hodgson
A. trivialis	0.0722	0.072	0.0704	0.0786	0.0739	0.0687	0.0703	0.0531	0.063	0.0288
A. hodgsoni	0.075	0.0743	0.0701	0.0764	0.0749	0.0664	0.069	0.0539	0.0624	NA
A. cervinus	0.0542	0.0422	0.0478	0.0485	0.0426	0.0415	0.0418	0.0397	NA	
A. roseatus	0.052	0.0463	0.0504	0.0517	0.0482	0.0505	0.0469	NA		
A. r. rubescens	0.0354	0.0278	0.0363	0.0359	0.0331	0.0224	NA			
A. [r.] japonicus	0.04	0.0333	0.0427	0.0414	0.0468	NA				
A. pratensis	0.0283	0.0262	0.0306	0.0319	NA					
A. s. spinoletta	0.0203	0.0169	0.0135	NA						
A. petrosus	0.0196	0.0147	NA							
A. s. blakistoni	0.0099	NA								

Recommendations:

Taxonomic status (Part A):

As Doniol-Valcroze et al. (2023) indicated, in an ideal world it would be best to know much more about the potential contact zone between *japonicus* and the *rubescens* group, and to have a much larger sample size of songs of *japonicus* and a song analysis. However, given the geopolitical issues in the potential contact zone, this is unlikely to transpire in the foreseeable future, and in any case songs tend to be quite variable in the group, such that even those of *A. petrosus* and *A. pratensis* can be difficult to distinguish. Further, Elfström (1990, 1992) demonstrated in playback experiments that *A. pratensis* and *A. petrosus* differentiated call notes and song of conspecifics versus heterospecifics. We consider that the integrative analysis of Doniol-Valcroze et al. (2023) shifts the preponderance of evidence in favor of species status for *japonicus*, and that the burden of proof now lies in showing otherwise. We thus recommend following these authors by elevating *A. japonicus* to species level, so our recommendation would be a YES on Part A.

English names (Part B):

Doniol-Valcroze et al. (2023) use "Siberian Pipit" for *A. japonicus* and American Pipit for *A. rubescens s.s.*, without elaboration as to rationale. Although "Japanese Pipit" has a long history of usage for *japonicus* and is thus familiar and unambiguous, it does not breed in Japan (much as with Japanese Waxwing, also a non-breeder). The name "Siberian Pipit" also has received considerable usage (e.g., Lee and Birch 2002). In the case of the pipit, since Japan is really a very small part of the non-breeding range of *japonicus*, we consider "Siberian Pipit" to be the better name. Alström and Mild (2003) used "Asian Buff-bellied" and "American Buff-bellied" for *japonicus* and the *rubescens* group, respectively, but seemingly in an informal sense. See the 2015 NACC discussion regarding pros and cons of continuing to use "Buff-bellied" (with modifiers) for either or both.

Given that the relative range sizes are not very different, the NACC guidelines regarding retention of "American Pipit" for *rubescens s.s.* are ambiguous here, and especially so since NACC (but not most Old World sources) have long used "American" for the broader species. In our opinion the logic used in comparable cases in which names accepted in the New World and Old World differed even when considered conspecific (e.g., Northern vs. Great Grey Shrike and Northern vs. Hen Harrier) apply just as well here, and relatively little confusion is likely to ensue going forward if we retain the name "American Pipit" for *Anthus rubescens sensu stricto*. Other intriguing options mentioned in the 2015 comments include "Tundra Pipit" and "Canada Pipit".

If voting YES on Part A, please vote on Part B for names for B1) *Anthus japonicus* and B2) *Anthus rubescens s.s.*

Effect on the AOS Checklist:

This proposal would add a species, *Anthus japonicus*, to the AOS Checklist and NACC area, on the basis of numerous specimens and photographs.

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Submitted by: Pamela C. Rasmussen, Shawn M. Billerman, and Jon Dunn

Date of proposal: 22 February 2024

Recognize multiple species within the House Wren *Troglodytes aedon* complex

Background:

This is an update of NACC Proposal 2022-B-10 by Remsen, Jaramillo, and Sullivan, which proposed to recognize as many as seven species in the *Troglodytes aedon* complex in the Caribbean. The proposal failed 5-6 (with 10c and 10g failing 4-7). However, nearly all NACC members who voted NO acknowledged that multiple species must be involved in the complex, but indicated that a comprehensive integrative study was needed before action should be taken. A near-comprehensive phylogeny based on mtDNA and genomic data (Klicka et al. 2023) now provides an opportunity to reevaluate the complex. However, a broader geographic perspective is required, given the new data on phylogenetic relationships among continental forms. In addition, reevaluation of other papers provides a more integrative approach for examining species limits of all but the rarest (or extinct) taxa. Although evaluating some taxa in the complex clearly require further genetic sampling and analysis (Imfeld et al. 2024), we consider that sufficient data now exists to enable several changes to the current taxonomy.

It is assumed that committee members will carefully review the 2022 proposal (<u>https://americanornithology.org/wp-content/uploads/2022/03/2022-B.pdf</u>) and comments (https://americanornithology.org/about/committees/nacc/current-prior-proposals/2022-proposals/comments-2022-b/#2022-B-10) in conjunction with this proposal, as there is much information therein that is not repeated here, including photos of specimens and live birds.

New information:

Klicka et al. (2023) sampled 349 individuals from the genus *Troglodytes* for the mitochondrial gene ND2 and 184 individuals for the genomic (RADseq) analysis. For ND2, this included extensive sampling of continental forms of *T. aedon* such as *aedon*, *brunneicollis*, and *musculus*, as well as sampling of Caribbean forms *beani*, *albicans*, *grenadensis*, *musicus*, and *rufescens* (although all these except *beani* were labeled as *martinicensis*, as noted below). Several other species of *Troglodytes*, including *T. sissonii*, *T. tanneri*, *T. ochraceus*, *T. rufulus*, *T. rufociliatus*, and *T. solstitialis*, were also sampled for ND2, and outgroup taxa included other species of *Troglodytes*, *Cistothorus*, *Thryomanes*, *Henicorhina*, and other genera of wrens. The less comprehensive genomic analysis (Fig. 1) again included extensive sampling of *aedon*, *brunneicollis*, and *musculus*, and less extensive samples of *beani*, *T. sissonii*, and *T. tanneri*. A sample of *T. rufulus* was used as the outgroup. Klicka et al. (2023) were not able to get RADseq data for any forms of "*martinicensis*" (as they refer to several taxa, see below) or for any of the other outgroups used in the ND2 analysis.

Below we consider the status of the continental forms *musculus*, *brunneicollis*, and *parkmanii*, and Caribbean forms *beani*, *guadeloupensis*, *rufescens*, *martinicensis*, *mesoleucus*, *musicus*, *grenadensis*, and *albicans*. We focus here on the genomic phylogeny and supplement that with data from the mtDNA phylogeny for taxa included in the latter but missing from the former.

Very importantly, note that Klicka et al. (2023) refer to all Caribbean samples as "*T. a. martinicensis*", even though the included samples are from Trinidad, Grenada, St. Vincent, and Dominica, and thus must represent *albicans*, *grenadensis*, *musicus*, and *rufescens*, respectively (this is made clear in the supplementary materials). This may mislead some readers into thinking that one taxon (*martinicensis* from Martinique) falls into multiple clades, which is not the case; in fact, that extinct taxon is not included in the sampling.

(1) *musculus*—The primary ingroup split in the Klicka et al. (2023) RADseq phylogeny is between two main clades of *T. aedon*: the *aedon* and *musculus* clades (Fig. 1). The *aedon* clade (including *brunneicollis*) occurs from southern Canada southward through the Isthmus of Tehuantepec, and in Mexico it is largely a bird of pine-oak woodland in the highlands, whereas the *musculus* clade occurs in a variety of habitat types and elevations from southern Veracruz and northern Oaxaca through the Yucatán Peninsula and southward through South America. The STRUCTURE results do not show intergradation between these two groups, although the sample size from the relevant area is small.

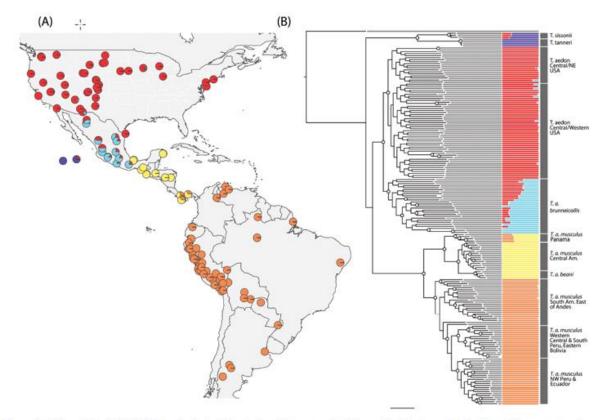


Figure 2. (A) Map plotting STRUCTURE results for k = 5 (best value via Evanno method) for each individual sample in the House Wren complex where each specimen was collected. (B) RAXML maximum likelihood tree and corresponding STRUCTURE bar plot for k = 5. White circles on the tree indicate nodes with $\geq 75\%$ bootstrap support, outgroup = *T. rufulus* (not labeled).

Figure 1. From Klicka et al. (2023), showing (a) map with sampling for the genomic data, and (B) the RAxML phylogeny and STRUCTURE plot from the genomic (RADseq) data.

Howell and Webb (1995) treated the *musculus* group equivocally, as "*Troglodytes aedon* (in part) or *T. musculus*". They considered the songs of these two groups not reliably distinguishable, but Sosa-López and Mennill (2014) found some vocal differences between

them (Fig. 2). Both *musculus* and *beani* (see below) clearly separated out from the other subspecies in their plot of PC1 vs PC2.

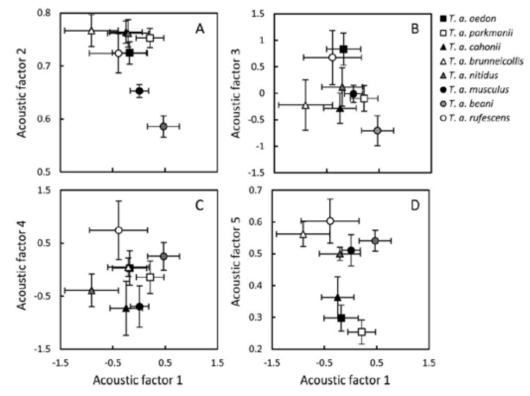


Figure 2. Acoustic variation among subspecies of *Troglodytes aedon* described by principal component factors summarizing variation in acoustic features of male songs. Points correspond to adjusted means and bars indicate 95% confidence intervals (from Sosa-López and Mennill 2014).

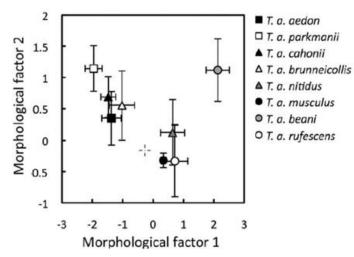


Figure 3. Morphological variation among subspecies of *Troglodytes aedon* described by principal component factors summarizing variation in morphological traits between the first two component factors. Points correspond to adjusted means and bars indicate 95% confidence intervals (from Sosa-López and Mennill 2014).

These authors also demonstrated mensural differences between the *aedon* and *musculus* groups (Fig. 3), although the disputed race *nitidus* (e.g., placed in the *brunneicollis* group in Clements but not recognized at all by IOC-WBL) groups here with *musculus*, not *brunneicollis* et al. This seems unsurprising as *nitidus* is from mountains of northern Oaxaca, thus near or at the contact zone between *brunneicollis* and *intermedius* of the *musculus* group. Nelson's (1893) description of *nitidus* (Fig. 4) indicated that it is darker and more reddish-brown than typical *brunneicollis*, so it could be variable, more like *brunneicollis* in color but more like *intermedius* in measurements (see description of *intermedius* in Fig. 5), or perhaps both forms occur in sympatry in the region. More study is obviously needed on that.

Troglodytes brunneicollis nitidus, subsp. nov.

Zempoaltepec Wren.

Type.-No. 143,058, 3 ad., U. S. Nat. Mus., Biological Survey Coll. From Mt. Zempoaltepec, Oaxaca, Mexico. Collected July 8, 1894, by E. W. Nelson and E. A. Goldman.

Distribution.—Humid forests on Mount Zempoaltepec, Oaxaca, and adjacent parts of the Cordillera in northeastern Oaxaca (above 6,500 feet).

Subspecific characters.—Both adults and young differ from typical *T. brunneicollis* in the deeper, or darker, reddish bistre-brown of upperparts, and the darker and richer buffy-cinnamon on neck and breast; size about the same.

Remarks.—This subspecies, based on two adults and one young of the year, from the very humid forest on Mount Zempoaltepec, shows the influence of the environment in its darker colors compared with *T. brunneicollis*, the type of which was taken in the more open and arid pine and ver fir forest of the mountains at La Parada near Oaxaca City, central Second

Figure 4. Original description of *Troglodytes brunneicollis nitidus* Nelson, 1893.

38. Troglodytes intermedius n. sp. T. supra murino-brunneus, alis caudaque anguste nigro-transfascia-tis; subtus cum supercillis fulvescente-brunneus; hypochondriis crissoque dilutioribus, rufescentibus; tectricibus subcaudalibus rufescentibus, nigro transversim fasciatis, maculis nonnullis albescentibus intermixtis. Similis hace species americano et platensi, quasi intermedia. Wie T. brunneicollis Sclat. die entsprechende südlichere Form des nördlicheren T. aedon Vieill. ist, so könnte intermedius als die-jenige des nordamerikanischen T. americanus Audub. betrachtet werden. Jenge ues novamentatusent 1. americanta atuati, berrantet verten, Zugleich bildet unser Vogel, wie nach seiner geographischen Yerbreitung, so auch durch Zeichnung und Färbung den Uebergang von den nörd-licher vorkommenden Arten zu denen des südamerikanischen Continents. Alle nördlichen Arten haben die unteren Schwanzdecken lebhaft dunkel gebändert und hell gefleckt, und erstreckt sich diese Zeichnung mehr oder weniger über die Weichen und Aftergegend, wahrend bei fast allen südamerikanischen Arten dieselben Körpertheile fast ganz ohne Querzeichnung sind. Bei intermedius sind nur noch die Unterschwanzdecken entschieden quergebändert. Von americanus unterscheidet sich unser Vogel durch die dunklere Oberseite, welche am Scheitel und Nacken ins Graubräunliche zicht; ferner durch die hellbräunliche Färbung der Unterseite, welche an platensis Neuw. erinnert, aber dunkler und weniger fahl ist. Auch ist bei platensis der Rucken nicht so braun, sondern mehr ins Graubraune ziehend und die Querzeichnung der unteren Schwanzdecken ist weniger ausgebildet, fast nur noch als Spitzenzeichnung der einzelnen Federn vorhanden. Ganzn Länge 4¹/₄"; Schnabel vom Mundwinkel 8¹/₄"; Flügel über 2"; Schwanz 1" 7"; Lauf 8". Zoterré: v. Frantzius Soleré; S. José, Quebrada-honda, im September: Augen schwarz; Die vorstehenden Vulgärnamen werden wohl Zoterrey und Solerey, von "rey" König, (bei uns "Zaunkönig, Schneekönig") zu schreiben sein.

Figure 5. Original description (in German) of *Troglodytes intermedius* Cabanis, 1861. Google translation of Cabanis's description:

T. above murine-brown, wings and tail narrowly barred with black; below with the eyebrows yellowish-brown; with hypochondria, more and more diluting, blushing; with rufous subcaudal coverts, banded transversely with black, interspersed with some whitish spots. This species is similar to the *americano* and the *platensi*, as if intermediate.

Just as *T. brunneicollis* is the corresponding southern form of the more northern *T. aedon* [eastern Canada and US], so *intermedius* could be viewed as that of the North American *T. americanus* [=*parkmanii*] [western Canada and US]. At the same time, our bird forms the transition from the northern species to those of the South American continent through markings and coloring, as does its geographical distribution. All northern species have the lower caudate coverts vividly dark and brightly spotted, and this marking extends more or less over the wings and anal area, while in almost all South American species the same parts of the body are almost entirely without transverse markings. In *intermedius* only the undertail coverts are clearly cross-banded. Our bird differs from *americanus* in its darker upper side, which turns gray-brown on the crown and neck; furthermore by the light brownish color of the underside, which is reminiscent of *platensis* Neuw., but is darker and less pale. The back of *platensis* is also not so brown, but more of a gray-brown color, and the transverse markings on the lower tail coverts are less developed, almost only present as tip markings on the individual feathers.

In essence, Cabanis was stating that his new form *intermedius* is similar to western North American birds, not to the geographically adjacent *brunneicollis*. In any case, if there is a zone of intergradation, it seems it must be a narrow one. This marked discontinuity in phenotype in near-parapatry has been known for a long time and has now been corroborated in the Klicka et al. (2023) phylogeny, although a larger sample size in this region and more focused study on this aspect is needed to better understand the interactions between these two forms.

Sosa-López et al. (2016) analyzed response to playback with respect to mtDNA divergence (Fig. 6) and found that *brunneicollis* responded more strongly physically (but not vocally)

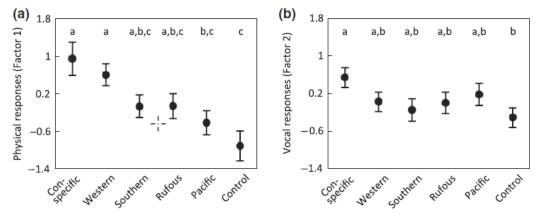


Figure 6. Responses to playback of songs of *brunneicollis*: (A) physical responses, and (b) vocal responses (from Sosa-López et al. 2016).

to Western than to Southern house wrens, with the response to the latter at the level of the nonconspecific Rufous-browed and only slightly higher than to Pacific Wren.

There is a case to be made for splitting the *intermedius* group of *musculus*, which occurs from southern Mexico to Panama, from the *aedon* group (including *brunneicollis*). The most obvious problem with this is that there is some gene flow in Panama with the South American *musculus* group (see Fig. 1), so simply splitting *musculus* from the southern Mexico-Central American *intermedius* group requires further study and has nomenclatural implications. As for considering the *intermedius* and *musculus* groups separate species, if it has ever been seriously considered, it is not evident in the papers reviewed here, and for now we consider *intermedius* a group within the *musculus* complex.

(2) *brunneicollis*—mtDNA phylogenies, including that in Klicka et al. (2023), showed that inclusion of *brunneicollis*, which occurs from southern Mexico to the southwestern USA, in *T. aedon* makes *aedon* paraphyletic with respect to some of the outgroups, thus suggesting species status for this taxon. However, this result has not held up in the genomic analysis of Klicka et al. (2023). Furthermore, as was already apparent by plumage, broad introgression occurs with *aedon* in Mexico and the southwestern USA (Fig. 7).

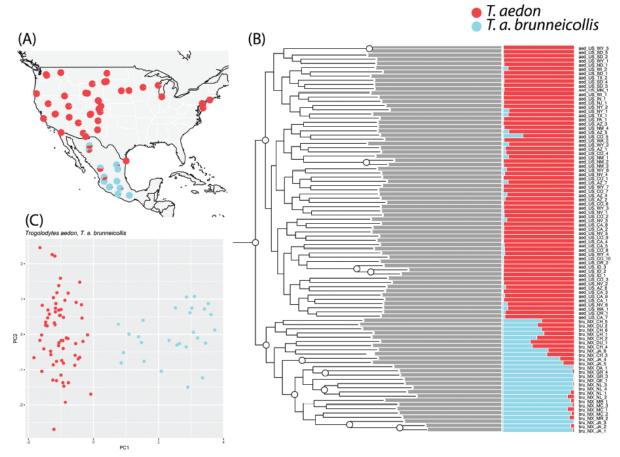


Figure 7. Map (A) and STRUCTURE plot (B) showing introgression between *aedon* and *brunneicollis*.

(3) *parkmanii*—As with *brunneicollis*, mtDNA phylogenies, including that in Klicka et al. (2023), showed that inclusion of *parkmanii*, of the western USA and Canada, in *T. aedon* makes *aedon* paraphyletic, but this is again not the case for the genomic phylogeny, in which it groups with *aedon*. They have been shown to be vocally different and to have some reduced response, but the differences are not at the scale of the other taxa studied (see below).

(4) *beani*—The Cozumel Wren (*beani*) has long been known to be an outlier morphologically; in the 1885 OD Ridgway did not even explicitly compare it with other species (unlike almost all the other taxa he described in the same paper; Fig. 8):

DESCRIPTION OF SOME NEW SPECIES OF BIRDS FROM COZUMEL ISLAND, YUCATAN.

BY ROBERT RIDGWAY.

[Public ed by permission of the U.S. Commissioner of Fish and Fisheries.]

A collection of birds made by Mr. J. E. Benedict, Naturalist of the U. S. Fish Commission Steamer "Albatross," assisted by Dr. T. H. Bean and Mr. Thomas Lee, on the Island of Cozumel, in January, 1885, contains the following new species. A full report upon the collection is in course of preparation and will soon be published in the Proceedings of the U. S. National Museum.

1. Harporhynchus guttatus, sp. nov.

SPECIFIC CHARACTERS.—Similar to *H. longirostris* (Lafr.), but smaller, darker in color, the bill wholly deep black, and all the markings more sharply defined. Type, No. 102,454, 3, U. S. Nat. Mus.; Cozumel, Jan. 23.

2. Troglodytes beani, sp. nov.

SPECIFIC CHARACTERS.—Above plain brown, more castaneous on rump and tail, the latter indistinctly barred with darker, the remiges more distinctly barred. Lower parts, pure white; the sides, flanks, and crissum, light cinnamon-brown; the under tail-coverts barred or spotted with dusky. Wing, 2.20; tail, 1.90; culmen, .81; bill from nostril, .50; tarsus, .80; middle toe, .50. Type, No. 102,473, &, U. S. Nat. Mus.; Cozumel, Jan. 28.

Figure 8. Original description of *Troglodytes beani* Ridgway, 1885.

The morphological analysis of Sosa-López and Mennill (2014; Fig. 3 above) showed *beani* to be the most distinctive form based on measurements of those examined. However, the mensural distinctiveness of *beani* compared to all other forms was less marked in the analysis of Wetten (2021).

Vocalizations of *beani* were also the most distinctive of the studied taxa on the first three acoustic axes (Sosa-López et al. 2016; Fig. 2 above) and in playback responses (Fig. 9). Cozumel birds responded most strongly to their own song, especially in physical responses, but with at least some vocal response to Southern and Western house wrens as well. Brewer (2001) also commented on the differences in vocalizations, and Boesman's (2016) analysis

indicated several consistent differences, although it should be emphasized that *beani* songs are also highly variable.

Although the vocal differences of Cozumel birds from mainland House Wrens are welldocumented, *beani* is nevertheless embedded within the Central American clade of the *musculus* group in both the ND2 and RADseq analyses (Figs. 10, 11).

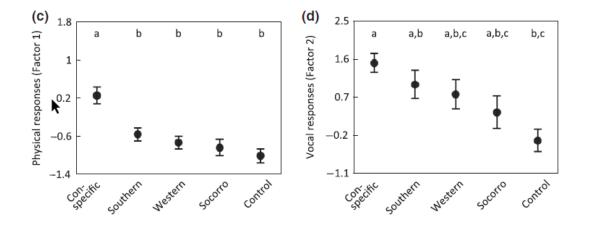


Figure 9. Responses to playback of songs of *beani*: (A) physical responses, and (b) vocal responses (from Sosa-López et al. 2016).

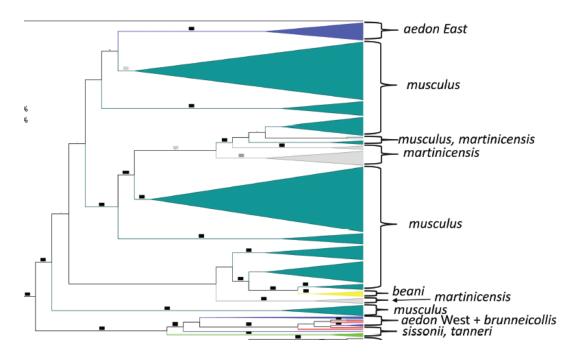


Figure 10. Phylogenetic relationships of *T. a. beani* in the ND2 phylogeny of Klicka et al. (2023). The small clade of *musculus* shown to be sister to *beani* consists of individuals from Veracruz and Yucatan, Mexico.

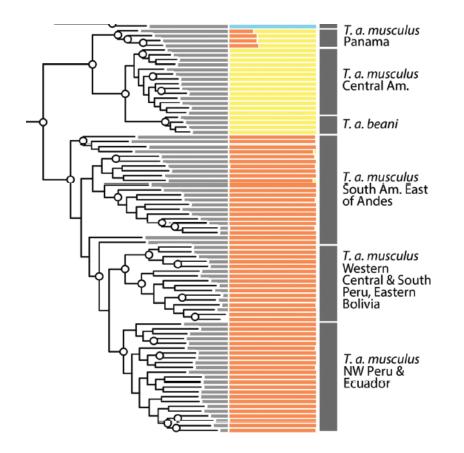


Figure 11. Zoomed-in view of the relationships of *T. a. beani* in the RADseq phylogeny (from Klicka et al. 2023).

(5) *guadeloupensis*—This taxon, which was endemic to Guadeloupe, was described in 1886 but was very rare and seems to have disappeared since the late 20th century. Its voice may have been unique but was inadequately documented. Its plumage and bill shape are not so different from those of *rufescens* from neighboring Dominica (see graphs from Wetten 2021 reproduced below, under *grenadensis*), and they are similar in tail and tarsus length (Wetten 2021). However, wing is notably longer in *guadeloupensis* than *rufescens* (Wetten 2021). There is one recording (in two clips) by Jean Roché at ML that is compared with *rufescens* songs in the Appendix; the three iterations all sound pretty similar to each other and are broader-band at least than for *rufescens*, but to PCR anyway don't sound especially different. And we're unaware of genetic data. The known differences seem relatively minor and do not preclude conspecificity (even with the refined species limits this proposal seeks to enact).

(6) *rufescens*—Described in 1877 and endemic to Dominica, this is a strikingly richly rufescent form with a long, largely yellow bill and a loud, ebullient song that has some resemblances to continental birds but is also quite distinctive and variable. Although embedded within the *musculus* group in the ND2 tree of Klicka et al. (Fig. 12), *rufescens* is not closely related to other extant Lesser Antilles taxa included in the phylogeny (which does not include *guadeloupensis* or *martinicensis*). Thus, the grouping of all Lesser Antillean taxa as "Antillean House Wren *T. a. martinicensis*" as adopted in the HBW/BLI checklist (del Hoyo and Collar 2016) and Kirwan et al. (2019) is untenable, at least pending nuclear data on these taxa.

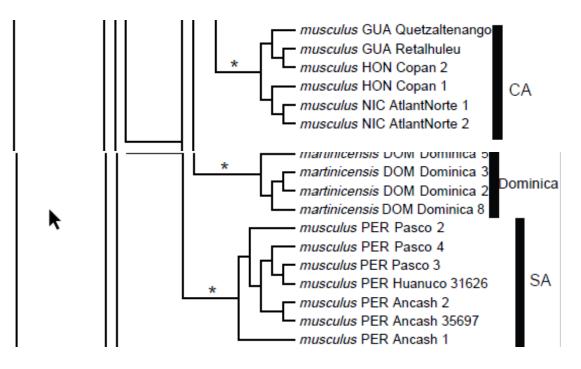


Figure 12. Section of the ND2 tree of Klicka et al. 2023 showing the phylogenetic relationships of *rufescens*, here labelled *martinicensis* from Dominica (from their Supplementary Material). Asterisks indicate bootstrap values >89%.

(7) *martinicensis*—Described in 1866 and endemic to Martinique, this was evidently the first described taxon to go extinct, and thus it is hardly known. However, it was considered similar to *grenadensis* but grayer above and duller below; again, thus not known to differ in major ways from *rufescens* from adjacent Dominica. Unfortunately, we have very little to go on here; it has not been sequenced to our knowledge, and it was not included in the morphological study of Wetten (2021), but the name *martinicensis* takes priority if any are lumped with it.

(8) *mesoleucus*—This taxon, endemic to St. Lucia and described in 1876, resembles Cozumel Wren in plumage and is relatively more similar to continental House Wrens than most, but still quite different in our opinion, including in its fairly well-documented voice. (PCR recorded it in 2022 and wasn't sure in the field it was the wren, as it was not seen, until comparing it with recordings of this taxon.) It was not included in the morphological analysis of Wetten (2021). It is also restricted to mainly drier forest types and is relatively rare and largely restricted to the far southwest and far north of the island. It has not been sequenced to our knowledge.

(9) *musicus*—The St. Vincent taxon, described by Lawrence 1878, is similarly pale as with *mesoleucus* of St. Lucia, but still very different in plumage, with a lot of white and buff (see eBird photos) and especially in its radically different song. As summarized in Remsen et al.'s 2022 proposal, "This one sounds really different – I have to struggle to find anything *aedon*-like in this one". It is sister to birds from Grenada in the ND2 tree (Fig. 13), although support for this relationship is not strong, so it is not recommended that these be considered conspecific. This

taxon also has an unusually long wing chord, although superseded by *T. tanneri* of Clarion Island in the Pacific (Fig. 14).

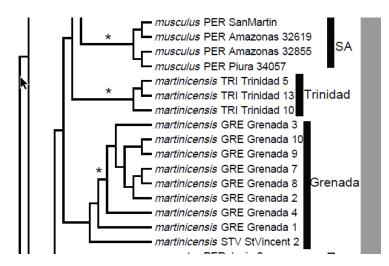


Figure 13. Section of the ND2 tree of Klicka et al. 2023 showing the phylogenetic relationships of *grenadensis*, here labeled *martinicensis* from Grenada, and *musicus*, here labeled *martinicensis* from St. Vincent (from their Supplementary Material). Asterisks indicate bootstraps >89%.

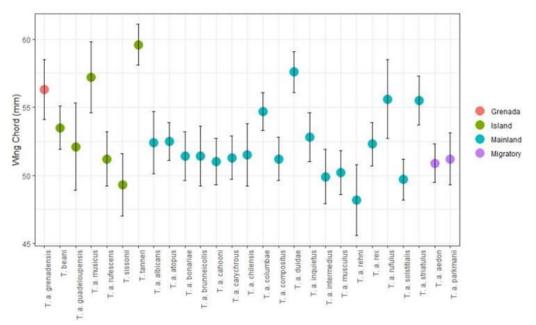


Figure 14. Mean and standard deviation of wing chord of subspecies of *T. aedon* and closely related species (from Wetten 2021). Key: red dot = *grenadensis*, green dots = other island taxa, blue dots = resident mainland taxa, purple dots = migratory mainland taxa.

(10) *grenadensis*—As shown above, *grenadensis*, which is endemic to Grenada and was also described by Lawrence in 1878, appears to be sister to *musicus* of St. Vincent in the ND2 tree and is embedded in the *musculus* clade, but it is markedly different in its much deeper plumage color. It is larger and shorter-tailed than most other populations (Wetten 2021). Vocally,

grenadensis is much more similar to continental birds than is *musicus*, but it has been shown to adapt its song to urban environments in unusual ways (Cyr et al. 2020). In morphology, it is rather like a dark, richly colored, whitish-throated *musculus* but for the long spike-like bill (the longest and deepest of all; Figs. 15 and 16), which gives it a hammer-headed look.

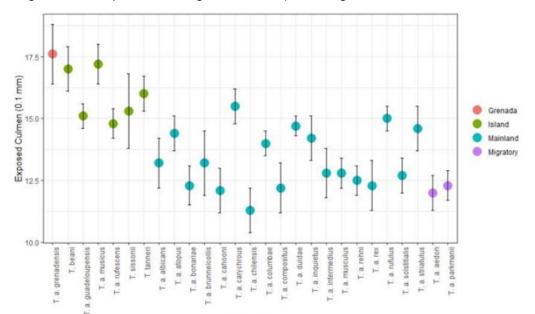


Figure 15. Mean and standard deviation of exposed culmen of subspecies of *T. aedon* and closely related species (from Wetten 2021). Key: red dot = *grenadensis*, green dots = other island taxa, blue dots = resident mainland taxa, purple dots = migratory mainland taxa.

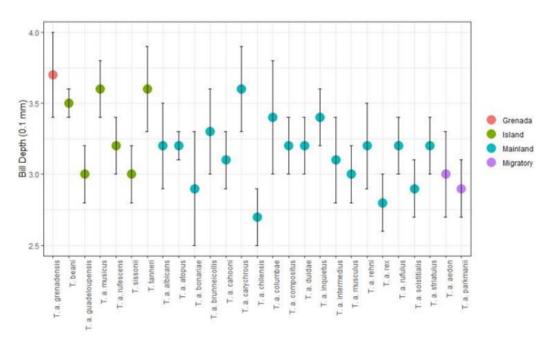


Figure 16. Mean and standard deviation of bill depth of subspecies of *T. aedon* and closely related species (from Wetten 2021). Key: red dot = *grenadensis*, green dots = other island taxa, blue dots = resident mainland taxa, purple dots = migratory mainland taxa.

(11) *albicans*—This taxon occurs both on Trinidad and in northern mainland South America. As might be expected from populations that belong to the same subspecies, phenotypic divergence is minimal and ND2 samples from Trinidad were intermixed with those from the mainland. Trinidad forms part of the South American continental shelf and most of its birds have strong affinities with the mainland.

Phylogenetic, biogeographic, and ecological considerations:

In Proposal 2022-B-10, Remsen et al. suggested that the Caribbean taxa currently grouped under *T. aedon* or *T. musculus*, or grouped together as a single species separate from *T. aedon* or *T. musculus* (del Hoyo and Collar 2016, Kirwan 2019), might not form a monophyletic group, but instead might be the result of multiple independent colonization events. Although the genomic analysis of Klicka et al. (2023) included only one island taxon (*beani*), the mitochondrial analysis included five Caribbean taxa: *beani*, *rufescens*, *musicus*, *grenadensis*, and *albicans* (island samples from Trinidad). Despite missing many of the relevant taxa, the ND2 tree supports the notion of independent colonizations of Cozumel (by *beani*), Dominica (by *rufescens*), Grenada/St. Vincent (by *grenadensis/musicus*), and Trinidad (by *albicans*). Thus, all sampled Caribbean taxa appear to represent independent colonizations except for *grenadensis* and *musicus*, which would appear to have diverged following a single colonization event. This phylogenetic pattern, in which taxa that in many cases appear to be valid island species render a widespread mainland species paraphyletic, presents a serious test for those who require species to be monophyletic, but is entirely in keeping with phylogenetic expectations related to multiple isolated, restricted-range species budding off from a widespread parent species.

The presumed biogeography of these colonization events is of interest, for in most cases the island taxa are sister to mainland individuals from geographically proximate areas, as would be expected under considerations of parsimony. The mainland samples sister to *beani* are from nearby Veracruz and Yucatán on the Mexican mainland, and the *albicans* samples are intermixed with those of *albicans* from northern South America, as would be expected given that they are consubspecific and that Trinidad forms part of continental shelf of South America. The samples sister to *grenadensis/ musicus*, taxa that occur on islands just north of Trinidad, are from nearby Trinidad and northern South America. The samples sister to *rufescens* of Dominica are from Mexico and Central America (including all samples from these regions, including islands of Cozumel and Coiba) and also from northwestern South America, making it the only distant presumed colonization event.

One of the most compelling arguments presented in Proposal 2022-B-10 concerned the fact that most of the Lesser Antillean forms of *T. aedon* have diverged so much in their basic ecology, especially in habitat requirements, that they more-or-less have to be considered separate species. Mainland tropical forms of *aedon/musculus* thrive in towns and villages, much the same as their north temperate counterparts, but the taxa in the Lesser Antilles prefer such divergent habitats as coastal dry forest, with use of edge at higher elevations (*musicus*); dry forest (*mesoleucus*); moist forest (*rufescens*); montane forest, apparently (the probably extinct taxon *guadeloupensis*); or presumably some form of native habitat (the long-extinct *martinicensis*). Of the Antillean taxa, only *grenadensis* is regularly found in the human-disturbed habitats preferred by its mainland relatives, although it also uses a variety of other habitats including savanna and dry scrub thickets. Remsen et al. cogently argued that species that are

"proper continental *musculus*-types" should be thriving on Caribbean islands as well as on the mainland due to the availability of residential and other disturbed habitat and that "if the Lesser Antillean taxa were really the same species as the House Wren, they would have benefitted by human disturbance rather than be threatened by it." Instead, most Caribbean taxa occupy specialized, at-risk habitats and avoid the human-disturbed habitats where their mainland counterparts thrive.

Recommendations:

- (1) Split Troglodytes musculus from T. aedon.—We strongly recommend a YES vote to splitting musculus (including the intermedia group) from the aedon group (including the brunneicollis group). Should the intermedia group be split later from the musculus group, the species-level nomenclature would have to change for the Central American group to intermedia, but we think the evidence for the split between the aedon and musculus groups is overwhelming.
- (2) Split *Troglodytes brunneicollis*.—We recommend a NO vote on splitting *brunneicollis* from *aedon*, given the broad introgression with the *aedon* group.
- (3) Split *Troglodytes parkmanii*.—We recommend a NO vote on splitting *parkmanii* from *aedon*, given the new genomic results showing it grouping with the *aedon* group, and the relatively minor nature of morphological and vocal variation.
- (4) Split *Troglodytes beani.*—We strongly recommend a YES to the split of Cozumel *beani*, as has previously been enacted by BirdLife International and other sources. Yes, it is embedded within the *intermedia* group of *musculus*, but we believe this to be a case of paraphyletic speciation in isolation.
- (5, 6, 7) Split the *Troglodytes martinicensis* group, comprised of *guadeloupensis*, *rufescens*, and *martinicensis*. Voters may opt to split all or none of these but given the general morphological resemblances of all three, the biogeographic pattern of close relationships among birds of these three adjacent islands, and the lack of evidence otherwise except in plumage tone (and perhaps in bandwidth of *guadeloupensis* song) it seems to us safest to split these as a single species at least on present knowledge. However, we hope future genomic work with the extinct taxa will elucidate their relationships, and they may well ultimately prove to be more than one species.
- (8) Split *Troglodytes mesoleucus*.—Evidence is slightly more equivocal for the St. Lucia bird, and genetic data are evidently lacking, but in our view it is better considered a separate species, given its habitat specialization and quite different plumage from continental *musculus*, so we recommend the split. It certainly does not fit neatly within *Troglodytes musculus* on plumage, structure, or song.
- (9) Split *Troglodytes musicus*.—We strongly recommend a split of this taxon as a distinct species. It is vocally very different and its plumage is really striking, with the white underparts bordered by cinnamon flanks and lower underparts, whitish sides to the head and strong white eyestripe, and very rufous upperparts, with a mainly pink bill. However,

mtDNA does not bolster this treatment (nor does it refute it), and genomic data are not yet available.

- (10) Split *Troglodytes grenadensis.*—We weakly recommend a split of this taxon, but it is the least convincing case for specific status of the Lesser Antillean taxa due to its less diverged plumage and vocalizations, broad habitat choice, and mtDNA, yet it still stands out from other members of the *musculus* group in structure (especially bill size) and coloration.
- (11) Split *Troglodytes albicans* of Trinidad.—We recommend a NO vote on splitting the *albicans* populations of Trinidad from those on the South American mainland. This taxon fits neatly with *albicans* of northern South America, both phenotypically and genetically.

English names:

Depending on which splits are adopted, we recommend:

- Northern House Wren for Troglodytes aedon sensu stricto
- Southern House Wren for *T. musculus* (including the *intermedia* group)

del Hoyo and Collar (2016), followed by Kirwan also use "Northern House Wren" for the *aedon* group and "Southern House Wren" for the *musculus* group, as do other sources at least informally.

• Cozumel Wren for T. beani

del Hoyo and Collar (2016) split *beani*, which they call "Cozumel Wren" rather than "Cozumel House Wren". We suggest there is no need for the modifier "House", and it doesn't seem closely associated with human dwellings.

• Dominica Wren for *T. martinicensis*

An English name for this species (which, if the recommendations are followed, would comprise guadeloupensis of Guadeloupe, rufescens of Dominica, and martinicensis of Martinique) does not so easily suggest itself as for the single-island endemics. Nevertheless, Dominica Wren accurately describes the range of what is apparently the only extant taxon of the three (rufescens of Dominica), martinicensis of Martinique having long been extinct and guadeloupensis of Guadeloupe not having been detected since the late 20th century. As noted above, del Hoyo and Collar (2016), followed by Kirwan, used "Antillean House Wren" for a group comprised of all six Lesser Antillean taxa, so we don't think we should re-use this now if a multi-way split is adopted. This taxon is not closely associated with human dwellings, with both guadeloupensis and martinicensis having been upland forest birds, although rufescens can be near dwellings (PCR photographed and recorded a family going in and out of a pipe in the eaves of a church). A plumage-based name such as Rufescent Wren or Cinnamon Wren, as suggested by Oscar, would also be a possibility. Another possibility would be Kalinago Wren. This name was suggested by Jeff Gerbracht of the Cornell Lab of Ornithology and BirdsCaribbean and Stephen Durand of Dominica, and the name references the Kalinago people. This name seems especially appropriate given that *Troglodytes martinicensis* is a common and resilient resident of Dominica, sharing the island with the Kalinago people. However, adoption of this name would require permission from the Kalinago Council.

• St. Lucia Wren for *T. mesoleucus*

This taxon is not associated with human dwellings.

• St. Vincent Wren for T. musicus

This taxon is not associated with human dwellings.

• Grenada Wren for *T. grenadensis*

"Grenada House Wren" was used by Wetten (2021) in the unpublished thesis. In this case at least, a good argument could be made for retention of "House" in the name, given its continued abundance around human habitations, but it could easily just be kept short and simple.

Effect on the AOS Checklist:

This proposal would add up to six (or even eight) species to the AOS Checklist and NACC area.

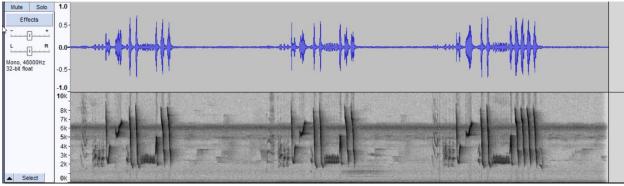
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Submitted by: Pamela C. Rasmussen, R. Terry Chesser, J. Van Remsen, Jr., and Brian Sullivan

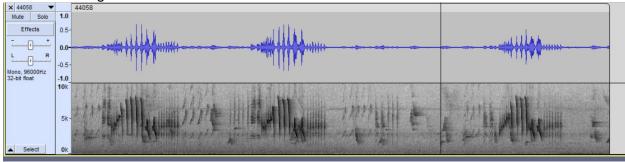
Date of proposal: 23 February 2024

Appendix. A comparison of a recording of songs of *guadeloupensis* with various recordings of songs of *rufescens*.

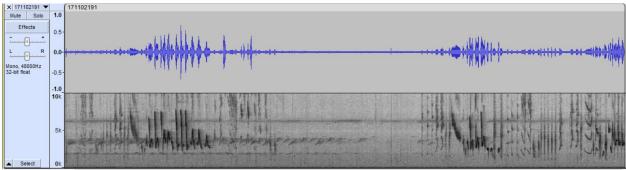


guadeloupensis ML Jean Roche (above)

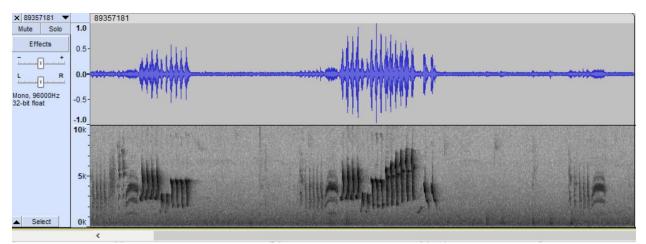
All the following are *rufescens*:



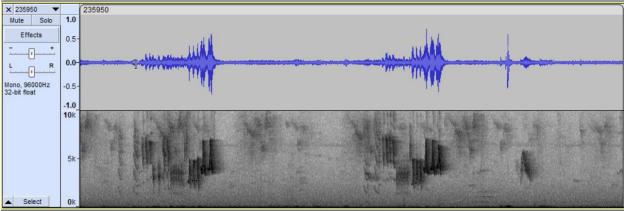
rufescens ML 44058 Ted Parker



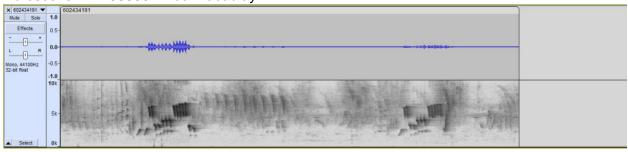
rufescens ML 171102191 Jeff Gerbracht



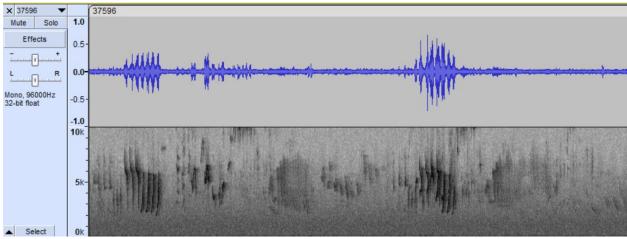


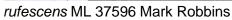


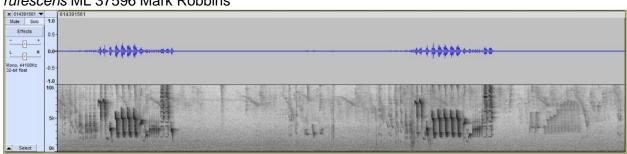
Rufescens ML 235950 Linda Macaulay

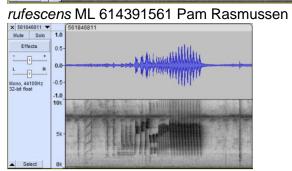


rufescens ML602434191 David Hollie









rufescens ML 561846811 Andy Keister

Treat Rufous-naped Wren *Campylorhynchus rufinucha* as two or three species: (a) treat *C. capistratus* as a separate species from *C. rufinucha* (including *humilis*), and (b) treat *C. humilis* as a separate species from *C. rufinucha*

Background:

The Rufous-naped Wren, *Campylorhynchus rufinucha*, comprises 7-8 currently recognized subspecies, which have long been considered to form three well-defined phenotypic groups: a monotypic *rufinucha* group, occurring on the Gulf coast of Mexico in Veracruz and adjacent northern Oaxaca; a monotypic *humilis* group, found in western Mexico from Colima to westernmost Chiapas; and a polytypic *capistratus* group, occurring from eastern Chiapas through much of Central America, comprising the remaining subspecies (*capistratus*, *nigricaudatus*, *castaneus*, *nicoyae*, *xerophilum*). The three groups were considered to be separate species by Ridgway (1904), although Hellmayr (1934) treated them as conspecific; however, Hellmayr also considered *C. chiapensis*, now universally treated as a separate species, to also be part of *C. rufinucha*.

The groups differ in body size (*humilis* smallest, *rufinucha* intermediate, *capistratus* group largest), plumage (among other differences, *rufinucha* is speckled below, and *humilis* has a browner (vs. black) crown and eyestripe, whereas the *capistratus* group has a rufous back and typically lacks the mustache stripe and undertail covert barring of the other two groups), and vocalizations. (Subspecies *nigricaudatus* is moderately distinct-looking from other members of the *capistratus* group in its more uniformly dark tail, but is otherwise similar to the rest.) The nominate subspecies is allopatric with the rest, whereas small, pale *C. r. humilis* and large, rich-colored *C. r. nigricaudatus* meet in a narrow zone of secondary contact near Laguna La Joya, Municipio Tonalá, in southwestern Chiapas (Selander 1964, 1965).

Much of what is known of the contact zone is due to the detailed studies of Selander (1964, 1965), who collected birds and made observations in the zone over 4 weeks in March and April of 1954. He created a hybrid index based on 6 plumage and 9 size-related characters differing between the two subspecies. Selander's results indicated that the hybrid zone was narrow and that populations of pure parentals occurred within less than 30 miles (50 km) of each other. Selander also noted variation in song patterns within the contact zone. At either end, birds sang songs typical of their respective subspecies, but within the zone, song phrases reportedly varied widely, from one parental-type song to the other through various intermediates. Emphasizing an apparent lack of premating isolation mechanisms in the hybrid zone, intergrades were fertile, and neither they nor phenotypically pure birds appeared to show preferential mate selection.

Selander suspected that this contact zone was of relatively recent anthropogenic origin, connected with extensive clearing of forests in the region, probably within the previous 50-100 years, but possibly dating as far back as 300 years. Hybrid specimens collected in 1939 indicated that the zone was present some 25 years prior to Selander's study. Upon returning to the study area in March 1963, Selander found the contact zone in the same place, but he also found evidence that the rate of gene flow in the zone had diminished, likely due to a decline in population numbers (Selander 1964, 1965), and that characters in birds on the *humilis* end of

the zone had shifted slightly towards *humilis* and those in birds on the *nigricaudatus* end of the zone had likewise shifted slightly towards *nigricaudatus*, although these changes were not statistically significant.

Intriguingly, where they occurred sympatrically with Giant Wren *C. chiapensis* (classified at the time as *C. griseus chiapensis*), the intergrades appeared to be at a competitive disadvantage relative to pure *humilis* or *nigricaudatus*, with *C. chiapensis* occupying habitat that in other regions would be suitable for *C. rufinucha*. This could account for the reported reduction in population numbers in the contact zone.

Selander, emphasizing apparently free interbreeding and fertile hybrids in the contact zone between *humilis* and *nigricaudatus*, treated the three groups as conspecific, a treatment followed by AOS (1983, 1998) and most other authors since, although Navarro-Sigüenza et al. (2004) treated the three groups as separate species under an evolutionary (and phylogenetic) species concept framework.

More recently, Birdlife-HBW separated *C. rufinucha* into three species based on the following rationale, which incorporates vocal analyses from Boesman (2016):

- *C. rufinucha*: Until recently considered conspecific with *C. humilis* and *C. capistratus*, but split on grounds of molecular and vocal research (1, 2), supported here with additional morphological evidence (see under both other species). Monotypic.
- *C. capistratus*: Until recently considered conspecific with *C. rufinucha* and *C. humilis*, but differs from latter in characters given under that species and from former in its plain vs lightly spotted underparts (2); much less restricted rufous on nape, extending (in most cases) to rump (2); longer wing (allow 1); duetting song with both birds uttering low-pitched melodious whistles of comparable shape, in synchrony, vs both birds uttering quite different notes in perfect synchrony (4) (1). Six subspecies recognized.
- C. humilis: Until recently considered conspecific with C. rufinucha and C. capistratus, but differs from the former in its plain vs lightly spotted underparts (2); mostly rufous vs all-black crown (2); smaller size (allow 2); and duetting song with one bird giving a melodious note and the other an asynchronous chatter vs both birds uttering quite different notes in perfect synchrony (4) (1); and from C. capistratus by its mostly rufous vs all-black crown (2); much more restricted rufous on nape, not extending (in most cases) to rump (2); less black in tail (1); smaller size (allow 2); duetting song involving one bird giving a melodious note and the other an asynchronous chatter vs both birds uttering low-pitched melodious whistles of comparable shape, in synchrony (4); narrow zone of hybridization (2) (2). Monotypic.

New information:

Several publications from the past two decades have delved into geographic variation in the Rufous-naped Wren.

Genetics.—Vázquez-Miranda et al. (2009) investigated the phylogeography of this species using partial sequences (547 bp) of the mitochondrial gene ND2 for 128 individuals. They sampled extensively from throughout the range of the species (Fig. 1), including 16 samples from four localities within the contact zone identified by Selander (1964).

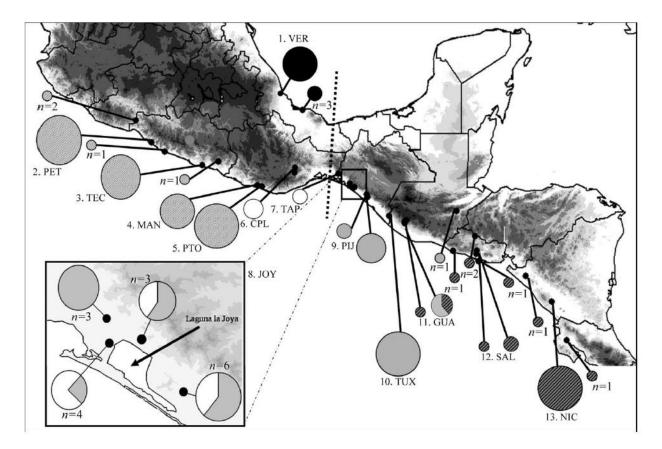


Figure 1. Map detailing the sampling of Vázquez-Miranda et al. (2009), with an inset map showing sampling within the contact zone previously studied by Selander (1964). The range of *humilis* is northwest of the contact zone (white circles for haplotype group S2 and gray-striped circles for haplotype group S1, although the stripes are hard to see), and the range of the *capistratus* group (solid gray circles for haplotype group L1 and black-striped circles for L2) is southeast of the contact zone. Nominate *rufinucha* (solid black circles for haplotype group M) occurs along the coast of the Gulf of Mexico.

Vázquez-Miranda et al. (2009) noted that in the new series of specimens from around Laguna La Joya, all birds were *nigricaudatus* based on large size and unambiguous plumage traits (e.g., black rather than barred tails, solid reddish backs), rather than spanning the range of plumage and size variation between *humilis* and *nigricaudatus* that Selander had observed decades earlier. BEH examined these specimens (located at UNAM) and confirmed this. Moreover, several dozen specimens that Vázquez-Miranda et al. examined from throughout the range of the *capistratus* group (and far from the zone of contact) had lightly to heavily barred undertail coverts and/or a faint to strong moustachial stripe, suggesting that these plumage traits, also used in Selander's hybrid index, may not be reliable indicators of introgression when they occur on otherwise *nigricaudatus*-plumaged birds in the contact zone.

The distribution of haplotypes was congruent with the morphological groups, apart from five birds (out of the 16) from the contact zone that had *nigricaudatus* phenotypes but *humilis* mtDNA haplotypes. These were called hybrids by Vázquez-Miranda et al. (2009) but note that they are not hybrids in the sense of Selander (1964); rather, they are birds with mismatched phenotype and mitochondrial DNA, suggestive of past introgression. The mismatched birds had a distinctive haplotype (h23 in the S2 group in Fig. 2, marked by an asterisk) that differed by one step from those of the nearest *humilis*; the most parsimonious explanation for the unique haplotype is that it results from hybridization sometime in the past, with little if any current gene flow (Vázquez-Miranda et al. 2009).

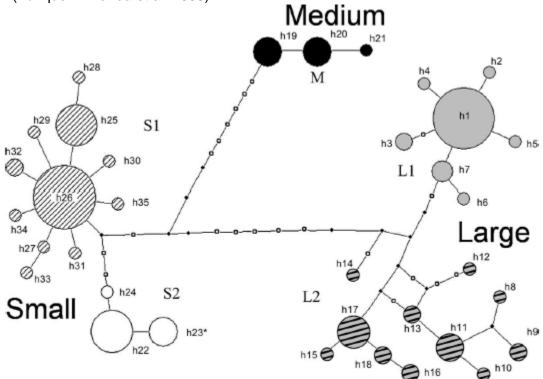


Figure 2. Minimum spanning network of haplotypes of *C. rufinucha* (small = subspecies *humilis*; medium = subspecies *rufinucha*; large = *capistratus* subspecies group). The shading matches that in the map, although the striping is much easier to see in this figure.

In the parsimony and ML analyses (Fig. 3), the three groups formed reasonably well-supported clades (83-90% parsimony bootstraps), with *humilis* and *rufinucha* sister to each other and *capistratus* sister to them. Groups were not as well-resolved in the Bayesian analysis (*capistratus* did not form a monophyletic group, and *rufinucha* was embedded within *humilis*), but support for these results was poor. ND2 divergence between *humilis*/*rufinucha* and *nigricaudatus* was reported as 4.1% (Vázquez-Miranda et al. 2009), whereas we estimated the divergence between *humilis* and *rufinucha* (from GenBank sequences) to be 3.1%.

On the basis of their findings, Vázquez-Miranda et al. (2009) proposed recognizing the three main evolutionary lineages, coincident with the three long-recognized phenotypic groups, as distinct species.

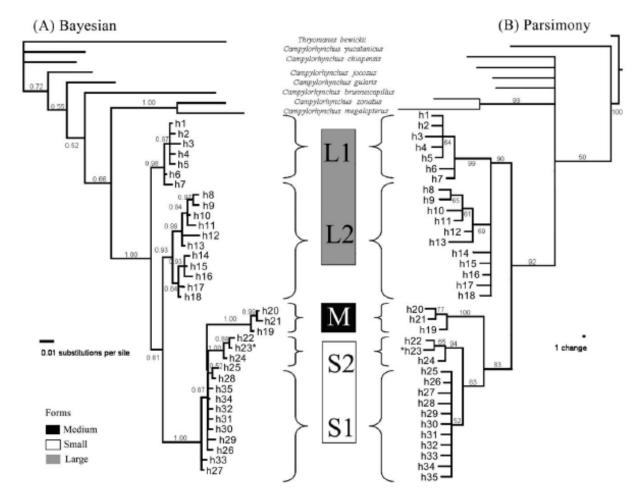


Figure 3. Phylogenetic relationships within *C. rufinucha* using (A) Bayesian and (B) parsimony analyses (results of ML analyses were similar to the parsimony tree). Average divergence between *humilis/rufinucha* and *nigricaudatus* was 4.1%, whereas that between *humilis* and *rufinucha* was ca. 3.1%.

Although all birds that Vázquez-Miranda et al. (2009) sampled from northwest of Selander's contact zone were *humilis* in both phenotype and mtDNA haplotype, the genetic samples of *humilis* nearest to the contact zone were from San Pedro Tapanatepec, Oaxaca, ca. 65 km northwest of the Tonalá/Laguna La Joya region. This suggests at least the formal possibility that the hybrid zone may have shifted northwest of the original contact area, but would not have been detected using the samples available to Vázquez-Miranda et al. To investigate this possibility, RTC examined photos of this species from Chiapas in the Macaulay Library. All identified or identifiable photos from Selander's contact zone and to the southeast of the zone were *nigricaudatus*, whereas all identified or identifiable photos from the Arriaga region (ML 66886331, ML 88882671, and ML 56220621), only some 25 km from the *nigricaudatus* samples collected by Vázquez-Miranda et al. at Rancho la Industria, northwest of Laguna La Joya. Thus, even if the hybrid zone were to have shifted to the northwest, a proposition for which there is no evidence, it must have narrowed considerably from the already narrow zone studied by Selander.

Vocalizations.—Sosa-López et al. (2012), in concert with Vázquez-Miranda et al.'s study of genetic variation, analyzed songs from across the range of Rufous-naped Wren (including all but two subspecies of the capistratus group), including samples from three localities within the contact zone between humilis and nigricaudatus where Selander had found high incidence of hybridization, to determine the existence and extent of vocal variation among the taxa. Both individual songs and duets differed significantly among the three groups, but the primary differences among songs were associated with size. Duets, however, differed qualitatively in their degree of sexual dimorphism. In the *capistratus* group, duets generally weren't sexually dimorphic - duetting birds sang virtually identical notes in synchrony - whereas duets of rufinucha and humilis were strongly sexually dimorphic. The latter two taxa differed in note pattern: in *rufinucha*, female and male notes were typically given synchronously, whereas in humilis, the female component of the duet wasn't synchronized with that of the male, but instead was a constant chatter in the background. Individual songs from the humilis-nigricaudatus contact zone differed significantly from songs of humilis, but not from those of nigricaudatus/ capistratus, although some birds did sing an individual song similar to that of humilis. Sosa-López et al. (2012) found no indication of mixed individual songs, and duets were apparently not recorded in the contact zone.

Boesman (2016) compared vocalizations of *capistratus*, *rufinucha*, *humilis*, although he did not mention individual songs but instead focused solely on the duets, for which he provided the sonagrams in Fig. 4. Boesman, as noted in the Birdlife rationale mentioned previously, concluded that duets of the three subspecies groups differ markedly:

- *capistratus* differs from *rufinucha* by duet phrases including more notes (2) which are all of a similar type (while both sexes of *rufinucha* utter very different notes, score 1-2) and which have a longer period duration (score 2-3).
- capistratus differs from humilis by duet phrases including less notes (2) which are all of a similar type (while both sexes of humilis utter very different notes, score 1-2), which are given in synchronous duet (2) and which have a longer period duration (score 2-3).
- *rufinucha* differs from *humilis* by a synchronous duet (2) with only two notes per period (vs. many more in *humilis*, score 3).

Ku-Peralta et al. (2020) found further support for significant differences in duets among the three groups, largely due to different degrees of sexual dimorphism. Duets of the *capistratus* group were the most divergent, mainly due to minimal sexual dimorphism in which males and females sang the same melodic whistled songs, whereas duetting songs of both *rufinucha* and *humilis* were strongly sexually dimorphic. Duets in *rufinucha* were temporally synchronized as in the *capistratus* group, but the female song was simpler than the male song. In *humilis*, the female song was a simple chatter, not synchronized with the male song. Ku-Peralta et al. (2020) did not study vocalizations in the contact zone between *humilis* and *nigricaudatus*.

In summary, previously reported phenotypic differences between groups are largely congruent with the findings of in-depth genetic and vocal analyses of the *C. rufinucha* complex.

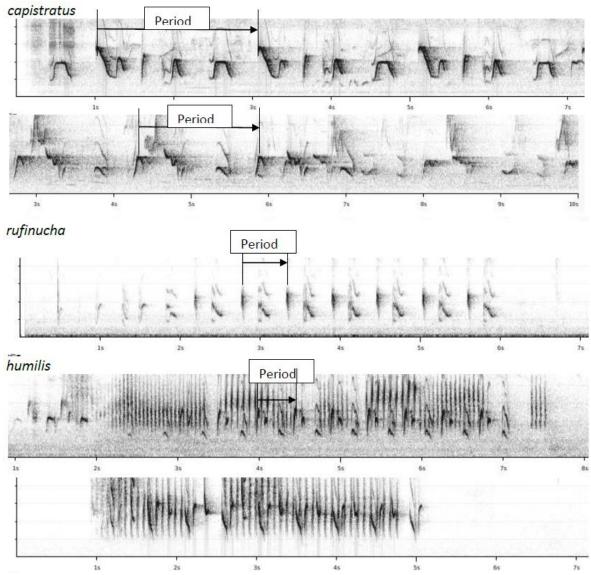


Figure 4. Sonagrams of duets from the three subspecies groups of *C. rufinucha* (from Boesman 2016).

Recommendation:

Votes are required on the following issues:

- (a) Treat C. capistratus as a separate species from C. rufinucha (including humilis)
- (b) Treat C. humilis as a separate species from C. rufinucha

We recommend a YES vote to recognize *C. capistratus* as a separate species from *C. rufinucha* (incl. *humilis*). Although Selander found apparent free hybridization between *nigricaudatus* (of the *capistratus* group) and *humilis* in a narrow zone in the Laguna La Joya/Tonalá region in his studies of 1954, the situation appeared to be changing somewhat by 1963, when, despite maintenance of the width of the contact zone, he noted diminishing gene flow and slight shifts in

characters towards parental states at the ends of the zone. By the time of Vazquez-Miranda's study in the early 2000s, all birds in the vicinity of Laguna La Joya were *nigricaudatus* by plumage and morphometrics. The chief indications of contact were the five birds with mismatched phenotype and mtDNA, indicating past introgression, and perhaps some residual effects on individual song, whereas Vazquez-Miranda et al. (2009) found no introgression of mtDNA beyond the Laguna La Joya region, and there is no evidence for the hybrid zone having simply shifted to the northwest. In our view, this indicates that the apparent free interbreeding of 1954 has resolved itself, presumably through postmating isolation mechanisms, possibly due to the competitive disadvantage of hybrid birds relative to *C. chiapensis*, as noted by Selander (1964).

We have less to go on in the case of recognizing the allopatric *humilis* and *rufinucha* as separate species, but we tentatively recommend a YES vote on this as well. This would represent a return to the taxonomy of Ridgway (1904). Under ordinary circumstances the differences in individual songs, duets, and genetics would make a strong case for species status, but the free interbreeding noted by Selander (1964) in the *humilis-nigricaudatus* contact zone raises the possibility that a similar situation might pertain if *rufinucha* and *humilis* were to meet. This is especially so given that the phenotypic and genetic differences between *rufinucha* and *humilis*, although notable, are somewhat less than those between *humilis* and *nigricaudatus*. Nevertheless, given morphological differences deemed sufficient for species status in the past, substantial vocal differences, and genetic differences, we recommend that *rufinucha* and *humilis* also be elevated to species status.

English names:

The 7th edition of the AOU Check-list used the English names Rufous-naped Wren, Sclater's Wren, and Rufous-backed Wren for the *rufinucha*, *humilis*, and *capistratus* groups, respectively. However, if this proposal passes, a separate proposal will be introduced regarding English names.

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Submitted by: Max T. Kirsch, R. Terry Chesser, and Blanca E. Hernández-Baños

Date of Proposal: 23 February 2024

Treat recently described Vanuatu Petrel *Pterodroma occulta* as a subspecies of Whitenecked Petrel *P. cervicalis*

Background:

Extralimital species *Pterodroma occulta* was recently described as a species separate from *P. cervicalis* (Imber and Tennyson 2001). The description was based on six AMNH specimens taken during the Whitney South Sea Expedition near Vanuatu in 1927 and a specimen salvaged in New South Wales, Australia, in 1983. This description post-dates the 1998 checklist and the distributional statement of *P. cervicalis*, which does not mention Vanuatu. If this proposal is accepted, the distributional statement of *P. cervicalis*, which does not mention Vanuatu. If this proposal is accepted, the distributional statement of *P. cervicalis* will be amended to include Vanuatu and a note will be added. The six AMNH specimens were taken at sea near Mera Lava, Banks Islands, Vanuatu, 28–29 January 1927, and initially identified as probably *P. cervicalis*, then later as *P. externa*, likely after Peters (1931) lumped *cervicalis* with *externa*. A description of these specimens as a new subspecies was planned in 1962 but never occurred (Shirihai and Bretagnolle 2010). Later, Falla (1976) reidentified these specimens as a small form of P. *cervicalis*. A road-killed specimen found near the coast in northern New South Wales, Australia, in 1983 was also identified as this small form of *cervicalis*.

New Information:

These seven specimens were used to describe *P. occulta* as a species separate from *P. cervicalis* by Imber and Tennyson (2001) based on average smaller size, including shorter wing and bill, relatively longer and more wedge-shaped tail, and average darker under-primary surface and tail of *occulta* (Table 1). Lice found on *P. occulta* are also found on *P. cervicalis* and *P. phaeopygia*, but not on *P. sandwichensis* or *P. externa*. At the time of the description, the breeding grounds were unknown.

Later work found that although size averaged smaller, most measurements were closer than previously thought, with only bill measurements being diagnostic, the smaller size possibly due to the lower latitude breeding grounds (Table 2; Shirihai and Bretagnolle 2010). This smaller size is generally not apparent in the field and there is enough variation in tail and underwing patterns of both taxa that they are not currently known to be field identifiable (Shirihai and Bretagnolle 2010; Howell and Zufelt 2019). It has been suggested that some individuals may be identifiable by a combination of size and underwing pattern (Flood and Zufelt 2023), and a full complement of Vanuatu Petrel-like features (dark underwing point, ulna bar, and carpal bar) shown by a minority of individuals, may be diagnostic for the taxon (Vaughan et al. 2024).

Although sex-related differences in the burrow call of *P. occulta* have been described and spectrograms have been published, no direct comparison with *P. cervicalis* has been made, although the calls of the two taxa are said to be similar, as are those of *P. externa* (Totterman 2012). Totterman (2012) also described and included spectrograms of the flight call of *P. occulta*, but these were not studied in depth. It is also not known what breeding stage pairs were in at the time of recording. Only two recordings of *P. cervicalis* (believed to represent courtship calls) are readily available (both on xeno-canto) and none of *P. occulta*.

The breeding grounds were confirmed in 2007 and 2009 to be on Vanua Lava, Bank Islands, Vanuatu, where the birds were well known to the locals who know them as Qetlap and regularly harvested them (Totterman 2009, 2012). The breeding season is roughly six weeks earlier than that of *P. cervicalis*. Although *P. occulta* is definitively only known to occur around Vanuatu, two at-sea sightings from Ogasawara (Bonin Islands), Japan, and a third individual 1000 km north of Kiritimati (identified by a combination of apparent small size, slight build, and extreme dark underwing pattern) suggest that this taxon may wander widely into the north Pacific and thus may occur in the NACC area (Flood and Zufelt 2023).

The description of *P. occulta* as a separate species has remained controversial, with some sources recognizing it as such (IOC; Onley and Scofield 2007; Clements et al. 2023) and others treating it as a subspecies (Birdlife International; Brooke 2004; Dickinson and Remsen 2013, Del Hoyo 2020). Others have considered the taxonomy unresolved (Shirihai and Bretagnolle 2010; Howell and Zufelt 2019, Flood and Zufelt 2023, Vaughan et al. 2024).

Recommendation:

As there are no published studies on the genetics or comparing vocalizations of *occulta* and *cervicalis*, and only average plumage differences with bill measurements the sole diagnostic feature, I recommend a **yes** vote on treating *P. occulta* as conspecific with *P. cervicalis*. Adoption of this would require a change to the distributional statement for *P. cervicalis*, and a note would need to be added to the species account. If this proposal fails, only the note would be needed.

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Submitted By: David Vander Pluym, Louisiana State University

Date of Proposal: 22 February 2024

Replace family name Cettiidae with family name Scotocercidae

Background:

In 2010, NACC voted to adopt a split of the formerly very large and diverse family of Old World Warblers, Sylviidae, on the basis of phylogenetic work that showed Sylviidae *sensu lato* was paraphyletic (Beresford et al. 2005, Alström et al. 2006, Johansson et al. 2008, Chesser et al. 2010). One of the families that NACC recognized from the breakup of Sylviidae was Cettiidae, the sole NACC representative of which is the introduced species *Horornis diphone*. The name Cettiidae was proposed by Alström et al. (2006), using *Cettia* as the type genus of the family, and additional studies have further refined the boundaries and membership of this family. These include Alström et al. (2011) and Fregin et al. (2012), who found that *Scotocerca inquieta* and *Erythrocercus* were closely related to the Cettiidae, with some taxonomic authorities placing these two genera within Cettiidae (e.g., Gill and Donsker 2011). Based on its distinctive morphology and ecology relative to other members of Cettiidae, Fregin et al. (2012) recommended placing *Scotocerca inquieta* in a monotypic family and described the family Scotocercidae.

Although Cettiidae was adopted as a family name by Alström et al. (2006) and subsequent authors, it failed to satisfy Articles 13 and 16 of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature 1999): 1) the definition of a family on the basis of molecular phylogenetic characters did not satisfy the requirement under Article 13 that a diagnosis or description be given for the new name, and 2) when a description was given in Alström et al. (2011), there was no statement that the name Cettiidae was "new" as required by Article 16, as it was assumed that Cettiidae was already a valid name.

In Appendix 2 of the Howard and Moore Complete Checklist of the Birds of the World (Dickinson and Christidis 2014), Alström, Olsson, and Ericson (p. 636) formally described Cettiinae, and acted as first revisors in adopting Scotocercidae over Erythrocercidae, which had both already been described in the same journal article (Fregin et al. 2012), for the family name that includes the bush warblers (*Cettia, Horornis*), tesias (*Tesia*), and their allies, as well as *Scotocerca inquieta* and *Erythrocercus*. The use of Scotocercidae for this group (this name has priority over Cettiidae) has been adopted by Dickinson and Christidis (2014), Clements et al. (2023), and others.

Following the International Code of Zoological Nomenclature, the use of Cettidae in the *Check-List* is invalid and must be replaced with Scotocercidae, which has priority. I recommend adopting Scotocercidae as the family name for this group (but see below).

Addendum:

Further evidence has surfaced that the name Cettiidae *is* in fact valid and available as the family name. Max Kirsch brought to our attention, through posts by Laurent Raty on BirdForum (see <u>here</u>), that two publications were overlooked in the designation of the family name of this group.

The name "Cettiidae" or "Cettiinae" appears to have been used in Coues (1903) and Chigi (1912). In the case of Coues (<u>1903</u>: p. <u>261</u>), the name "Cettiinae" was proposed conditionally; however, Article 11.5.1 of the ICZN states "A name proposed conditionally for a taxon before 1961 is not to be excluded on that count alone." Coues's name also satisfies Article 12, where "To be available, every new name published before 1931 must be accompanied by a description or definition of the taxon that it denotes, or by an indication," an "indication" noted in Article 12.2.4 as "the formation of a family-group name from an available generic name" (International Commission on Zoological Nomenclature 1999). In the case of Chigi (<u>1912</u>: p. <u>437</u>), the name is included in an index, but clearly denotes the type genus and the reference to that genus. Based on these new findings, it does appear that Cettiidae is valid under the rules of the ICZN, and no change is needed for the *Checklist*, as the name proposed by Alström et al. (2006) was not in fact new, and therefore Articles 13 and 16 of the ICZN do not apply.

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Submitted by: Shawn M. Billerman, Cornell Lab of Ornithology

Date of Proposal: 22 February 2024, revised 25 March 2024

Transfer Mangrove Hummingbird Amazilia boucardi to the genus Chrysuronia

Background:

The Mangrove Hummingbird, *Amazilia boucardi* (Figure 1 and 2), was described by Mulsant in 1877 in the monotypic genus *Arena*. It is endemic to mangrove forests on the Pacific slope of northwestern Costa Rica. Ridgway (1911) and Cory (1918) found that the genus name *Arena* was preoccupied and instead placed this species in the genus *Lepidopyga* (Reichenbach, 1855). Peters (1945) placed *boucardi* (but not the two other species of *Lepidopyga*) in the broad genus *Amazilia* where it has remained ever since. In 2014 tissues were not available for this narrow endemic and it was not included in the McGuire et al. (2014) study that led to the broad breakup of *Amazilia*. Stiles et al (2017) tentatively recommended it be kept it in *Amazilia*, which NACC has followed.

New information:

Albertazzi et al. (2024) sought to determine the correct generic placement of *A. boucardi*, using tissues from a single, recently collected individual. Six loci – FGB (979 bp), AK1 (529 bp), ODC (603 bp), MUSK (596 bp), ND2 (945 bp), ND4/tRNA-His/tRNA-Ser/tRNA-Leu partial (885 bp) – were sequenced. In a Bayesian analysis, these sequences were combined with sequences of 56 emerald species (Trochilini) from Genbank derived from McGuire et al (2014) for the same loci. The resulting tree (Figure 3), placed *boucardi* as sister to one sample of *Lepidogyga coeruleogularis*, now placed in the genus *Chrysuronia* in a clade with several other species in the emerald group (the other sample of *L. coeruleogularis* is in a different clade, but this appears to be erroneous based on the McGuire et al tree, where the two samples are sisters). *Chrysuronia coeruleogularis* is found in mangroves and other scrubby habitats from eastern Panama and southwestern Costa Rica to northern Colombia, both on Pacific and Caribbean slopes (Schuchmann and Boesman 2021).

Within the broad emerald clade, this leaves only the Honduran Emerald "Amazilia" luciae (Lawrence, 1867) without certain generic placement, due to lack of a genetic sample. Although Schuchmann (1999) considered that *luciae*, an endemic to Honduras, and *boucardi* might be sisters (perhaps because of their geographical proximity), Albertazzi et al. (2024) preferred to leave *luciae* as "*incertae sedis*" until a genetic sample can be analyzed.

Recommendation:

I recommend that we place *Amazilia boucardi* in the genus *Chrysuronia*. It should be placed before *Chrysuronia coeruleogularis*, following our sequencing guidelines. Although *Amazilia luciae* has been linked with *boucardi* (Schuchmann 1999) and they are adjacent in our most recent classification, I recommend that we leave *luciae* stranded at the end of *Amazilia* until genetic sequences can be analyzed. As McGuire et al. (2014) showed, phenotype and geography in these emeralds have been unreliable characters for assessing relationships. The English name - Mangrove Hummingbird – has been used by everyone recently (IOC, eBird, HBW) and has been in use at least since the mid-1960s (Slud 1964 was the earliest I found); it

is entirely appropriate given the preferred habitat of this narrow endemic. Ridgway (1911) and Cory (1918) used Boucard's Hummingbird. Within the genus *Chrysuronia*, three species (including *boucardi*) are called hummingbirds, three species are called sapphires, and three species are called emeralds. All three names (hummingbird, sapphire, emerald) are found in least two other genera. It would not make sense to change a single group name to align with the genus at this point.



Figure 1. *Amazilia boucardi,* female plumage. Photo Dana Barbato (Macaulay Library ML614850071).



Figure 2. Amazilia boucardi, male. Photo Markus Craig (Macaulay Library ML602600021).

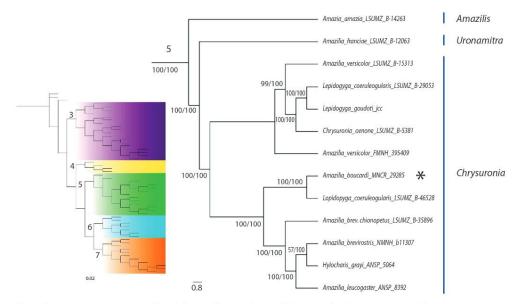


Fig. 1. Bayesian consensus tree inferred from a dataset of emerald hummingbirds group using six loci. Letters represent subgroup classifications according to Stiles et al. (2017b) and are highlighted in different colors. The numbers above the nodes correspond to percent of posterior probabilities values and maximum likelihood bootstrap. *Amazilia boucardi* is denoted by an asterisk.

Figure 3. Phylogeny from Albertazzi et al. (2024).

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Submitted by: Andrew W. Kratter

Date of Proposal: 23 February 2024

2024-C-8 N&MA Classification Committee p. 521

Treat *Ramphocinclus sanctaeluciae* as a separate species from White-breasted Thrasher *R. brachyurus*

Effect on NACC:

Approval of this proposal would split *Ramphocinclus brachyurus* into two species: *R. brachyurus* and *R. sanctaeluciae*, and therefore would add one species to the checklist.

Background:

The White-breasted Thrasher is a medium-sized species in the family Mimidae with brown upperparts, sides, flanks, and undertail coverts, and white underparts (throat, breast, and belly). Females and males share the same plumage, although males are slightly larger (Mortensen et al. 2020). *Ramphocinclus brachyurus* has long been considered a single species with two subspecies (Hellmayr 1934; AOU 1983, 1998; Storer 1989), but Cory (1887) and Ridgway (1907) previously considered the subspecies to be separate species. The two subspecies are endemic and year-round residents in the Lesser Antilles, *R. b. brachyurus* on Martinique, and *R. b. sanctaeluciae* on Saint Lucia. They inhabit seasonal deciduous forests, preferably with dense saplings and abundant leaf litter (Mortensen et al. 2020).

The genus *Ramphocinclus* is monotypic. When the species *R. brachyurus* was described it was initially named *Turdus brachyurus* (Vieillot 1818) with the type locality of Martinique. The species was later transferred to the newly designated genus *Ramphocinclus* (Lafresnaye 1843). Sclater (1859) mentioned as the habitat for *R. brachyurus* the islands of Martinique, Saint Lucia, and Guadeloupe, although the Guadeloupe records were later regarded as erroneous (Hellmayr 1934). Although Sclater (1859) had listed Saint Lucia as the habitat of *R. brachyurus*, it was almost three decades later that *R. sanctaeluciae* was described as a separate species by Cory (1887). The Saint Lucia birds were differentiated from the Martinique birds by their brown instead of dark slate-colored upperparts, a different shade of brown on the sides of the body, more extended black on the lores, broader tail feathers, and larger body size (Cory 1887).

Ridgway (1907) treated *brachyurus* and *sanctaeluciae* as separate species and described *sanctaeluciae* as similar to *brachyurus* but larger and darker; the upperparts darker and more sooty brown, the sides and flanks similar. Ridgway presented specimen measurements evidencing the larger size of *sanctaeluciae* (Table 1).

Table 1. Specimen measurements (millimeters) of the genus Ramphocinclus (Ridgway 1907).							
Species and sex	n	Length	Wing	Tail	Exp. culmen	Tarsus	Middle toe
<i>R. brachyurus</i> male	6	186 – 212 (200)	92 – 100 (96.5)	72 – 85 (77.3)	20 – 24.5 (23.4)	29 – 31.5 (30.2)	19 – 23 (21.4)
<i>R. brachyurus</i> female	5	195 – 225 (204)	95 – 106 (98.4)	70 – 84.5 (77.2)	22 – 23 (22.7)	29 – 31 (29.9)	21 – 23 (21.8)
<i>R. sanctaeluciae</i> male	7	190 – 222 (204)	101 – 109 (105.2)	77 – 87 (83.5)	24.5 – 27 (26)	32.5 – 34.5 (33.4)	22 – 25 (23.3)
<i>R. sanctaeluciae</i> female	3	200 – 222 (214)	107 – 109 (107.7)	85 – 90 (87.7)	25 – 27 (25.7)	33 – 35 (34.3)	23 – 25 (23.7)

Hellmayr (1934) listed *brachyurus* and *sanctaeluciae* as subspecies of a single species, and wrote a note under *sanctaeluciae* stating that it "is merely a somewhat larger race with darker upper parts, especially on the forepart of the pileum".

Storer (1989) conducted a study on the geographic variation and sexual dimorphism of the Lesser Antillean thrashers in the genera Ramphocinclus and Cinclocerthia. Storer examined 79 specimens in the genus Ramphocinclus and considered brachyurus and sanctaeluciae as conspecific. His analysis confirmed that brachyurus is consistently smaller than sanctaeluciae, and except in culmen length, less dimorphic; color differences between the two subspecies were consistent and corresponded with those noted by Ridgway (1907). Storer's work, focusing on two genera of mimids from the Lesser Antilles, provides a good point of comparison of species limits for closely related groups inhabiting the same region. Tremblers in the genus Cinclocerthia are found in the Lesser Antilles from the islands of Saba and St. Eustatius to St. Vincent. Cinclocerthia ruficauda by 1989 (the year of Storer's publication) was considered a single species (AOS 1983) with six subspecies. However, the monotypic Cinclocerthia was split into two species, C. ruficauda and C. gutturalis (AOU 1991) following Storer (1989): morphological and plumage color differences between ruficauda and gutturalis are comparable to or greater than the differences between other pairs of thrasher species, in addition to differences in vocalizations and trembling. Interestingly, C. gutturalis is only found in the islands of Martinique (C. g. gutturalis) and Saint Lucia (C. g. macrorhyncha) and is therefore sympatric with Ramphocinclus (although C. gutturalis is more widespread than Ramphocinclus on both islands). The two subspecies of C. gutturalis differ consistently in the color of the underparts (Storer 1989); species limits within C. gutturalis have not yet been questioned and only samples from the subspecies in St. Lucia have been included in phylogenies. Phylogenetic analysis suggests that C. gutturalis from St. Lucia represents a distinct mtDNA clade from C. ruficauda with average distances to the two C. ruficauda clades of 4.0% and 4.3% (Hunt et al. 2001).

Behavior

The White-breasted Thrasher is a cooperative breeder with sex-biased dispersal in which females disperse over greater distances while males show philopatry (data from six microsatellite loci); relatively short dispersal distances may have a negative impact on its ability to colonize new areas (Temple et al. 2006). Breeding groups consist of a pair of breeders and up to three related helpers of either sex, and they show a small percentage of extra-group paternity, 7.5% (Temple et al. 2009). Cooperative breeding has been recorded in both *R. b. brachyurus* (Gros-Desormeaux et al. 2015) and *R. b. sanctaeluciae* (Temple et al. 2006, 2009).

Documented strong philopatry in addition to banding evidence suggests that birds do not move between Martinica and Saint Lucia islands (Temple et al. 2006, Mortensen et al. 2020) nor between the Iyanola and Mandelé ranges within Saint Lucia, ranges that are 3 km apart (Mortensen et al. 2017). Banding data show that birds can disperse a variety of distances: from 11 recaptures, five settled in the same area of the first capture, three traveled between 150 and 250 meters, and three traveled between 400 and 1000 meters (Gros-Desormeaux et al. 2015). However, the average distance juveniles move is 249 meters (Mortensen et al. 2017).

Phylogenetics

Phylogenetic analyses, which have only included two representatives of *R. b. sanctaeluciae*, place the species as either sister to the predominantly continental Gray Catbird *Dumetella carolinensis* or as sister to the continental Black Catbird *Melanoptila glabirositris* (Hunt et al. 2001, Lovette et al. 2012). Phylogenetic analyses in Hunt et al. (2001) included Greater and

Lesser Antillean Mimidae species, and analyzed mitochondrial DNA (ATP 6 and 8, ND2, CO1, and ribosomal genes 12S and 16S) and one nuclear gene (MYO-2 and short regions of flanking exons 2 and 3).

The phylogeny developed by Lovette et al. (2012) included the same two samples of *R. b. sanctaeluciae* (STRI-SLRBR1, STRI-SLRBR2) previously analyzed by Hunt et al. (2001). Lovette et al. (2012) reconstructed the phylogeny of the Mimidae including all recognized species in the family, analyzing mitochondrial (ATP 6 and 8, ND2, CO1, CO2) and nuclear (FGB-5, FGB-7, TGFB-2, RHO-1) DNA. The relationships estimated by Bayesian MCMC analyses of the concatenated mitochondrial and nuclear sequences recovered the White-breasted Thrasher as sister to the Gray Catbird (Fig. 1).

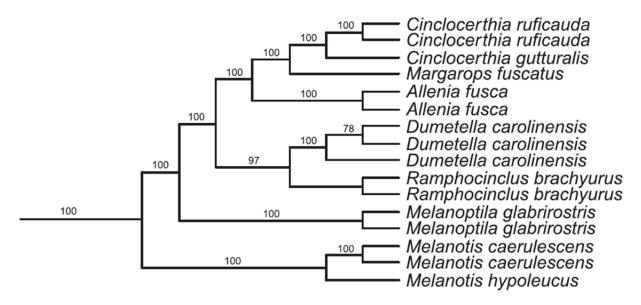


Figure 1. Relevant part from Figure 1 of Lovette et al. (2012). Bayesian MCMC analyses of the concatenated mitochondrial and nuclear sequences. The two individual samples of *Ramphocinclus brachyurus* represent the subspecies *sanctaeluciae*. The topology shows the 50% majority rule consensus of post-burn-in trees. Numbers adjacent to nodes indicate posterior probability values >75. Note that branch lengths are not proportional to genetic divergence.

Vocalizations

There have been no formal studies on vocalizations of the White-breasted Thrasher, only comments about its song in technical reports. Morton (2009) noted that in Saint Lucia alarm cries are commonly heard when mobbing predators but song is quite rare. Lesales (2012) mentioned that the Saint Lucia thrasher seems to have a varied repertoire of calls, which differ from those of its Martinique counterpart. Lesales also commented about playing a recording of the song of the Martinique thrasher to Lesmond (probably Stephen Lesmond from the Forestry Department in Saint Lucia), who indicated that the song is similar to that of the Saint Lucia thrasher.

Unfortunately, recordings are scarce in sound libraries (Macaulay Library - 19 recordings; xenocanto - 9 recordings) and 27 out of 28 recordings are calls. The varied repertoire of calls would require large sample sizes of both subspecies to be able to compare homologous calls. Here is a subsample of the repertoire of calls (category of call as appears in sound libraries):

R. b. brachyurus - Martinique:

Call (recorder approached to a nest): <u>https://macaulaylibrary.org/asset/173419701</u> Call (simple call note): <u>https://macaulaylibrary.org/asset/142941421</u> Call: <u>https://macaulaylibrary.org/asset/602432541</u>

R. b. sanctaelucia - Saint Lucia Petition call: <u>https://xeno-canto.org/589913</u> Alarm call: <u>https://xeno-canto.org/589908</u> Call: <u>https://xeno-canto.org/589916</u>

Only a single song, this one from Saint Lucia (<u>https://xeno-canto.org/9502</u>), is available, so it is not known whether songs differ between islands.

New information:

There are recent publications on Mimidae phylogenomics (DaCosta et al. 2019) and morphological variation within *R. b. brachyurus* (Son et al. 2021). DaCosta et al. (2019) estimated species trees and made recommendations on *Ramphocinclus* species limits; Son et al. (2021) focused on one of the two subspecies and did not address species limits within *Ramphocinclus*.

DaCosta et al. (2019) examined the biogeographic and evolutionary history of the tremblers and thrashers of the Antilles. The authors worked with ddRAD sequencing and included samples of both subspecies of Ramphocinclus brachyurus in the phylogenetic analysis (two individuals from each subspecies). The phylogeny recovered *R. brachyurus* as part of a monophyletic group exclusive to the Antilles and not as sister to the Gray Catbird (Fig. 2) as previous studies had suggested (Hunt et al. 2001, Lovette et al. 2012). The new phylogenetic hypothesis suggests that R. b. brachyurus and R. b. sanctaeluciae have a long history of independence with no evidence of gene flow, and that they are as genetically divergent from each other as other genera in the family Mimidae. The authors recommended that both subspecies should be elevated to species level and subsequently designated as Critically Endangered, R. b. brachyurus, and Endangered, R. b. sanctaeluciae, by the Red List. Although not discussed in the paper, the deep divergence (and long branches) seems intriguing given the near extinction event that is documented for R. b. brachyurus around 1950 (Gros-Desormeaux et al. 2015), which could have resulted in a strong genetic bottleneck in that subspecies (bottlenecks produce a sudden burst of coalescence, Bunnefeld et al. 2015). The population on Martinique has increased since then but it still has a small number of individuals (coalescence is accelerated where there are small population sizes, Eriksson et al. 2010), around 300 individuals (Mortensen and Reed 2016).

Son et al. (2021) followed the capture-mark-recapture method to study morphological variation within *R. b. brachyurus* in Martinique. The measurements taken from each bird were beak length, beak height, tarsus length and thickness, wing length, tail length, body mass; sex was determined genetically. No sexual dimorphism was found for all the analyzed traits.

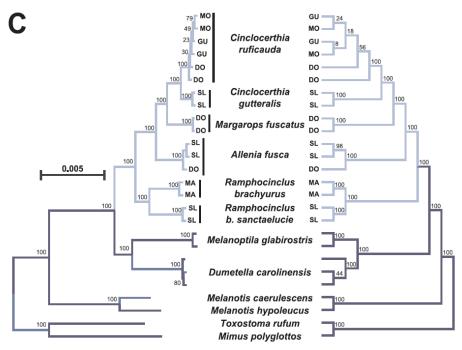


Figure 2. Relevant part from Figure 2 of DaCosta et al. (2019). Phylogenetic hypotheses based on a concatenated matrix of 2223 ddRAD loci. Left: concatenated maximum likelihood. Right: quartet-based species tree. Numbers at nodes represent bootstrap percentages. MO: Montserrat; GU: Guadeloupe; DO: Dominica; MA: Martinique; SL: Saint Lucia.

Additional comments on species limits within Ramphocinclus

Several other authors have commented on the taxonomic status of the subspecies of *R*. *brachyurus*. Temple (2005) noted that *R. b. brachyurus* and *R. b. sanctaeluciae* are welldifferentiated at the phenotypic level, are not interbreeding, and constitute two separate evolutionary lineages; therefore, each subspecies should be considered as an evolutionarily significant unit for conservation management. Morton (2009) mentioned personal communication with Temple: Temple reported that genetic analyses (unpublished) have suggested that each subspecies could be elevated to species level.

Mortensen et al. (2017) noted that their ongoing genomic work supports the field data (i.e., no dispersal between Martinique and Saint Lucia, nor dispersal between ranges within Saint Lucia). They also suggested that their genomic work would help to assess species limits between the two subspecies. Unfortunately, that genomic work has not been published yet.

None of the four global lists of birds (HBW-BirdLife, eBird/Clements, Howard & Moore, IOC) split the White-breasted Thrasher into two species. However, HBW-BirdLife acknowledged several differences: "Subspecies *sanctaeluciae* considered a separate species by some authors and evidence highly supportive: differs in the browner shade of its grey-brown plumage (1); blacker lores and ear-coverts (1); purer white underparts (1); more neatly organized (less irregular) flank markings (ns1); lack of scalloping on wing-coverts (ns1); anecdotally somewhat different calls (no recordings available; allow 1); mildly different ecology (nests reportedly placed much lower in vegetation; clearer evidence needed) (ns1); and larger size (effect size for male tail 5.71, but n=7 vs n=6; precautionarily allowed 2)."

Recommendation:

This is a challenging case, especially given that the split being evaluated involves two allopatric subspecies, each inhabiting small areas in separate islands in the Lesser Antilles, R. b. brachyurus on Martinique and R. b. sanctaelucia on Saint Lucia. The two subspecies of Ramphocinclus differ phenotypically, with R. b. sanctaelucia being larger and darker than R. b. brachyurus. In support of maintaining two subspecies, the differences in plumage coloration between the subspecies of Ramphocinclus are similar to the differences between other pairs of subspecies of Antillean mimids, such as Cinclocerthia gutturalis, which also occurs on Martinique and Saint Lucia, with a different subspecies on each island. Conversely, dispersal distances and behavior could support a split; banding data suggest that individuals do not move between islands, and microsatellite data have shown sex-biased dispersal with strong male philopatry. Although the vocalizations have not been quantitatively assessed, it has been commented that the two subspecies differ in vocal repertoire; they even differ in the frequency of emitting songs (song is rare in *R. b. sanctaelucia*; they mainly call). Furthermore, the most recent phylogeny based on ddRAD sequences suggests deep genetic divergence between the two subspecies. Although in most cases a deep divergence might not be sufficient evidence to support a split, given that the phylogeny is based on genomic data and that the deep divergence between R. b. brachyurus and R. b. sanctaelucia is as substantial as the divergence between genera of related mimids from the Lesser Antilles, this deep divergence, taken together with the additional evidence (morphology, plumage coloration, possible vocal differences, and low dispersal distances), presents the case to support elevating the two subspecies to species level. I recommend a YES vote to split the White-breasted Thrasher in the currently monotypic genus Ramphocinclus into two species, R. brachyurus and R. sanctaelucia.

On English names for each subspecies, Ridgway refers to them as the White-breasted Trembler (*R. brachyurus*) and the Saint Lucia White-breasted Trembler (*R. sanctaeluciae*). Following that, Martinique White-breasted Thrasher and Saint Lucia White-breasted Thrasher could be considered, although these geographic names are quite long, so if this proposal is approved a separate proposal on English names should be considered.

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Submitted by: Rosa Alicia Jiménez, Universidad de San Carlos de Guatemala

Date of proposal: 24 February 2024

Transfer Phyllomyias burmeisteri/zeledoni to (a) Tyranniscus or (b) Acrochordopus

This proposal is based largely on SACC proposal 962.2

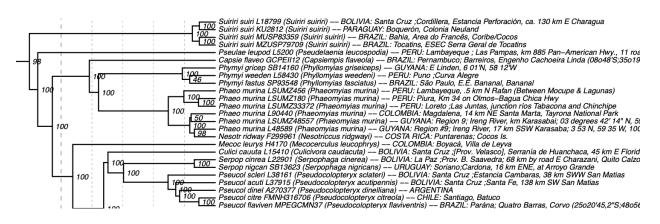
(<u>https://www.museum.lsu.edu/~Remsen/SACCprop962.htm</u>). SACC voted unanimously (10-0) to place these species in *Acrochordopus*. Acceptance of the recommendations in this proposal would bring NACC in line with SACC.

Description of the problem:

Phyllomyias Cabanis & Heine 1859 is a genus of approximately 12-15 species (Dickinson 2003, Clements 2023) of small, largely canopy-dwelling tyrannulets found from Costa Rica south through much of South America. The genus limits in the group have shifted frequently through the years, with four synonyms for *Phyllomyias* listed by Clements (2023), but all recent global checklists consider all 12-15 species to be part of *Phyllomyias*. SACC (Remsen et al. 2024) recently revised genus limits in this group, based largely on recent phylogenetic work.

New information:

The suboscine phylogeny_of Harvey et al. (2020) found that *Phyllomyias*, as currently circumscribed, is highly polyphyletic. Based on this phylogeny (see below), four groups can be distinguished (Harvey et al. 2020). The first group includes the type species of *Phyllomyias*, *P. fasciatus*, which is closely related to Sooty-headed (*P. griseiceps*) and Yungas (*P. weedeni*) tyrannulets, and forms a clade sister to "*Phaeomyias*" (now *Nesotriccus*). This group contains one species that occurs in the NACC area, *P. griseiceps*. In the figures below, the bolder dashed line is at 10 Ma, and the finer lines are at 2 My intervals. The portion of the figure from Harvey et al. (2020) shown here includes this clade of true *Phyllomyias*.



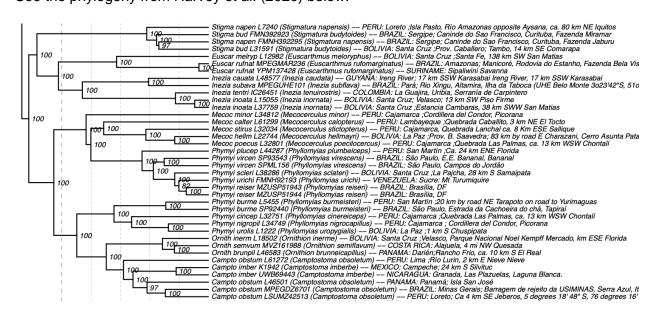
A second group of *Phyllomyias* is composed solely of Gray-capped Tyrannulet (*P. griseocapilla*) of southeastern Brazil, which is sister to *Zimmerius* (Harvey et al. 2021). This part of the Harvey et al. tree is not shown.

A third group, as shown in the figure below, is comprised of Plumbeous-crowned (*plumbeiceps*), Greenish (*virescens*), Slater's (*sclateri*), Urich's (*urichi*), and Reiser's (*reiseri*) tyrannulets, is

sister to a clade of species currently placed in *Mecocerculus* (which itself is polyphyletic, with the type species *leucophrys* being completely unrelated to those species of *Mecocerculus*). In their division of *Phyllomyias*, SACC (proposal number 962) did not address the genus limits of this group, but all species are extralimital to the NACC area so do not concern us here.

The last group includes *P. burmeisteri* (samples of nominate from Brazil and *leucogonys* from Peru are sister), Black-capped (*P. nigrocapillus*), Tawny-rumped (*P. uropygialis*), and Ashyheaded (*P. cinereiceps*) tyrannulets. This clade is sister to *Ornithion-Camptostoma* (Tello et al. 2009, Harvey et al. 2020). The genetically unsampled but distinctive *zeledoni* would presumably be closely related to *burmeisteri* and *leucogonys*, as *zeledoni* (of the Talamancas of Costa Rica and western Panama) is currently considered a subspecies of *P. burmeisteri*.

At the genus level, there are two alternatives for how to treat this last group. One would be to place all four species in the genus *Tyranniscus* Cabanis & Heine 1859 (type *nigrocapillus*). The other would be to place *P. burmeisteri* (together with *leucogonys* and presumably *zeledoni*) in the genus *Acrochordopus* Berlepsch and Hellmayr 1905 (type species *Phyllomyias subviridis* Pelzeln 1871, a junior synonym of *burmeisteri*; see Hellmayr 1914, 1927). The name *Idiotriccus* Ridgway 1905 (type *zeledoni*) was published later in the same year as *Acrochordopus*, according to zoonomen.net, so would narrowly be considered a synonym. *Acrochordopus* was typically considered a separate genus until Traylor (1977) merged it with *Phyllomyias*.



See the phylogeny from Harvey et al. (2020) below.

Areta et al. (2021, and citations therein) highlighted some differences in nest structure of other species in the former *Phyllomyias* that are relevant to genus circumscriptions. They noted that the open cup of *burmeisteri* and *zeledoni* contrasts with the globular nests of *Camptosotoma* and *Ornithion*, but, unfortunately, no data are available on the nesting of *P. nigrocapillus*, *P. uropygialis*, or *P. cinereiceps*. Nests of other members of the former *Phyllomyias*, such as *griseocapilla*, are similar in structure to those of their sister genera; the globular nests of *griseocapilla* share similarities to those of *Zimmerius*. The differences in nest structure of "*Acrochordopus*" suggest that it should be placed in a different genus than *Camptostoma*-

Ornithion, but the lack of data from the species in the proposed *Tyranniscus* hamper definitive conclusions regarding nest structure in comparison to those species.

Effect on AOS-CLC area:

Adopting the recommendations below would transfer one species, *P. burmeisteri/zeledoni*, to a different genus. *Phyllomyias griseiceps* would remain in *Phyllomyias*.

Recommendation:

The SACC adopted *Acrochordopus* for *burmeisteri* and *zeledoni* (the latter of which they split from *burmeisteri*), and retained *Tyranniscus* for *nigrocapillus*, *uropygialis*, and *cinereiceps*. This was based primarily on the distinctive bumpy leg morphology, which gives *burmeisteri* the common name Rough-legged Tyrannulet. We think NACC should follow suit, for conformity with SACC, as there is little in the rest of the morphology that clearly supports combining *burmeisteri* with *Tyranniscus*, other than simply being small tyrannulets. The crown ages of the two are comparable to those of *Ornithion-Camptosoma*, and could be construed as evidence for a single genus, but we think that this is borderline in either direction. The name *Acrochordopus* also highlights the distinctive leg morphology, as highlighted in one of the SACC comments (Gr. *akrokhordön* wart; *pous* foot).

Please vote on the following:

- (a) Transfer Phyllomyias burmeisteri/zeledoni to the genus Tyranniscus.
- (b) Transfer Phyllomyias burmeisteri/zeledoni to the genus Acrochordopus.

We recommend a No on (a) and a Yes on (b). Note that these two voting options are mutually exclusive.

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Submitted by: Oscar Johnson, Florida Gulf Coast University, and Juan I. Areta, Instituto de Bio y Geociencias del Noroeste Argentino (IBIGEO-CONICET)

Date of proposal: 12 February 2024

SACC comments:

Comments from Lane:

Part 2: YES to option B, recognizing Acrochordopus for burmeisteri and zeledoni.

Comments from Stiles:

2. Generic-level options- A- a broad *Phyllomyias*-NO: at the least, the *Acrochordopus* group must be split off; B- Split off the *Acrochordopus* group of *burmeisteri* et al-YES.

Comments from Zimmer:

Part 2, Generic placement: YES to option B, recognizing *Acrochordopus* for *burmeisteri* and *zeledoni*. The currently recognized, broad *Phyllomyias* is clearly paraphyletic, and not tenable, as currently constructed. Vocal distinctions and the distinctive, warty tarsi of the *burmeisteri*-group are enough, in my opinion, to warrant further generic separation of those taxa from *cinereiceps, nigrocapillus & uropygialis*.

Comments from Claramunt:

YES to 2.B. First impression, a "broad" *Tyranniscus* (option A), will not be broad at all as it would include just a handful of species that look very, very similar. However, I admit that those rough tarsi are so peculiar and distinctive, plus the light iris that gives them that mad-man look, I think their separation in *Acrochordopus*^{*} (totally descriptive, by the way) makes sense.

[* from Jobling: "Gr. akrokhordön wart; pous foot"]

Comments from Niels Krabbe (voting for Pacheco):

Part 2. YES to a separate genus for *burmeisteri* (with *zeledoni* group). The tarsus is so distinctive.

Comments from Bonaccorso:

962.2. YES to recognizing *Acrochordopus* for *burmeisteri*. Because a new name is needed anyway (no name stability possible here), it is best to name these lineages in a way that reflects their distinctiveness from other lineages.

Comments from Mario Cohn-Haft (voting for Jaramillo):

2. YES for 2B: place the above 2 spp in genus *Acrochordopus*. I like recognizing these smallish clades within the tiny flycatchers as genera. Just because we have trouble seeing (and hearing) their differences, I think that's simply the allometry of perception; they're as temporally and proportionately different as genera in larger birds.

Comments from Robbins:

Part 2. Yes to option B. Narrow Acrochordopus.

Comments from Remsen:

Part 2. Yes to option B, as per recommendation in proposal.

2024-C-10

Treat *Phyllomyias zeledoni* as a separate species from Rough-legged Tyrannulet *P. burmeisteri*

This proposal is based largely on SACC proposal 962.1 (https://www.museum.lsu.edu/~Remsen/SACCprop962.htm). SACC voted 8-2 to split *Phyllomyias zeledoni* from *P. burmeisteri* (adopting their Option B), and they accepted the English name White-fronted Tyrannulet without a vote. Acceptance of both parts of this proposal would bring NACC in line with SACC and most global checklists.

Description of the problem:

The Rough-legged Tyrannulet (*Phyllomyias burmeisteri*) is a small, wide-ranging Neotropical flycatcher, comprising three subspecies groups (Fitzpatrick et al. 2022a,b). From north to south, these groups are: a monotypic *zeledoni* (Lawrence, 1869) in the mountains of Costa Rica and western Panama; the *leucogonys* (Sclater & Salvin, 1871) group of four subspecies found from the coastal mountains of Venezuela south through the Andes to western Bolivia; and a monotypic *burmeisteri* Cabanis & Heine, 1860 that replaces *leucogonys* south in the Andes to north-west Argentina, and including a disjunct population in the Atlantic Forest of southeastern Brazil, eastern Paraguay, and extreme north-east Argentina (the apparently larger and longer-tailed Yungas population in the Andes could be referred to as *P. burmeisteri* salvadorii Dubois 1900, and the nominate Atlantic Forest population as *P. b. burmeisteri*; Areta et al. 2021).

The sampling map from Parra-Hernández et al. (2022a) nicely illustrates the distribution of these taxa.

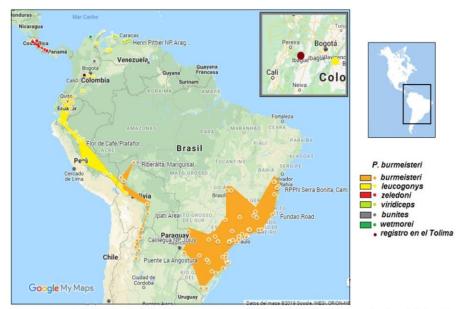


Figura 1. Mapa de distribución de *Phyllomyias burmeisteri*. En café ubicación de la Vereda Charcorrico, Ibagué (Tolima). Los datos corresponden a registros de eBird y xeno-canto. Los puntos señalan los registros específicos y los polígonos representan las áreas de distribución esperada de las subespecies.

NACC currently considers the complex a single wide-ranging species containing six subspecies (Chesser et al. 2023), although each of the three subspecies groups has at times been considered a species. Recently, SACC adopted a proposal to elevate the combined *zeledoni* and *leucogonys* groups as a species separate from *burmeisteri* (SACC proposal 962). This change has also been adopted by Clements et al. (2023).

New information:

Two recent studies on vocalizations in *Phyllomyias burmeisteri* recovered two distinct vocal groups corresponding to 1) *burmeisteri* and 2) *zeledoni* + *leucogonys* (Parra-Hernández et al. 2022a,b). The figure below from Parra-Hernández et al. (2022a) used five frequency variables (note duration, minimum frequency, dominant frequency, and change in frequency), and divided samples into two groups based on the five variables.

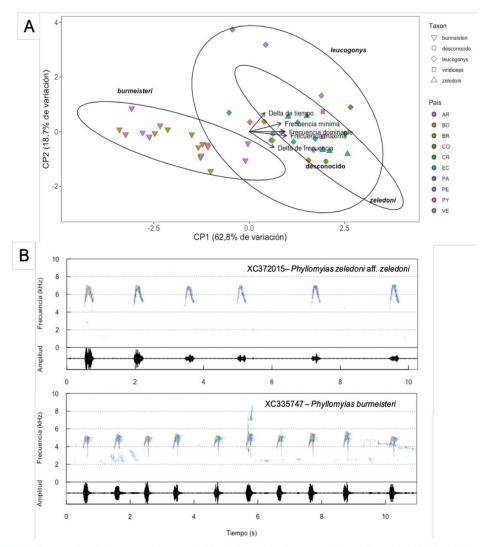


Figura 3. (A) Análisis de componentes principales de vocalizaciones de *Phyllomyias burmeisteri* teniendo en cuenta cinco variables: duración de la nota (delta de tiempo), frecuencia mínima, frecuencia máxima, frecuencia dominante y delta de frecuencia. Las hélices muestran el 95% de variación entre los taxones mejor representados *burmeisteri*, *leucogonys* y *zeledoni* (B) Comparación de un canto de *P. zeledoni* aff. *zeledoni* (XC372015 – Charcorrico, Tolima, CO) y *P. burmeisteri* (XC335747 – Caraca Monasetery, Minas Gerais, BR)

Two sonograms at the bottom of the above figure show representative songs of the two groups. Note especially the different note shape of the two samples, the shorter and lower-pitched notes of *burmeisteri*, and the slower song pace of *zeledoni*.

Using the same vocal data with a Uniform Manifold Approximation and Projection (UMAP) clustering method, Parra-Hernández et al. (2022b) also found strong clustering of the two vocal groups. See the figure below. Note especially the samples from Bolivia (where the two groups approach one another) were not closest together in the clustering analysis.

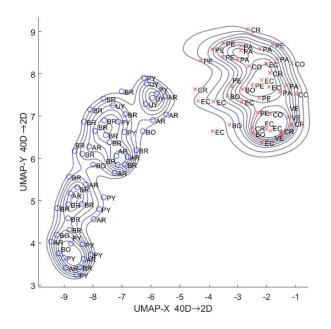


Figure 3. UMAP visualization and k-medoids clustering of the N = 101 samples of Rough-legged Tyrannulet (*sensu lato*) included in the study. Two clusters are identified using markers: Group A with blue circles, Group B with red x-mark. Each individual is labeled with the country of precedence using country codes alpha-2.

Parra-Hernández et al. (2022b) also showed that *burmeisteri* occurred at lower elevations on average than the *zeledoni* group, although this is to be expected given that *burmeisteri* occurs in southeastern Brazil. It is not clear if the two groups segregated by elevation in Bolivia.

Areta et al (2021) analyzed some other vocalizations, and discriminated between calls and song of *burmeisteri*. Clearly, there is more to be done in vocal analyses. Notably, *burmeisteri* (https://macaulaylibrary.org/asset/212343) has a "two-noted" song repeated in quick succession (sometimes given at dawn, so perhaps a dawn song), which might also be profitably compared to the northern taxa (e.g., this *leucogonys* recording: <u>https://xeno-canto.org/115491</u>). The dawn songs have not been properly compared, but seem to differ in ways that are similar to day songs and the most commonly used call.

Herzog et al (2016) indicated that in W La Paz, the taxon present belongs to the *leucogonys* group, and they provided separate vocal descriptions for the two taxa. See, for example, this song of *burmeisteri* from Santa Cruz (<u>https://macaulaylibrary.org/asset/117198601</u>), which

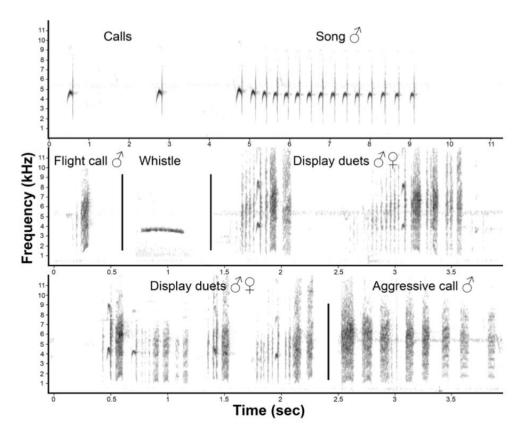


Figure 2. Vocalizations of the Rough-legged Tyrannulet (*Phyllomyias burmeisteri*) in Salta, Argentina. All spontaneous vocalizations were recorded on 31 December 2013 from the nesting pair reported herein at Ruta Nacional 9 kilometer 1644 (http://macaulaylibrary.org/audio/216410), except for the whistle, which belongs to a different individual from the same general area answering to playback on 23 July 2016 (http://ebird.org/ebird/argentina/view/checklist/ S30820740). All recordings by JIA.

sounds like birds in NW Argentina and in the Atlantic Forest of Argentina, Brazil and Paraguay, and the different sounding *leucogonys* from La Paz (<u>https://macaulaylibrary.org/asset/120908;</u> note that this recording was considered as "intermediate" by N. Krabbe in his SACC vote). It seems that the two vocal types are geographically segregated, although the exact turnover point needs further elucidation. Compare also this song of *viridiceps* (of the *leucogonys* group) from the Coastal Cordillera in Venezuela (<u>https://macaulaylibrary.org/asset/309180951</u>) which sounds very similar or identical to *leucogonys* in La Paz, for example.

Harvey et al. (2020) sampled both *burmeisteri* and *leucogonys* and found a very deep split suggesting a species-level difference between the two groups, with the caveat that this is based on only two samples.



We are not aware of any analysis of plumage differences between the two groups, but broadly speaking, *burmeisteri* has a greener head, less defined yellowish wing bars, and a plainer chest,

whereas *leucogonys/zeledoni* have a pale gray head (much paler in *zeledoni*), more defined white wing bars, and diffuse streaking on the chest. However, the diffuse streaking on the chest is also sometimes present in *burmeisteri* and might be more obvious in freshly plumaged birds. The *leucogonys/zeledoni* group usually exhibits a prominent white supraloral area which can form a spot at the base of the bill, lacking in *burmeisteri*. This feature has prompted usage of the name White-fronted Tyrannulet.

Effect on AOS-CLC area:

Splitting *zeledoni* (including the *leucogonys* group) from *burmeisteri* would add no new species to the checklist area, as *burmeisteri* is extralimital.

Recommendation:

We recommend a YES vote on splitting *zeledoni* (including *leucogonys*) from *burmeisteri* based on the vocal differences between the two groups. A further split of *zeledoni* from *leucogonys* is not warranted at this time. Note that depending on the voting outcomes of a concurrent NACC proposal, the genus of these two taxa may change to *Tyranniscus* or *Achrochordopus*.

We also recommend that NACC adopt the English name White-fronted Tyrannulet for *P. zeledoni* and retain Rough-legged Tyrannulet for *P. burmeisteri*, following IOC and eBird/Clements. We note that SACC did not explicitly vote on the common names for these daughter species. However, when *leucogonys* and *zeledoni* together are considered a separate species, the name White-fronted Tyrannulet is generally used (e.g., by IOC), and when *zeledoni* is further elevated to species rank, the name Zeledon's Tyrannulet has been used. "White-fronted" does highlight one of the few plumage features that separates *zeledoni/leucogonys* and *burmeisteri*. Although using Rough-legged Tyrannulet for one of the daughter species goes against our naming guidelines, it is also the name that has previously been used for *burmeisteri* s.s., so likely should not have been used for the combined species when they were lumped. It is a good name that accurately describes a unique feature of the species (although we note that it could apply equally well to *zeledoni*). We recommend following these taxonomic authorities.

Please vote on the following:

- (a) elevate zeledoni to species rank, including the leucogonys group.
- (b) adopt the English name White-fronted Tyrannulet for *P. zeledoni* and retain Roughlegged Tyrannulet for *P. burmeisteri*.

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Submitted by: Oscar Johnson, Juan I. Areta, and Mark Pearman

Date of proposal: 8 March 2024

SACC comments:

Comments from Lane:

Part 1: YES to option B, recognizing *burmeisteri* and *zeledoni* as separate species.

Comments from Stiles:

Species-limits options- A- NO to keeping all in *burmeisteri*; B- YES to separating *burmeisteri* from the *leucogonys-zeledoni* group; C- NO for further split of *leucogonys* and *zeledoni* on the basis of vocal data; at least, genetic data needed.

Comments from Zimmer:

Part 1. YES on Option B: Two species treatment, splitting *P. zeledoni* (including *wetmorei*, *viridiceps, bunites & leucogonys*) from *P. burmeisteri*, following the vocal analyses in Parra-Hernandez et al. 2020. I still think there remains the possibility that more comprehensive vocal analysis, with broader sampling of calls and songs, might support recognizing *zeledoni sensu stricto* as distinct from the other (South American) taxa in the *leucogonys* group. I have noted some trilled, frequency-modulated vocalizations of *zeledoni*, typically given in response to playback, or, naturally, during interactions between excited conspecifics, that I have not heard from *leucogonys* (*sensu lato*), although that may reflect my relative lack of interaction with the latter, rather than a true distinction. In a perusal of recordings on the Cornell Birds of the World website, it also seems as if the spectrographic tracings of songs reveal some fairly consistent distinctions in note shapes between *zeledoni* and other taxa in the *leucogonys*-group (longer notes, with less-peaked, more rounded centers and longer terminal tails in *zeledoni*, versus shorter, more steeply peaked and triangular-shaped notes with truncated terminal tails in *leucogonys*). Recognition of *zeledoni sensu stricto* as a separate species would also make sense from the standpoint of biogeography, since its range is confined to the Chiriquí Highlands center of endemism. All of that being said, I don't think the current available evidence supports a 3-way split at this time, and I also take note of the fact that Gary, who probably has more familiarity with *zeledoni* relative to Andean taxa in the *leucogonys*-group than any of us (and who treated *zeledoni* as specifically distinct in Birds of Costa Rica) is not voting for splitting the two at this time.

Comments from Claramunt:

YES to 1.B. split P. zeledoni from P. burmeisteri.

Comments from Niels Krabbe (voting for Pacheco):

Part 1. YES to option A. Keep a broad *burmeisteri*. Although the clusters by Parra-Hernández et al. appear distinctive, they really cover only two differences: average note length (correlated with pace of notes in song) and pitch (and with it automatically frequency max, min and span), hardly enough for species rank. General patterns of songs and calls are identical and there is overlap in both note length and pitch. Notably, one of four recordings from W La Paz (ML120908) is intermediate.

Comments from Bonaccorso:

962.1 A. YES. One species treatment. Definitively, the vocal differences

between *burmeisteri* and *zeledoni-leucogonys* are not as strong (and may respond to adaptations to local conditions), and the possibility of more individuals showing intermediate voices (as Niels points out about (ML120908)) calls for caution and a better understanding of this aspect in the limits of the distributions. I know that vocal differences are heavily used here for justifying splits, but it would be important to reinforce the case with more sampling and some genetic data.

Comments from Mario Cohn-Haft (voting for Jaramillo):

Although I don't have much direct familiarity with the taxa in guestion individually and no comparative experience at all with them in the field, the situation seems to be nicely laid out for evaluation. judging from the other votes, the most controversial question is the first one: split or not to split *burmeisteri*, and if so in how many spp? The argument for 3 spp. appears to lack data, and the data currently available argue against species status for *leucogonys*. That will have to wait for new arguments, it seems. No tragedy there. The argument for 2 species is primarily vocal, but nay-savers point out that the voices are not spectacularly different and that there may be vocal intermediates in the geographical middle ground. i agree that the figures of vocal variation show what could be interpreted as lots of variation in each and little gap between the 2 vocal types--a gap that could theoretically be filled by further sampling. However, geographic proximity does not appear related to vocal trait similarity in the figures, so it's not intuitively obvious that the intermediate localities, if sampled, would lead to intermediate vocal types. Furthermore, the voices sound different to me, especially in pitch (frequency), in a way that intuitively sounds like "different flycatcher species" to me, and the lack of any hint of clinal variation approaching a similar-sounding middle ground reinforces that impression. But finally, if I'm interpreting the Harvey et al tree correctly, then the 2 "burmeisteri" in it are actually one

a *burmeisteri* (Brazil) and one a *zeledonilleucogonys* (Peru), and they show the kind of depth in their split comparable to (or deeper than) most other species in that part of the tree. although I'm no fan of genetic % limits for taxonomic status, it's hard to imagine members of a cline that near to one another geographically having that much genetic difference.

So,

1. YES for 1B: split into 2 species: burmeisteri vs. all other taxa in zeledoni.

<u>Comments from Robbins</u>: Part 1. Yes to option B. Two species treatment.

Comments from Remsen:

Part 1. Yes to option B, as per recommendation in proposal.

Treat *Tolmomyias flavotectus* as a separate species from Yellow-margined Flycatcher *T. assimilis*

p. 385

This proposal is based largely on SACC proposal 960

(https://www.museum.lsu.edu/~Remsen/SACCprop960.htm) and 973 (https://www.museum.lsu.edu/~Remsen/SACCprop973.htm). SACC voted 8-0 to split *Tolmomyias flavotectus* from *T. assimilis*. Results of the English names votes were as follows: for *T. flavotectus*, 6 votes for Yellow-winged Flycatcher, 3 for Yellow-margined, and 1 for Yellow-edged; and for *T. assimilis*, 6 votes for Yellow-margined Flycatcher,1 for Terra Firme, and 2 for Similar. Acceptance of both parts of this proposal would bring NACC in line with SACC and most recent global checklists.

Description of the problem:

The taxonomy of *Tolmomyias assimilis* (Pelzeln, 1868) is very complex and in need of extensive research. The species, as currently treated by NACC, is found in southern Central America and the Chocó (the monotypic *flavotectus* group) and in the Amazon Basin and Guiana Shield (the *assimilis* group). However, within the *assimilis* group there are eight subspecies, with considerable variation that requires further study. The SACC footnote provides some background information on the taxonomic history of the group:

Tolmomyias assimilis was formerly (e.g., Cory & Hellmayr 1927) considered a subspecies of *T. sulphurescens*, but Zimmer (1939) provided rationale for considering it a separate species, and for treatment of *flavotectus* of Central America and the Chocó, considered a separate species by Cory & Hellmayr (1927), as a subspecies of *T. assimilis*. Zimmer (1939), followed by Pinto (1944), considered *flavotectus* to have priority over *assimilis* as the species name.

Most of the taxonomic issues in this group are outside of our geographic purview. However, *flavotectus* is clearly not part of what we currently consider *T. sulphurescens* (which itself has considerable taxonomic issues), based on extensive sympatry in Central America.

Some authors, such as Ridgely & Greenfield (2001) for Ecuador and Hilty (2021) for Colombia also split *T. flavotectus* (W of the Andes) from *T. assimilis* (E of the Andes).

New information:

Harvey et al. 2020 estimated the following tree:



The tree shows that *flavotectus* (i.e., *T. assimilis* from Panama) is sister to all the other *Tolmomyias* and thus distantly related to true *T. assimilis* (presumably including *assimilis*, *sucunduri*, and other subspecies).

The vocal differences between *flavotectus* and the other taxa are also striking (see <u>https://xeno-canto.org/species/Tolmomyias-assimilis</u> and <u>https://xeno-canto.org/species/Tolmomyias-flavotectus</u>. Many recordings on Macaulay and the brief analysis by Boesman 2016) support these differences. Moreover, the species was lumped without a solid basis. Note, however, that much variation in vocalizations remains in taxa currently included in *T. assimilis*, which are out of the discussion here. Separating *T. flavotectus* seems a safe step forward, while *T. assimilis* as currently delineated would still include possibly at least 3 species (i.e., *assimilis, sucunduri* and *examinatus/neglectus*). At this point, separating *T. flavotectus* is mandatory based on the phylogenetic data, whereas there is not enough published information to decide on what to do with the remaining *T. assimilis* taxa, all of which are extralimital.

Effect on AOS-CLC area:

Splitting *flavotectus* from the *assimilis* group would add no new species to the checklist area, as *assimilis* is extralimital.

Recommendation:

We strongly recommend a YES vote on considering *flavotectus* as a species separate from the *assimilis* group. The genetic evidence indicates that *flavotectus* is unrelated to *assimilis*, within the genus. This treatment was originally advocated by Cory & Hellmayr (1927), and is now supported by the deep genetic differentiation, sister relationship to all *Tolmomyias*, and vocal differences. This would also align the NACC taxonomy with that of SACC.

We also tentatively recommend we adopt the English name Yellow-winged Flycatcher for *T. flavotectus* and retain Yellow-margined Flycatcher for *T. assimilis*, following SACC and eBird/Clements. A separate (and concurrent) NACC proposal will address the issue of changing the group name from "Flycatcher" to "Flatbill" for this genus.

SACC proposal 973 (see link above) provides extensive discussion on potential common names for the two species, if they are split, along with a detailed taxonomic history of the group. Rather than repeat that discussion here, we recommend that committee members read the proposal and comments therein. We note that because this is not a parent-daughter split, our naming guidelines do not necessarily apply. Because *T. assimilis* is the nominate and the more wide-ranging species, it can retain the current name for the parent species. This is the option eventually adopted by SACC and Clements. It is also essentially a placeholder name pending further splits within *T. assimilis*, which if split is extralimital to the AOS area.

As for *T. flavotectus*, we should have some input on this name. SACC adopted the name Yellow-winged Flycatcher for *T. flavotectus*, which is the name currently used by Clements. However, the name Yellow-margined was originally used by Ridgway (1907) for *T. flavotectus*, when the taxon was known as *T. marginatus* (a name now synonymized). Yellow-margined has

also been used by some recent authors (e.g., Ridgely and Greenfield 2001) for *T. flavotectus*, and although it is a good name, we think again applying it to *T. flavotectus* would only lead to confusion, given its recent use as the English name for *T. assimilis sensu lato*.

Another name suggested by SACC members for *T. flavotectus* is Yellow-edged, which is a good name, and could apply just as well as Yellow-winged. As for plumage differences, they are minimal, but *T. flavotectus* does have somewhat more extensive yellow wing feather edgings that form more of a yellow wing patch, so Yellow-winged could be slightly more appropriate for *flavotectus*. However, these are still yellow wing <u>edgings</u>, not a yellow wing, so the name is not entirely appropriate. It is in use, so to minimize confusion and maintain some stability, it could perhaps be advantageous to maintain Yellow-winged for *flavotectus*.

Please vote on the following:

- (a) elevate *flavotectus* to species rank
- (b) adopt the English name Yellow-winged Flycatcher for T. flavotectus
- (c) adopt the English name Yellow-edged Flycatcher for *T. flavotectus*
- (d) retain Yellow-margined Flycatcher for T. assimilis

Literature Cited:

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Submitted by: Oscar Johnson and Juan I. Areta

Date of proposal: 5 March 2024

SACC comments:

species split (SACC 960):

<u>Comments from Remsen</u>: "YES. That *flavotectus* should be considered a separate species has been known to field people for decades, but without published data on vocalizations, the Zimmer treatment has been perpetuated in most classifications. The new genetic data require that *flavotectus* be treated as a separate species."

<u>Comments from Lane</u>: "YES to separating *T. flavotectus* from the remainder of the *T. assimilis* group, with the understanding that the latter will no doubt weather more splits in the future once we gain a better understanding of the populations therein."

<u>Comments from Stiles</u>: "YES to splitting *flavotectus* from *assimilis*; probable (?) further splits in *assimilis* await further data."

<u>Comments from Zimmer</u>: "YES. As noted in the Proposal, as well as in some of the comments by committee members, there is still more splitting to be done within the wide-ranging *assimilis*-group, but this is the one split for which there is clear-cut, published, genetic evidence that not only supports a split, but demands it."

<u>Comments from Claramunt</u>: "YES. The phylogenetic data are robust. This seems yet another case in which lumping by similarity, in the heydays of the polytypic species concept, created polyphyletic species."

<u>Comments from Robbins</u>: "YES for recognizing *flavotectus* as a species. Because of the distinct vocalizations, a straightforward decision. Undoubtedly there will be additional splits within the *assimilis* complex.

<u>Comments from Mario Cohn-Haft (voting for Pacheco)</u>: "YES. Splitting out *flavotectus* from polytypic *assimilis* is an easy one for me, even not being familiar with the former. it's not even in the *assimilis* "complex" according to the gene tree, so that's a YES. What happens in the future to the true *assimilis* complex isn't part of the issue as far as i can tell."

English names (SACC 973):

<u>Comments by Lane</u>: "YES to A1 (Yellow-winged F.) and B3 (Terra Firme F.) or, as an alternate B4 (Yellow-edged F.; funny, I actually coined this myself in my head independent of seeing Steve's suggestion). Because Yellow-winged already has some use and is not a terrible name, I think we can handle it (may need to double-check it isn't already occupied in the Old World by some other "Flycatcher" should *Tolmomyias* stay with "Flycatcher" though). As for B3: well, besides the fact that it was my idea, I think it may be the best option until *T. assimilis* is further split, and isn't inaccurate (assuming we do adopt "Flatbill"). If SACC votes to stay with "Flycatcher" then Yellow-edged seems a fair name for a placeholder until the split."

Comments from Dale Dyer (voting for Remsen):

"A) Option A2 for *flavotectus:* I vote for Yellow-margined (my previous comments still apply).

"B) Option B5 for *assimilis*: I vote for Similar. (It also seems acceptable to go with Zimmer's because it's in some use, and then, when split further we could use Similar and retire Zimmer's, but I'm here just going to go with my preference.)"

<u>Comments solicited from Josh Beck</u>: "While this is a really messy and confusing history, very few if any contemporary users of English names are going to know (or perhaps care) much

about the details prior to the names introduced by Ridgley + Greenfield (i.e., Yellow-margined and Zimmer's Flatbills) and the current use in eBird / iGoTerra and field guides.

"On one hand, I agree with the logic that using Yellow-margined for *flavotectus* and Zimmer's for *assimilis* would be a decent solution, and is arguably more true to naming history/precedent than Yellow-winged/Yellow-margined. In this case stability / predominance of names used in the past 30-40-50 years seems more important than the baggage associated with the name Zimmer's, particularly given the likely future retirement of Zimmer's with further splits.

"However, realistically I don't think any/most English name users are going to care if Yellowmargined ends up being *flavotectus* or *assimilis* but having both "daughters" of this split change names seems unnecessarily destabilizing. Most keen Neotropical birders / armchair taxonomists / etc will know a bit of the (recent) naming history and the pending likelihood of this split and won't be surprised by a name change of one of the two resultant species. However, I think changing to something like Similar Flycatcher or Terra Firme Flycatcher is stretching too far.

"So taking all that into consideration, and giving some priority to stability with the (even only recently established) names in use in IOC / Clements / eBird, I think option A1 and B1 are the best choice. I could also be ok with A2 and B2 if the voting swings that way."

<u>Comments solicited from Steve Howell</u>: "It (*marginatus/flavotectus*) was originally Yellowmargined Flatbill, and has long been Yellow-margined Flatbill in IOC (until the very recent switch to novel and inaccurate Yellow-winged), and still is Yellow-margined Flatbill in Xeno-canto (who follow IOC but haven't caught up with an utterly pointless name change occasioned by plain ignorance within the Clements fraternity), Ridgely & Gwynne, Dyer & Howell, and most other recent sources.

"So, as Dale Dyer pointed out, Yellow-margined has been used for A, then A+B, and now for B. That really is not helpful. The best course as I see it is to quickly switch back to Yellowmargined for *flavotectus* before any more confusion spreads and damage is done) and either stick with Zimmer's for the taxa east of the Andes (widely used in field guides and until recently by IOC), or find some other name for them (Yellow-edged?), *but calling them Yellow-margined really messes things up and should be avoided*. And Yellow-winged should be removed from the table, as it is inaccurate and not useful for birds with yellowish edgings to the wings; yes, few English names are perfect, but when confronted with coining a new name some intelligence should be applied to the process, as well as basic knowledge of nomenclatural history."

<u>Comments solicited from Bret Whitney</u>: "I'm sitting in a waiting lounge in Manaus, headed to Porto Velho, so I'll chime in because these birds are near-and-dear to my heart. That said, I will be fine with whatever English names they end up with. Anyway, here goes:

"Like Dan, I favor Flatbill for *Tolmomyias*. The genus is sister to Rhynchocyclus flatbills, this pair of genera constituting a well-supported clade in the Rhynchocyclidae. That would be an initial, very positive improvement. [*Ramphotrigon* is in the Tyrannidae, and probably ought to get a new moniker, think Large-headed Bamboozler.]

"I suggest Choco Flatbill for *flavotectus*, the type of which is from western Ecuador. This has biogeographic significance, and it's easy to understand and adopt. A good number of "Choco" birds extend north into lower Central America.

"I kind of like Dan's Terra Firme Flatbill for the *assimilis* group east of the Andes, the only points against, that I see, being that both *poliocephalus* (across Amazonia, in várzea and terra firme), and lower Amazonian populations of the *sulphurescens* complex (terra firme only), occur widely in terra firme as well. That will be confusing. So, in recognition of the fact that the very wide *assimilis* radiation — from the upper Tropical Zone of the Andes (Colombia to Bolivia) north through the Guianas thence across the big river to the southern rims of Amazonia — has been called Yellow-margined for a very long time (and in many more countries than has *flavotectus*), I would certainly feel most comfortable with Yellow-margined Flatbill.

"I think the only member of this 'Yellow-margined' *assimilis* complex that has been formally proposed as a 'split' (= undescribed species) is the vocally highly distinctive *T. sucunduri*, Sucunduri Yellow-margined Flycatcher. (It is currently considered a subspecies of *T. assimilis* simply because I reported identifying a few individuals that I strongly suspect to be hybrids in a zone of less than 10 kilometers; these birds were recorded and collected, but have not been analyzed — and, for some reason, the multiple tissues we have collected of *T. sucunduri* since about 2008 were not included in the suboscine phylogeny of Harvey et al. 2020!). So, there is precedent for maintaining "Yellow-margined" in the English name of species in the *assimilis* complex, and I concur with Dan's statement that a name like "Rasping" could well be applied to the "raspiest" of the complex when further splitting eventually happens, e.g., "Rasping Yellow-margined Flatbill".

"Zimmer figuring out that he had two very similar groups of tyrannids, in a remarkably complex biogeographic setting, and separating them out pretty darned well into *assimilis* and *sulphurescens*, was brilliant, far outweighing his reported lapsus in assigning priority (I have not personally verified that he actually did that). But yeah, we have a lot of Zimmer's this and that, and we should leave room for a younger Zimmer to be honored at some point, too."

<u>Comments from Steve Hilty (voting for Claramunt)</u>: "It seems likely that few people will remember or much care about all the history (just too convoluted) in this case. Also, name stability is important and helpful, especially when names are already in current use by a significant portion of the birding/ornithological community. It is particularly important in this example, as Peter Kaestner pointed out, with so many people using eBird and Merlin (especially Latin American birders). Imperfect or not, I vote to retain the current Clements/IOC names: For *flavotectus*, I vote yes for option A1; for *assimilis* I vote yes for option B1.

"[in the interests of full disclosure, these choices were employed in *Birds of Colombia*, 2021]"

<u>Comments from David Donsker (voting for Bonaccorso)</u>: "This has certainly become a very messy situation and I fully understand the desire of those who would prefer to discard "Yellow-margined" as an English name for either taxon. But despite that , I would very much regret it if the venerable name "Yellow-margined" disappeared from the ornithological lexicon altogether.

For the reasons expressed by others, and despite some downside to the choice, I would stand by the English names currently adopted by Clements/eBird/IOC:

- A. T. flavotectus: Option A1 "Yellow-winged"
- B. T. assimilis Option B1 "Yellow-margined"

"As for the group name, I strongly favor replacing "flycatcher" with "flatbill" which reflects the sister relationship of *Tolmomyias* to *Rhynchocyclus*."

<u>Comments from Gary Rosenberg (voting for Del-Rio)</u>: "I vote YES on Option A1 for *flavopectus* and I vote YES on Option B1 for *assimilis*. I think the issue is coming up for a name for *flavopectus* - and it makes more sense to me to NOT use Yellow-margined for *flavopectus*, even though that has been in use in Central America, and this will lead to some confusion. There will be confusion "somewhere" - and this seems unavoidable - and if, as Bret pointed out, Yellow-margined has been in use for birds east of the Andes in more countries, and longer, then, in my opinion, using "Yellow-margined" as a place holder for *assimilis* seems the most parsimonious choice - even though it may disappoint those in Costa Rica and Panama but as has been discussed, you can't please everyone with common names. Determining a name for *flavopectus* seems all over the place. I think "Yellow-winged" is as good a name as any - I don't think "Choco" is really accurate given the status in Central America - if it was restricted to Ecuador and Colombia, maybe, but the distribution extends out of the true Choco region. Given that Yellow-winged is already in use, it makes sense to me to go with that, as opposed to coming up with yet another name that may not be any more accurate."

<u>Comments from Schulenberg (voting for Robbins)</u>: "I prefer Yellow-winged for *flavotectus* and retaining the well-established Yellow-margined for *assimilis*. I don't think that *assimilis* is as big as mess as is the *sulphurescens* complex. but I also don't see any point in messing with its name if there's the slightest chance that it will be split down the line. if changes are to be made to the name for *assimilis*, I'd recommend waiting for a more comprehensive phylogeny of the genus."

<u>Comments from Stiles</u>: "Really a very messy one; however, if the proposal to substitute Flatbill for Flycatcher passes (quite likely) it makes things a bit easier. The main difference between the two in plumage is that *assimilis* shows wing-bars but *flavotectus* does not but has prominent yellow borders to the greater secondary coverts.

A. *flavotectus*: the name Yellow-margined dates from Ridgway, whose original name was indeed Yellow-margined Flatbill, but if this is disqualified given the subsequent confusion, "Yellow-edged" would be an acceptable substitution.

B. *assimilis*: 'Zimmer's' to me is unpalatable due to his role in creating the aforementioned confusion, and using "Yellow-margined" only perpetuates it. Other non-starters are Yellow-winged (Inaccurate and misleading for both spp.) and wing-barred (applicable to 100+ small flycatchers and least 2-3 other flatbills). I'm no good at vocalizations, although something like Rough-voiced (based on Ridgely's description) might apply. As a fallback, geography. Because the two species are on opposite sides of the Andes, hence in view of its wide distribution (much

as in the case for *Trogon r. rufus*), "Cisandean" could be applied to *assimilis*, at least as a temporary stopgap. Were this species to be split up later, more apt species names could be applied as required."

<u>Comments from Peter Kaestner (voting for Areta)</u>: "I've enjoyed reading all the ins and outs of the convoluted history of these species. In an effort to emphasize stability, I vote for A1 and B1. Consistent with my earlier vote, I believe that maintaining the eBird/Merlin names is determinant in a group where there is just no obvious answer."

Comments from Jaramillo:

"A. for *flavotectus*:

Option A2. Yellow-margined – I don't think it will actually cause confusion. The margins seem to be brighter and wider to me, they are *Zimmerius*-type greater coverts rather than wing bars on *flavotectus*. That is actually a good mark to look at in the field so over time this will decrease any confusion. If it causes confusion it will be with the observers who have been paying attention for the last decade or two and they can figure this out. Going forward this seems like the best name to me.

"B. for assimilis:

Option B5. "Similar" – Actually I like this. It is memorable and tells you something. Don't look for something obvious, look for something similar to its congeners. It is also a unique name that stands out, rather than another olive-yellow, yellowish-green, pale-green or what have you. This takes us out of that loop, and the name has some logical sense in understanding that this is a bird that looks like others, yet it is different. I like it."

<u>Comments from Zimmer</u>: "I really dislike the name "Yellow-winged" – it really doesn't describe/conjure a wing pattern like that of *flavotectus* (or any other *Tolmomyias* for that matter). If we retain "Yellow-margined" as a name for either species, then I agree with Bret's reasoning that it would best be retained for *assimilis*, at least until such time as more splits among the cis-Andean taxa dictate still more changes. Adopting Flatbill as the group name for *Tolmomyias* will, as others have pointed out, make this exercise easier, and makes resulting English modifiers to any splits more accurate and helpful (e.g. Sucunduri Flatbill would work just fine.). With all of this in mind, my votes are as follows:

"A) for *flavotectus*: Option A3 (Yellow-edged). This is a far more descriptive & accurate name than Yellow-winged, and is close enough to the original Yellow-margined so as to imply the history of the split.

"B) for assimilis: Option B1 (retain Yellow-margined for now)."

Treat *Tolmomyias viridiceps* as a separate species from Yellow-breasted Flycatcher *T. flaviventris*

This proposal is based largely on SACC proposal 961

(https://www.museum.lsu.edu/~Remsen/SACCprop961.htm) and 988

(https://www.museum.lsu.edu/~Remsen/SACCprop988.htm). SACC voted 7-3 to accept the species split, and 8-0 to adopt the English names Ochre-lored Flatbill for *T. flaviventris* and Olive-faced Flatbill for *T. viridiceps*. Acceptance of both parts of this proposal would bring NACC in line with SACC and most global checklists.

Description of the problem:

Tolmomyias flaviventris (Wied-Neuwied, 1831) is a wide-ranging polytypic species of the lowland Neotropics, found throughout the Amazon Basin, northern South America, and the Atlantic Forest, with a small population in eastern Panama (del Hoyo et al. 2022). This species can be broadly divided into two groups. One group of three subspecies, of which *viridiceps* (Sclater & Salvin, 1873) has priority (also includes *zimmeri* and *subsimilis*), occurs in the western Amazon Basin. The other group comprises three subspecies from the remainder of the range, including nominate *flaviventris* (along with *dissors* and *aurulentus*). SACC recently considered this issue and opted to elevate the *viridiceps* group to species level.

The SACC note on this group provides some background information:

Tolmomyias flaviventris almost certainly involves more than one species; see Bates et al. (1992) and Ridgely & Tudor (1994). The subspecies *viridiceps* is almost certainly a distinct species, and was so considered by Ridgely and Greenfield (2001) and Hilty (2003). However, Zimmer (1939a) considered them conspecific because he considered the subspecies *subsimilis* and *dissors* to represent taxa that were intermediate between the two, and this treatment was followed by Fitzpatrick (2004) in the absence of published data supporting a split. SACC proposal needed.

As is obvious here, much of the prior work depended on potential intermediacy in plumage. Recent work has focused on genetics and vocalizations, both of which point towards species status for *viridiceps*. The species account in Ridgely and Tudor (1994) provides more relevant background information:

DESCRIPTION: Iris dark brown to grayish brown; bill usually all dark, but base of lower mandible sometimes paler. Rather different from other *Tolmomyias*: brighter and with no gray on crown. Uniform yellowish olive above, yellower above lores and on eye-ring; wings blackish with 2 prominent yellow wing-bars and edging. Below yellow, slightly clouded olive on breast and sides. Foregoing applies to birds from lower Amaz. and e. Brazil, extreme s. Venezuela, and ne. Bolivia, the "intermediate" nominate group. Races found in w. Amazonia (the *viridiceps* group) are duller and darker olive above with little or no yellow on face and are more clouded olive on breast. Birds from n. Colombia to Amapá, Brazil (the *aurulentus* group), are brighter yellowish olive above with loral area and eye-ring ochraceous; throat and chest also tinged ochre.

SIMILAR SPECIES: Birds found in w. Amazonia are rather drab and can be confusing if the wide bill is not noted; no tyrannulet has a comparable bill. Yellow Tyrannulet is perhaps the most similar in plumage. More easterly birds, particularly the *aurulentus* group, are more distinctive.

HABITAT AND BEHAVIOR: Fairly common to common in lighter woodland, gardens and groves of trees, gallery woodland, and mangroves (at least in Guianas and on Trinidad); in Amazonia found mainly in riparian growth and in edge and canopy of várzea forest.

Especially widespread on Trinidad and Tobago, where it occurs in virtually all wooded habitats; particularly numerous on Tobago. Usually found singly or in pairs, foraging at various heights but coming low mainly in clearings or borders. The call of the bright nominate group (e.g., *dissors* in s. Venezuela) is a characteristic loud, shrill "shreeeép," usually given singly at long intervals, less often in series of 2 or 3; the voice of *aurulentus* is similar. The call of the duller *viridiceps* group (e.g., in e. Ecuador) is a faster series of 3-4 "cheeyp" notes which gradually rise in a crescendo. RANGE: Widespread south to n. Bolivia (La Paz and ne. Santa Cruz on the Serranía de Huanchaca) and s. Brazil (s. Mato Grosso, Goiás, Bahia, and Espírito Santo); west of Andes only in nw. Venezuela and n. Colombia; Trinidad and Tobago. Recently also found in c. Panama (P. Coopmans). To about 1000 m. NOTE: More than one species may be involved. The dull and olive *viridiceps* group of w. Amazonia seems distinct both in plumage and voice from the brighter nominate group of n. and e. South America.

New information:

The BSc thesis of Marques Almeida (2017) provided a wealth of data on the phylogeography of *T. flaviventris* (based on two mitochondrial and two nuclear loci) and some evidence on vocalizations. All but one figure (the tree from Harvey et al. 2020) in this proposal were extracted from this thesis.

This study obtained genetic sequences of subspecies *flaviventris*, *aurulentus* and *dissors* in the *flaviventris* group, and only nominate *viridiceps* from the *viridiceps* group (missing *zimmeri* and *subsimilis*). See the range map from Marques Almeida (2017) on the next page.

Marques Almeida (2017) found that *viridiceps* (Clade A, blue) was sister to the other samples in the *flaviventris* group (where four clades were identified). There is at least on area of suspected overlap between the two groups of taxa in the Madeira-Tapajos interfluvium (Marques Almeida 2017) in which three genetic clusters are found (Clades A, B, and E), but they could potentially meet across a broad area in the western Amazonia of SE Colombia, CW Brazil and N Bolivia.

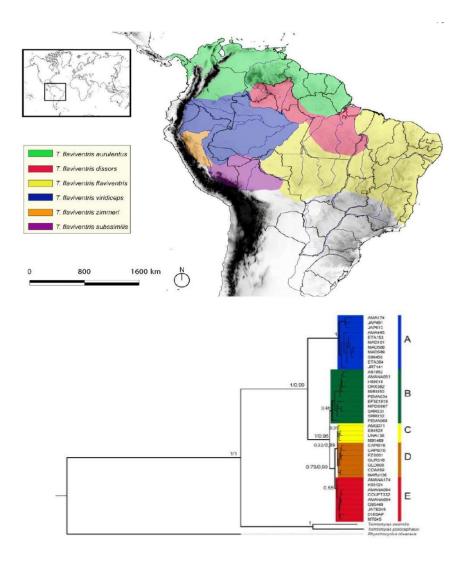
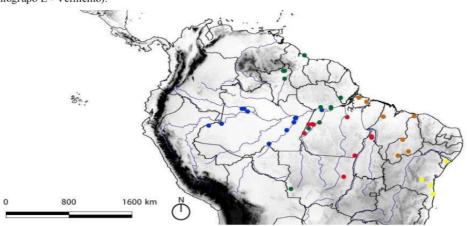


Figura 4 - Distribuição geográfica e localização das amostras, destacando os filogrupos aos quais pertencem. (Filogrupo A - Azul; Filogrupo B - Verde; Filogrupo C - Amarelo; Filogrupo D - Laranja; Filogrupo E - Vermelho).



The genetic p-distance between *viridiceps* and the *flaviventris* groups was large (between 3.1% and 4.5%):

	1	2	3	4	5	6	7	8	DP*
1. E									0
2. B	0,4								0,09
3. A	3,4	3,1							0,98
4. C	0,9	1,3	4,5						0,36
5. D	0,7	1,1	4,3	0,2					0
6. T. poliocephalus	5,8	6,3	7,1	6,3	6,3				
7. T. assimilis	7,5	8	6,5	8,6	8,4	9,8			
8. R. olivaceus	15,9	15,4	14,4	16,7	17	16,8	15,6		

Tabela 7 - Divergência genética (distância-*p*, em %) entre e dentro das populações encontradas a partir de 2,030 pares de bases dos genes mitocondriais CYTB e ND2. *DP = distância dentro de cada população.

One sample of what should be *viridiceps*, from Cobija (Pando, NW Bolivia), and one from *flaviventris* from Piaui (NE Brazil) were sisters in the work of Harvey et al. (2020). Dashed lines indicate 2 MY:



The separation into two species seems to capture most of the variation in song (see for example descriptions in Herzog et al. (2016) for Bolivia, and Ridgely & Tudor (1994 posted above). Although there are sampling gaps in the critical areas in which both taxa presumably approach closely, it is worth highlighting that recordings of both forms in N Bolivia, CW Brazil. and possibly also SE Colombia can be easily identified to the corresponding taxon without signs of intermediacy. Briefly, the songs of the *flaviventris* group comprise "U" shaped or descending notes, while those of *viridiceps* are rising or an inverted V. An informal analysis by Boesman supports these vocal differences: https://birdsoftheworld.org/bow/ornith-notes/JN100123

https://xeno-canto.org/species/Tolmomyias-flaviventris https://xeno-canto.org/species/Tolmomyias-viridiceps

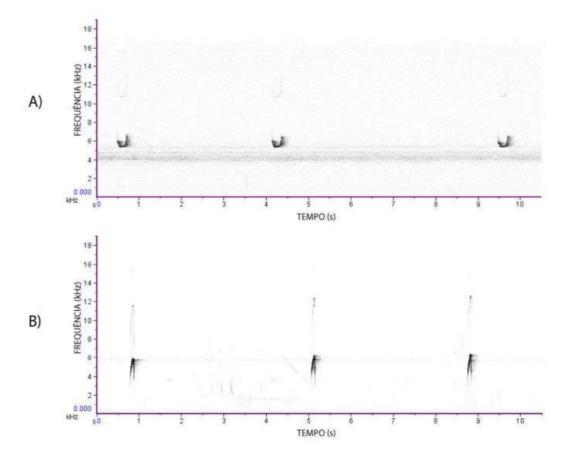
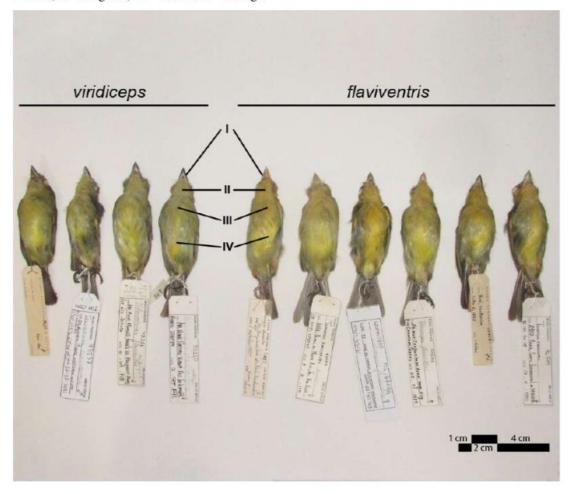


Figura 9 - Comparação de sonogramas de calls dos grupos flaviventris (A) e viridiceps (B).

In his comments on SACC proposal 961, Glenn Seeholzer plotted all the recordings of the two groups (see link above) and showed that these vocal types were fairly uniform across their range, but approached one another in three areas; southern Colombia, near Riberalta (Bolivia), and east of Manaus. Although unconfirmed, the lack of biogeographic barriers in these regions suggests that these taxa could be sympatric.

The "intermediate" plumages of *subsimilis* and *dissors* discussed by Zimmer (1939) might be a cause for concern to some. However, note that vocalizations of *subsimilis* indicate its affinity with the *viridiceps* group (no genetic samples available), whereas both vocalizations and genetics (mostly mtDNA) indicate the affinity of *dissors* with the *flaviventris* group. Below is a sample of specimens from each group (perhaps showing the extremes and not the "intermediate" populations). Regardless, the subspecies *dissors*, which was suggested to be intermediate in plumage, is vocally part of the *flaviventris* group.

Figura 8 - visão ventral dos indivíduos selecionados para análise morfológica (direita - grupo "*viridiceps*" e esquerda - grupo "*flaviventris*"). Os números indicados pelas setas representam os caracteres comparados.
I - Bico; II - Garganta; III - Peito e IV - Barriga.



Effect on AOS-CLC area:

Splitting *viridiceps* from *flaviventris* would add no new species to the checklist area, as *viridiceps* is extralimital.

Recommendation:

We recommend a YES vote on splitting *viridiceps* from *flaviventris*, which would bring us in line with SACC. Given the degree of vocal and morphological differentiation it seems difficult to envision that there would be genetic flow in the Madeira-Tapajos interfluvium or other possible zones of parapatry/sympatry. Also, if there is some gene flow, it seems to be restricted based on the close proximity of vocal and genetic types.

We also recommend that we adopt the English names Ochre-lored Flatbill for *T. flaviventris* and Olive-faced Flatbill for *T. viridiceps*, following SACC, eBird/Clements, and some previous authors.

Please vote on the following:

- (a) elevate *viridiceps* to species rank
- (b) adopt the English names Ochre-lored Flatbill for *T. flaviventris* and Olive-faced Flatbill for *T. viridiceps*

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Submitted by: Oscar Johnson and Juan I. Areta

Date of proposal: 5 March 2024

SACC comments:

species split:

<u>Comments from Lane</u>: YES to splitting *T. viridiceps* from *T. flaviventris*. The distinctiveness of the voices of these two groups, and the apparent sympatry pointed out by Almeida, make this split quite straightforward for me!"

<u>Comments from Stiles</u>: "YES to splitting *viridiceps* from *flaviventris*, based primarily on the Almeida data, which look to be solid evidence."

<u>Comments from Zimmer</u>: "YES. This one is pretty straightforward given the genetic data and apparent sympatry of the two groups in the Madeira-Tapajós interfluve as presented in Almeida (2017), and, given the solid vocal differences between the two groups, which has been known to fieldworkers for some time."

<u>Comments from Remsen</u>: "NO. Although I'm certain from what is assembled here that two species are involved, I'm going to be very picky about our standards of evidence. What we have is anecdotal, qualitative information combined with an unpublished BSc. thesis that did not sample two of the three taxa assumed to be associated with *viridiceps*, and sample sonograms from xeno-canto. I have no reason to doubt that any of the evidence presented is incorrect but plenty of reason to doubt that this is sufficient for changing the status quo. I have the feeling that we are rushing this one through because most of us 'know' two species are involved."

Comments from Claramunt: "YES. The nice study by Almeida is convincing."

<u>Comments from Bonaccorso</u>: "NO. Judging by the mitochondrial evidence, there is good enough genetic differentiation between *viridiceps* (clade A) and the other four populations in the tree (B, C, D, E), but this could be just genetic (population-level) structure. I don't see clear evidence of reproductive isolation among these populations. Plumage differences are so subtle that I bet it would be challenging to identify potential hybrids or intergrades; also, we are basing a decision on "apparent sympatry." Finally, I don't know much about calls, but it seems that more data (from several individuals) should be used to support the case."

<u>Comments from Mario Cohn-Haft (voting for Pacheco)</u>: "NO. The *flaviventris* group is less obvious to me based on the info presented. First off, I'm not sure exactly what the proposal is. Is it to split only *viridiceps* out of a still polytypic *flaviventris*? That was my initial understanding based on the wording. But, if as is implied in the discussion of voices, *subsimilis* is to be part of *viridiceps* and the rest (?) presumably to stay in *flaviventris*, then i think that needs to be made explicit. In other words, I'm not sure how to vote without knowing exactly what taxa are supposed to go where. I guess I'd be inclined to vote NO as currently worded (or at least as i currently understood the proposal) for lack of clear evidence of what information supports what relationships."

<u>Additional comment from Areta</u>: "Mario: The proposal is to include *viridiceps*, *subsimilis*, and *zimmeri* under *T. viridiceps*."

<u>Comments from Robbins</u>: "YES. Although we haven't been given a copy/access to the unpublished thesis, it has long been appreciated, and can readily be heard via on-line audio resources, that more than one species is involved in *Tolmomyias flaviventris*. So, even though I appreciate Van's sentiments concerning published evidence, this seems clear enough to at least recognize the population of the *viridiceps* clade that was sampled as a species. Moreover, to be consistent with my evaluation of the *Myiophobus fasciatus* proposal, which has less documentation (e.g., no genetic data), I vote "Yes" for recognizing *viridiceps* as a species."

<u>Comments from Glenn Seeholzer (voting for Jaramillo)</u>: "YES. Correspondence between vocalizations and genetics places the burden of proof on those that would keep these vocal+genetic groups as a single species.

"- Mario is correct that the proposal doesn't state explicitly what subspecies go where. For me, it is implied that subspecies *viridiceps*, *subsimilis*, and *zimmeri* go in *viridiceps* and subspecies *flaviventris*, *aurulentus*, and *dissors* go in *flaviventris*. Perhaps Nacho can amend the initial proposal to make this clear

"- vocalizations have been shown to more closely track evolutionary history than plumage in *Zimmerius* (Rheindt et al. 2008, 2014). Given the well-known vocal differences amongst subspecies (ahem, species) within *Tolmomyias assimilis* and *sulphurescens* with relatively minor plumage variation, I'm inclined to also not worry too much about the 'intermediate' plumages of *subsimilis* and *dissors*. The eye-ball-a-series approach of Zimmer and others can uncover remarkably subtle variation, but I'd prefer something more quantitative before fully buying into the idea that there are intermediate plumages and the implication of gene flow.

"- peer-reviewed and published would be ideal, but this thesis is a far more complete analysis than what was available when these species were split by other taxonomies in 2016. There is also a grey-literature analysis by Peter Boesman (2016) (<u>https://birdsoftheworld.org/bow/ornith-notes/JN100123</u>) of these species vocalizations confirming what many have long observed, that there are two vocalization groups each with easily distinguished primary vocalizations with non-overlapping variation.

"- There are only two genetic samples that come from a contact zone between Clades A (viridiceps) and Clade B+C+D+E (flaviventris) along the Amazon close to the Tapajos. More would be desirable, but this does mean that we can be reasonably confident that the genetic clades match the vocal groups.

"- The three regions below are where these forms are documented to come close to being in contact based on vocalizations (see Figure 1). I've included linear distance between the nearest localities. Especially for Bolivia and Colombia, there are no obvious intervening biogeographical barriers, so it seems likely that they come into close contact with possibly syntopy somewhere in these regions. For Central Brazil along the Amazon, these taxa are riverine / disturbed habitat species and probably not greatly affected by the Amazon.

- Central Brazil along the Amazon (358 km)

- N Bolivia (134 km)

- Central Colombian Amazon - Central and Southern Serrania de Chiribiquete (125 km, wouldn't that be an adventure to find that contact zone!).

flaviventris from N Chiribiquete

<u>https://search.macaulaylibrary.org/catalog?view=list&unconfirmed=incl&captive=incl&taxonCod</u> <u>e=yebfly3&mediaType=audio®ionCode=CO-CAQ</u> (ML252714 is an outlier, but the other two recordings from Alvarez are clearly *flaviventris*)

viridiceps from S Chiribiquete

https://search.macaulaylibrary.org/catalog?view=list&unconfirmed=incl&captive=incl&taxonCod e=yebfly4&mediaType=audio®ionCode=CO-CAQ

Boesman, P. (2016). Notes on the vocalizations of Yellow-breasted Flycatcher (*Tolmomyias flaviventris*). HBW Alive Ornithological Note 123. In: Handbook of the Birds of the World Alive. Lynx Edicions, Barcelona. <u>https://doi.org/10.2173/bow-on.100123</u>

Rheindt, Frank E., Matthew K. Fujita, Peter R. Wilton, and Scott V. Edwards. "Introgression and Phenotypic Assimilation in *Zimmerius* Flycatchers (Tyrannidae): Population Genetic and Phylogenetic Inferences from Genome-Wide SNPs." Systematic Biology 63, no. 2 (March 2014): 134–52. <u>https://doi.org/10.1093/sysbio/syt070</u>.

Rheindt, Frank E., Janette A. Norman, and Les Christidis. "DNA Evidence Shows Vocalizations to Be a Better Indicator of Taxonomic Limits than Plumage Patterns in *Zimmerius* Tyrant-Flycatchers." Molecular Phylogenetics and Evolution 48, no. 1 (July 2008): 150–56. <u>https://doi.org/10.1016/j.ympev.2008.04.016</u>.

English names:

<u>Comments from Donsker (voting for Areta)</u>: "YES. I would strongly support Olive-faced Flatbill as the English name for *Tolmomyias viridiceps*."

<u>Comments from Josh Beck (voting for Bonaccorso)</u>: "Easy YES vote - there is a long precedent, and the name is widely used and known."

Comments from Dan Lane: "YES to 'Olive-faced Flatbill' for T. viridiceps."

Comments from Stiles: "Olive-faced is fine for me, so YES."

<u>Comments from Zimmer</u>: "YES" for using "Olive-faced Flatbill" as the English name for *T. viridiceps,* as first suggested by Ridgely & Greenfield (2001), and now, with a track record of more than 20 years of use in many quarters. Good, descriptive names are a challenge with this phenotypically conservative genus, but in this case, "Olive-faced" does draw attention to the most obvious plumage difference between *viridiceps* and the rest of the *flaviventris*-group."

Comments from Rasmussen: "YES! For the reasons given by everyone else."

<u>Comments from Andrew Spencer (voting for Claramunt)</u>: "YES to Olive-faced Flatbill for *T. viridiceps*. It is the name I learned the species as ever since my first time in South America, and I honestly have a hard time thinking of it under any other name."

(a) Adopt a new group name for species in the genus *Tolmomyias*, and (b) adopt a new linear sequence for species in this genus

pp. 384-385

This proposal is based largely on SACC proposal 974, which passed unanimously (8-0): https://www.museum.lsu.edu/~Remsen/SACCprop974.htm.

Description of the problem:

With two current proposals on the species limits and associated common names of two species of *Tolmomyias*, now is clearly the time to also consider the group name for *Tolmomyias*.

For stability, we are opposed to changing English names unless there are justifiable reasons. This is one such case for which there are justifiable reasons, in our opinion.

Our current classification treats all *Tolmomyias* flycatchers under the group name "Flycatcher", e.g. "Yellow-olive Flycatcher". The issue is that past and other current classifications have called them "Flatbills", e.g. "Yellow-olive Flatbill", as in their sister genus *Rhynchocyclus*, for which "Flatbill" is universally used.

New information:

The history of the issue is outlined below; the taxonomic history is interwoven with English name usage. This may not be comprehensive but is sufficient, we hope, to cover the main points:

1. Starting with at least Ridgway (1907), the Middle American species now in Tolmomyias were known as "Flat-bills." This makes sense because Ridgway treated them as members of *Rhynchocyclus*, which were (and always have been) known as Flatbills.

2. As noted in SACC 973, Cory & Hellmayr (1927) described a new genus, *Tolmomyias*, with the following diagnosis: "Similar to *Rhynchocyclus*, but bill relatively smaller and narrower, subterminal phalanx of middle toe entirely free from outer toe, and edge of outer web of outermost primary not roughened." They included in *Tolmomyias* all the current taxa that we do, but also included *Ramphotrigon megacephalum*, which at that time was typically placed in *Tolmomyias*. Cory & Hellmayr (1927) continued to use "Flat-bill" as the group name and also expanded it to include *Ramphotrigon*, a genus that Ridgway (1907) did not deal with (other than in a key in which, by the way, he correctly ascertained its relationship to *Sirystes* and other genera, contra Cory and Hellmayr 1927).

3. Zimmer (1939; Studies of Peruvian birds No. 33) transferred *megacephalum* from *Tolmomyias* to *Ramphotrigon* without providing rationale. Nonetheless, this was subsequently supported by Lanyon's (1988) work on syringeal morphology, and followed by all subsequent genetic analyses, including Harvey et al. (2020).

4. Eisenmann (1955) introduced "Flycatcher" for *Tolmomyias*. He called the two Middle American *Tolmomyias* species "Flycatcher" and restricted "Flatbill" to *Rhynchocyclus* with the

following note: "Unlike true *Rhynchocyclus*, whose breeding behavior is like Pipridae, *Tolmomyias* behaves normally (Skutch, Ibis 1953; 4, 33-34). As these genera may not be closely allied, it seems best to reserve the name "Flatbill" to the aberrant *Rhynchocyclus*."

Fair enough, but wrong, at least on the relationships. Harvey et al. (2020) confirmed that they are sister genera, although the split is old (est. 14 Ma; see figure below, with dashed lines equal to 2 Ma). So, Ridgway (1907) was correct in inferring a relationship from their phenotypes, as was usually the case.



5. Meyer de Schauensee (1966, 1970), who acknowledged Eisenmann's help with English names, also called all species in *Tolmomyias* "Flycatchers" and retained "Flatbill" for *Rhynchocyclus*, but he also called all the *Ramphotrigon* species "Flatbills", thus following Cory & Hellmayr (but not Ridgway) in assuming from their morphology that they were closely related (by placing them adjacent in his linear sequence). Thus began the "polyphyletic" use of the formerly "monophyletic" Flatbill: Lanyon's (1988) data on syringeal morphology showed that *Rhynchocyclus* and *Ramphotrigon* were distantly related, and Harvey et al. (2020) confirmed that these two genera are not even in the same subfamily.

6. "Flycatcher" for *Tolmomyias* became entrenched by its use in subsequent influential literature (e.g., AOU 1983, 1998; Hilty 1986; Ridgely & Gwynne 1989 Panama; Stiles & Skutch 1989 Costa Rica; Sibley & Monroe 1990, Ridgely & Tudor 1994; Fitzpatrick-HBW 1994; Howell & Webb 1995 Mexico, etc.).

7. Ridgely & Greenfield (2001) restored the name "Flatbill" for *Tolmomyias*, with the following justification: "We have reverted to the group name of 'flatbill' for all members of the genus *Tolmomyias*. This name was used long ago in Birds of the Americas (pt. 5) and is surely more useful than considering this group as yet another tyrannid genus bearing the group name 'flycatcher'."

8. "Flatbill" was subsequently used by Hilty (Birds of Venezuela 2003), Ridgely & Tudor (2009; Field Guide to Songbirds of South America), del Hoyo & Collar (2016; BLI), IOC, and presumably others. However, NACC and SACC continued to use "Flycatcher', as did Kenefick et al. (2007; Trinidad-Tobago), Schulenberg et al. (2007; Peru), Dickinson & Christidis (2014; Howard-Moore), Herzog et al. (2016; Bolivia), Birds of the World (2022), and many others.

In summary, Flatbill was the one and only name for *Tolmomyias* from 1907 to 1955 (48 years), Flycatcher the only name in widespread use from 1955 to 2001 (46 years), and after 2001, both were in use.

Additionally, the phylogeny of Harvey et al. (2020) suggests a different linear classification than what is currently used by NACC. Our current linear sequence is: *sulphurescens*, *assimilis* (*=flavotectus*), *flaviventris*. Although there are issues with polyphyly in *T. sulphurescens* (a separate publication on this is apparently nearing completion), the Middle American population of *sulphurescens* comes before *flaviventris* in the linear sequence based on the Harvey phylogeny. We recommend adopting the sequence: *flavotectus*, *sulphurescens*, *flaviventris*.

Effect on AOS-CLC area:

Changing the group name of *Tolmomyias* would change the name of three species in the NACC area, which depending on the outcome of concurrent NACC proposals would be: Yellow-winged Flatbill, Yellow-olive Flatbill, and Ochre-lored Flatbill. Changing the linear sequence would affect the order of these three species on the checklist.

Recommendation:

We favor a YES to both parts of this proposal because:

- 1. Flatbill was the original and only name in the literature for a half-century.
- 2. It correctly signals its relationship to sister genus *Rhynchocyclus*.
- 3. As noted by Ridgely & Greenfield, "Flycatcher" is fairly useless.

4. It makes finding suitable new English names for future splits in the *sulphurescens* and *assimilis* groups easier because of the small number of "Something Flatbills" vs. the dramatically larger number of "Something Flycatchers" (including Old World families). There are 79+/- species in the Tyrannoidea with the group name Flycatcher.

5. It's already in widespread use in several frequently used sources, so we would not be introducing an unfamiliar, novel name.

6. There is some chance that the *Rhynchocyclus-Tolmomyias* might someday be recognized as a separate family from Tyrannidae. In the phylogeny of Harvey et al. (2020) you can see that these two are separated on a very long branch that at least merits treatment at the subfamily or tribe level. Calling them all Flatbills would be a nice way to mark them not just as sisters but as a separate lineage (except for the *Ramphotrigon* problem).

The change in the group name was unanimously adopted by SACC.

Please vote on the following:

- (a) adopt the group name "Flatbill" for species in the genus *Tolmomyias*
- (b) adopt the following linear sequence for the genus *Tolmomyias*: *flavotectus*, *sulphurescens*, *flaviventris*

Select Literature Cited:

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Zimmer. 1939. Studies of Peruvian birds. No. 33, The genera *Tolmomyias* and *Rhynchocyclus* with further notes on *Ramphotrigon*. American Museum Novitates 1045

Submitted by: Oscar Johnson, Florida Gulf Coast University and Van Remsen, Louisiana State University

Date of proposal: 6 March 2024

SACC comments:

<u>Comments from Stiles</u>: "I am quite willing to revert to Flatbill for *Tolmomyias*, so YES; This fits with the phylogeny, simplifies the e-name problems for further splits, and is not inaccurate (the bills in this genus are more flattened than those of most other small tyrannids of similar aspects,

and in most species of this genus, the mandibles are notably whitish, which might enhance the impression of flatness (?)."

<u>Comments from Hilty (voting for Claramunt)</u>: "YES, I would prefer 'Flatbill,' because of all the reasons discussed. The sister relationship of *Tolmomyias* and *Rhynchocyclus* is particularly compelling because this now sets these genera apart from the hordes of 'other flycatchers.' Also, note that I also used 'Flatbill' in 2021 *Birds of Colombia*."

<u>Comments From Dale Dyer (voting for Remsen)</u>: "YES. I vote for Flatbill for all the reasons given, and add that Flatbill was used in Birds of Belize and Birds of Costa Rica."

<u>Comments from Lane</u>: "YES to changing *Tolmomyias* to "Flatbill" ... it took me a while to come around to this when Ridgely and Greenfield brought it back, but I see considerable value to it. Most importantly it will be helpful when looking forward to the mega-splits that are inevitable within several of the species in the future. In addition to the phylogenetic relationship with *Rhynchocyclus*, and the accuracy in describing the bill morphology, using "Flatbill" rather than "Flycatcher" for the members of the genus will result in a much wider field of potential names that would risk more redundancy with "Flycatcher".

<u>Comments from Marshall Iliff</u>: "You didn't ask, but I'll just lodge a *strong* vote of support for the proposal to use Flatbill for all *Tolmomyias* for all the reasons you lay out in your excellent arguments here. I think Flatbill is fairly well entrenched for *Tolmomyias* for followers of the IOC and BirdLife list, and I think the importance of finding alternatives to avoid overuse of "flycatcher" for so many Tyrannids (and other families in Eurasia!) really helps with ability for birders to understand, identify, and relate to this hyper-diverse Neotropical family. As you know, I support the same moves for Trochilids (using alternatives to "hummingbird" when possible/sensible. I would go further to suggest that we might want to think about a potential solution for the *Ramphotrigon*, although I am not sure what that might be."

<u>Comments from Gary Rosenberg (voting for Del-Rio)</u>: "YES to changing "Flycatcher" to Flatbill - for *Tolmomyias*. I have resisted this for a long time as I thought it would add to unnecessary confusion - given "Flycatcher" has been used in field guides for so long - but if the original name was "Flatbill", then it makes sense to me to change back to that usage - especially since much of the world, and many guides, has already adopted the use Flatbill."

<u>Comments from Schulenberg (voting for Robbins)</u>: "Enthusiastic YES to 'Flatbill'. I don't think that every genus of tyrannid needs its own English group name, but even so, chipping away at the number of birds named simply 'Flycatcher' serves a good cause."

<u>Comments from Jaramillo</u>: "YES. The name is useful in the field, as well as informative relative to understanding relationships with the other birds named flatbill in the family. I do think that any time we can change a "flycatcher" to something else is good given that flycatcher tells you nearly nothing about the bird, often is incorrect ecologically (for the ones that eat fruit), and definitely is incorrect taxonomically given that muscicapids are the "real" flycatchers. Both of these issues are entrenched and accepted so they are not really a problem, but when we can shift from flycatcher to something else, it is worthwhile in my opinion."

<u>Comments from Zimmer</u>: "A very strong YES! As some of you know, I've been working on redefining species-limits within the *Tolmomyias sulphurescens* complex for more than 20 years (manuscript 75% completed, pending completion of broadly sampled vocal analysis), during which, I've constantly mulled over what English names I was going to recommend for the various splits. I long since came to the conclusion that the only way to achieve meaningful English modifiers for a group in which all members are extremely similar in plumage was to use modifiers that reflect distributional and habitat distinctions, but even with that, the only way those name choices would be helpful, would be to change the group name from the ubiquitous and overly broad "Flycatcher", to the narrower, and more taxonomically informative "Flatbill". As others have noted, we may want to rethink the group name for *Ramphotrigon*, and reserve "Flatbill" for *Rhynchocyclus* and *Tolmomyias* – a grouping that is on the precipice of becoming much more speciose."

Treat Charadrius atrifrons as a separate species from Lesser Sand-Plover C. mongolus

Effect on NACC:

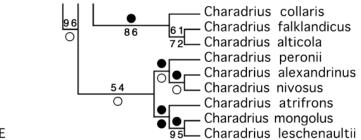
If accepted, this proposal would split extralimital *Charadrius atrifrons* (including subspecies *pamirensis* and *schaeferi*) from *C. mongolus* (including subspecies *stegmanni*) and would result in changes to the distributional statement and notes for *C. mongolus*. This would bring the NACC checklist in line with the new global treatment of these taxa. Note that proposal 2024-A-3h recommended that NACC transfer several plovers, including *C. mongolus*, from *Charadrius* to *Anarhynchus*, but any taxonomic change would not be official until published in the annual supplement. Therefore, we refer to them here as part of *Charadrius*, but they will likely be transferred to *Anarhynchus*. Below, we generally refer to the proposed new species by their group names (as well as for Greater Sand-Plover, *C. leschenaultii*, which includes subspecies *columbinus* and *scythicus*).

Background:

The two species of sand-plovers (*C. mongolus* and Greater Sand-Plover, *C. leschenaultii*) have long been considered to be closely related sister species, and the monophyly of *C. mongolus* had not been seriously questioned until recently. These two species are similar in plumage and represent an identification challenge and not all individuals are identifiable in the field (Hirscheld et al. 2000). However, consistent morphological differences had been found between the *mongolus* and *atrifrons* groups of *C. mongolus*. Based on this, Hirscheld et al. (2000) postulated they might be incipient species while Garner et al. (2003) proposed them as species. However, this was not adopted by any world list until recently. A series of recent molecular papers continued to find a close sister relationship between Lesser Sand-Plover *C. mongolus* and Greater Sand-Plover, *C. leschenaultii* (Barth et al. 2013, Dos Remedios et al. 2015, Černý and Natale 2022). None of these papers however, looked at multiple taxa within the larger *C. mongolus* group and DVP was only able to find a single sequence of the *atrifrons* group (*C. atrifrons pamirensis* by range, from Oman, in Dos Remedios et al. 2015). All Lesser Sand-Plovers identified to group in the NACC area have been of the *mongolus* group (Mlodinow and Boesman 2023a), with Alaskan specimens identified as *stegmanni* (Gibson and Withrow 2015).

New Information:

Surprisingly, a cladistic analysis of 1024 phenotypic characters (comprised of 446 skeletal features, 558 of the definitive integument, and 20 of natal patterns) found a sister relationship between the *mongolus* and *leschenaultii* groups, with *atrifrons* being sister to *mongolus/leschenaultii* (Livezey 2010); Figure 1). However, this paper also recovered a monophyletic *Charadrius*, which has not been the case in recent molecular papers (see proposal 2024-A-3h for more information).



SUBTREE E

Figure 12. Subtree D. Majority rule consensus (MRC) tree for species of Eudromianinae and Charadriinae in the present study. See Figure 9 for definitions of the symbols used.

Figure 1: From Livezey 2010. MRC percentages are given above the bar (solid circle is 100% while bootstrap support is below the bar.

Wei et al. (2022) used mtDNA and whole genome resequencing also found a sister relationship between *mongolus* and *leschenaultii*. Divergence of *atrifrons* from *mongolus/leschenaultii* was estimated as occurring ~2.0 million years ago, with *mongolus* diverging from *leschenaultii* ~1.2 million years ago. For mtDNA (COI and cyt b), sample sizes were 21 *mongolus*, 19 of the *atrifrons* groups, and 11 *leschenaultii* (see Fig. 2 for sampling). For the whole genome resequencing, 5 *mongolus*, 4 of the *atrifrons* groups, and 2 *leschenaultii* were resequenced at a depth of 5x and 1 individual from each group was resequenced at 30x. Using the 30x coverage individuals they performed ABBA-BABA tests and calculated D-statistics. They found the same relationship in both mtDNA and whole genome resequencing (Figure 3).

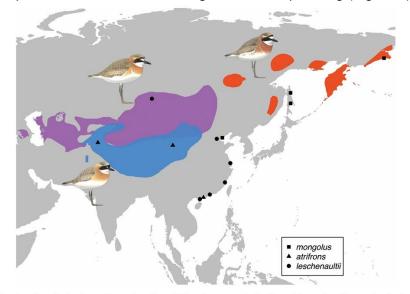


FIGURE 1. Breeding distribution and sampling sites of *Charadrius mongolus/leschenaultii* complex. The species distribution was derived from BirdLife International data zone (http://datazone.birdlife.org/species/requestdis). It is important to note that some of the sampling sites are from migratory routes. Plover drawings are courtesy of lan Lewington.

Figure 2: From Wei et al. 2022, showing sampling locations, partial breeding ranges for all three sand-plovers (*leschenaultii* in purple occurs west into Türkiye)

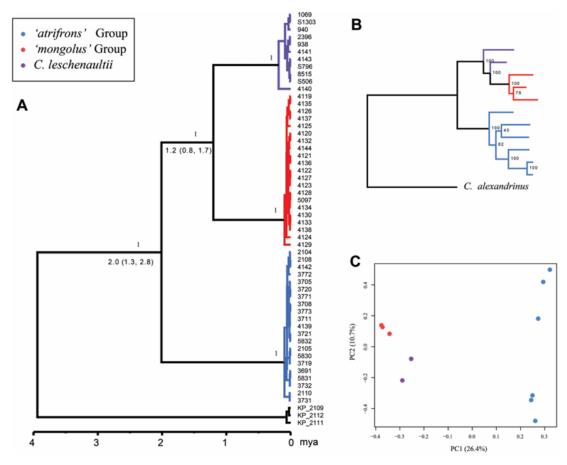
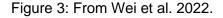


FIGURE 2. Phylogeny and population structure of the *Charadrius mongolus/leschenaultii* complex; samples from different taxa are labeled with different colors. (A) A phylogenetic tree reconstructed with 2 mitochondrial genes using BEAST; posterior probabilities are shown above nodes and divergence times are shown below nodes with a 95% HPD in parentheses (mya = million years ago); (B) a phylogenetic tree reconstructed with genome-wide SNPs data using RaxML, with bootstrap values on nodes; (C) principal component analysis of 765,092 SNPs.



While *mongolus* and *atrifrons* are relatively similar, and possibly not all are identifiable in all plumages, there are consistent plumage and structural differences between the groups (see Fig. 2 for representatives of breeding birds). The *mongolus* and *atrifrons* groups are similarly sized, whereas *C. leschenaultii* is larger in all respects. However, this species is geographically variable in size: the western subspecies of *C. leschenaultii, columbinus,* is smaller than the other two subspecies. The *mongolus* group is a little larger but has a thicker, shorter, and less finely tipped bill. The bill differences are less apparent in juvenile birds. The *atrifrons* group in basic plumage has whiter sides, flanks, and axillaries, and more white on the sides of the rump, as well as a longer white wing stripe. These differences are also shown in other plumages. The white forehead is more clearly defined in basic plumage in the *mongolus* group. The plumage and structural differences are summarized in tabular format in Bakewell (2022) and repeated in Schweizer and Liu (2022), which also illustrates the differences with a color plate and color photos.

Wei et al. (2022) also used a PCA to measure differences in calls of *leschenaultii*, *atrifrons*, and *mongolus* groups (see Table 1 for measurements used) with 7-10 individuals recorded from each population. They found that 37% of the variance was related to pitch (PC1) while 17% of variance for PC2 was correlated with time properties (Figure 4). Although the 3 groups are separated in PC space, there is some overlap between *atrifrons* and *leschenaultii*, and WGAC (in comments) and independently DVP did not find the vocalization data convincing on its own for species status.

Variable	Definition	PC1 loading	PC2 loading
speed	the number of elements per second.	0.55	-1.04
range	the mean base frequency diapason of a elements.	-1.1	0.09
shape	the mean relative length of the ascending shoulder (i.e. ratio of the length of the ascending shoulder to the length of the element).	0.6	-0.18
rise	the tangent of the angle of an ascending shoulder, calculated as: difference between the midpoint frequency and the element beginning frequency divided by shoulder length in milliseconds.	-1.04	-0.61
elements	the number of elements (units) in a call.	0.11	-0.34
slope	the slope of the base frequency linear trend of the call (calculated by linear regression by all points).	1.09	-0.19
frequency	the mean base frequency of an element, averaged by all points of measurement.	-0.71	-0.39
speed-up	the mean ratio of the lengths of next element to its preceding element.	0.12	0.87

Table S4. Definition of measured acoustic variables and their factor loadings in principal component analysis.

Table 1: From Wei et al. 2022 PC1 includes range, rise, and slope while PC2 included speed and speed-up.

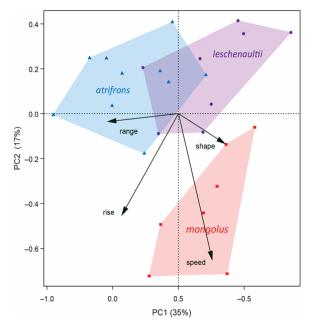


FIGURE 4. Principal component analysis of calls in the *Charadrius* mongolus/leschenaultii complex. Arrows indicate the loadings of original acoustic variables. Speed, the number of elements per second; range, the mean base frequency diapason of an element; shape, the mean relative length of the ascending shoulder; rise, the tangent of the angle of an ascending shoulder.

Figure 4: From Wei et al 2022.

The three groups are largely allopatric during the breeding season (Figure 2), with some near overlap between atrifrons and leschenaultii, although the two groups breed at different elevations and in different habitats. Although leschenaultii overlaps in winter with the atrifrons and mongolus groups, the latter two groups are largely allopatric: the atrifrons group winters from southern China west to east Africa, including southeast Asia, Indian Subcontinent, and the Arabian Peninsula, whereas the *mongolus* group winters further east including southern Japan, and south through Borneo, Indonesia, and New Guinea to Australia and the Solomon Islands. However, the two groups overlap in Taiwan, the Greater Sunda Islands, and the Philippines. The eastern breeding and wintering ranges of the *mongolus* group are reflected in its migratory routes, which are coastal eastern Asia and east to Micronesia, with a third of the population passing through South Korea (Mlodinow and Boesman 2023a). The atrifrons group also flies directly from its winter grounds on the coast to its breeding grounds and largely follows coastlines in migration with concentrations only occurring inland in northeastern Africa (Mlodinow and Boesman 2023b). The migratory routes are also entirely within the wintering range of the group. Within the NACC area all known occurrences have been of mongolus group, with Alaskan specimens identified as stegmanni (Gibson and Withrow 2015).

The mongolus group and *C. leschenaultii* were found to be sister and closely related and the *atrifrons* and *leschenaultii* showed a positive D statistic from the ABBA-BABA tests (D = 0.057) indicating some hybridization in their evolutionary history. An alternative to splitting *mongolus* might be to lump the *mongolus/atrifrons* groups with *leschenaultii*. We do not recommend this as *mongolus* and *leschenaultii* diverged ~1.2 million years ago, differ in plumage, ecology and range, and have long been considered separate species. *Charadrius leschenaultii* and the *atrifrons* group are not sisters and currently come into close contact but differ in breeding habitat (the *atrifrons* group breeds above tree line, whereas *leschenaultii* breeds in lowland deserts, semi-deserts, or steppes; the northern *mongolus* group also breeds at or above tree line), and no hybrid pairings have been found between the groups (Wei et al. 2022). It is also worth pointing out that within *C. leschenaultii* western breeding *columbinus* and *scythicus* were not sampled by Wei et al (2022). In particular, *columbinus* approaches *atrifrons* in size, but structure and plumage are more typical of other *leschenaultii* (Hirscheld et al. 2000), which indicates there may be more surprises ahead in this group (Schweizer and Liu 2022).

Recommendation:

Based on the non-sister relationship between the two groups of Lesser Sand-Plover we recommend spliting Lesser Sand-Plover *C. mongolus* into two species using the English names recommended by Wei et al. 2022. This is in line with taxonomic committees elsewhere.

Siberian Sand-Plover C. mongolus (including stegmanni)

Tibetan Sand-Plover for *C. atrifrons* (including *pamirensis* and *schaeferi*)

Note that we used the English name Mongolian Plover for Lesser Sand-Plover until it was changed in the 45th supplement (2004) to match the name used elsewhere in the world. Tibetan is an excellent name as Tibet makes up a key portion of its breeding range (and it is *C. atrifrons* that breeds in Mongolia). Siberian is not compelling as it is largely an antiquated name and represents a Western view that Siberia extends from the Ural Mountains to the Pacific, whereas

the breeding range of *mongolus* in Russia is confined to the Russian Far East rather than Siberia. However, as this is primarily an Old World issue without alternative English names, we recommend using the English names suggested by Old World authorities.

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Submitted By: David Vander Pluym, Louisiana State University, and Jon Dunn

Date of Proposal: 8 March 2024

Treat Oenanthe seebohmi as a separate species from Northern Wheatear O. oenanthe

Background:

For many years, at least since Hartert (1910a), the Northern Wheatear Oenanthe oenanthe has been considered to be comprised of several subspecies that breed from eastern Canada through the Palearctic and eastward to Alaska and northwestern Canada, and southward through northern Africa. Following Hartert's (1910a) review, and subsequently those of Meinertzhagen (1922) and Vaurie (1949) that further reduced the number of subspecies, Ripley (1952) and Ripley (1964) in the Peters Check-list considered O. oenanthe to be comprised of six subspecies: O. o. leucorhoa (breeding from eastern Canada eastward to the Faroe Islands), O. o. nivea (southern Spain and the Balearic Islands, perhaps resident), O. o. oenanthe (breeding from the British Isles eastward to northwestern North America), O. o. virago (breeding on eastern and southern Aegean islands), O. o. seebohmi (breeding from Morocco eastward to ?Tunisia), and O. o. phillipsi (resident in Somalia). More recent authors (e.g., Collar 2005, Panov 2005. Dickinson and Christidis 2014) have generally adopted a different four-subspecies treatment, following Cramp and Perrins (1988), with *leucorhoa* breeding from northeastern Canada through Iceland, oenanthe breeding in northern Eurasia from Britain through Alaska and northwestern Canada, *libanotica* (subsuming *nivea* and *virago*) breeding from southern Europe through Mongolia and south-central Russia, and seebohmi breeding in northwestern Africa, with *phillipsi* considered a separate species (see below).

The form breeding in northwestern Africa, *seebohmi*, is treated in detail by Förschler et al. (2008), Shirihai and Svensson (2018), and Rodewald (2022). Adult males differ conspicuously from males of the northern subspecies of *O. oenanthe* in having a black throat, and they also have black underwing coverts and axillaries, noticeably pale gray upperparts, and are generally smaller and shorter-winged, while females are similar in plumage to the northern subspecies, although with darker underwing coverts and axillaries (Förschler et al. 2008). Whether *seebohmi* breeds in Tunisia seemingly remains unclear, but there are certainly photos (ML).

The taxon *seebohmi* was treated as a separate species by Noble (1898) and Dresser (1902), and the earliest treatment of *seebohmi* as subspecific may have been by Hartert (1910a), who stated, seemingly without providing further justification, that it and *leucorhoa* are clearly defined forms of *O. oenanthe*. Meinertzhagen (1922) also included *seebohmi* as a race of *O. oenanthe*, though without discussing *seebohmi* further. In a study of polymorphism in *Oenanthe*, Mayr and Stresemann (1950) explicitly included the two North African breeding forms with black-throated males (*seebohmi* and *phillipsi*) as conspecific with the pale-throated forms in *O. oenanthe*, which they nevertheless considered non-polymorphic, as the forms are invariable in this character within their respective allopatric breeding ranges.

Despite the very distinct plumage of *phillipsi* of Somalia, Meinertzhagen's (1922) parenthetical statement "(which I believe to be a race of *Œ*. *Oenanthe*)" seems to have been influential in its long-term treatment as conspecific with *O. oenanthe*. Tye (1989) considered *phillipsi* a distinct species but part of the *oenanthe* superspecies, and argued that several features of *seebohmi* show that it forms a link between northern forms of *oenanthe* and *phillipsi*. However, it is now

known that *phillipsi* is not genetically close to *oenanthe* (Outlaw et al. 2010, Aliabadian et al. 2012), and thus *phillipsi* is not considered here further. However, the argument for conspecificity of *seebohmi* based on its apparent morphological intermediacy between *oenanthe* and *phillipsi* obviously no longer holds.

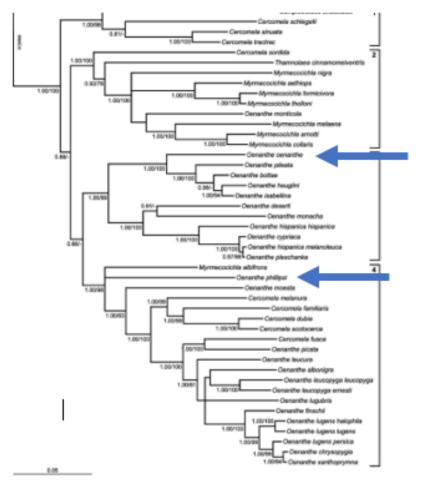


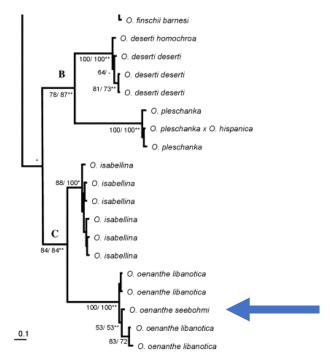
Fig. 1 of Aliabadian et al. (2012), showing *phillipsi* and *oenanthe* in separate major clades

Despite the long-held consensus that *seebohmi* was a subspecies of *O. oenanthe*, Voous (1977) indicated that it was sometimes treated as specifically distinct, Wolters (1980) indicated that *seebohmi* may be a separate species, Tye (1989) and Keith et al. (1992) considered it an incipient species, Monroe and Sibley (1993) treated *seebohmi* as a separate group under *O. oenanthe*, Beaman (1994) stated that *seebohmi* was formerly sometimes treated as specifically distinct, Collar (2005) indicated that species status had been suggested, and Borrow and Demey (2014) "limbo-split" *seebohmi*. The AOU (1998) in the 7th edition of the Check-list treated the extralimital *seebohmi* as a separate group of *O. oenanthe* with the English name "Black-throated Wheatear", also used by Voous (1977), mentioned by Beaman (1994), and resurrected by del Hoyo and Collar (2024) (however, the English name "Black-throated Wheatear" was also in prior use for *O. hispanica*; Hartert 1910b).

New information:

del Hoyo and Collar (2016) considered *seebohmi* to be a separate species from *O. oenanthe* on the basis of its morphological distinctness and on perceived differences in song, citing Collar (2005). Shirihai and Svensson (2018) also tentatively afforded species status to *seebohmi* on the basis of plumage, structure, and vocalizations, and emphasized its status as an incipient species. The IOC-WBL of Gill et al. (2022) followed this treatment.

<u>Genetics</u>.—The only genetic analyses available for *seebohmi* used mtDNA, in which it was found to be embedded in *oenanthe* (Aliabadian et al. 2007, Wang et al. 2020).



Part of Fig. 2 of Aliabadian et al. (2007)

Although it seems clear that *seebohmi* (unlike *phillipsi*) is indeed closely related to *oenanthe*, genomic analyses will be needed to determine whether a gene flow event causing mitochondrial capture is the explanation for the lack of divergence shown by these mtDNA analyses, or if *seebohmi* is indeed part of the *O. oenanthe* radiation. The case of Cyprus Wheatear *O. cypriaca* and Pied Wheatear *O. pleschanka* is somewhat similar, as they are hardly differentiated in mtDNA but differ strongly in plumage and, in their case, song (Shirihai and Svensson 2018).

<u>Morphology</u>.—Hartert (1910a; see Appendix) summarized the morphological distinctions of *seebohmi*, and Aliabadian et al. (2007) measured series of males of several taxa of *Oenanthe* (of which only the southern Palearctic form *O. oenanthe libanotica* and *seebohmi* are shown here). Several notable differences in shape and size exist, including wing length (WL), primary 1 length (P1L), distance between tips of primaries 1 and 2-4 (P1P2 etc.), greatest covert to wing tip distance (GtWt), and alula tip to wing tip (AtWt).

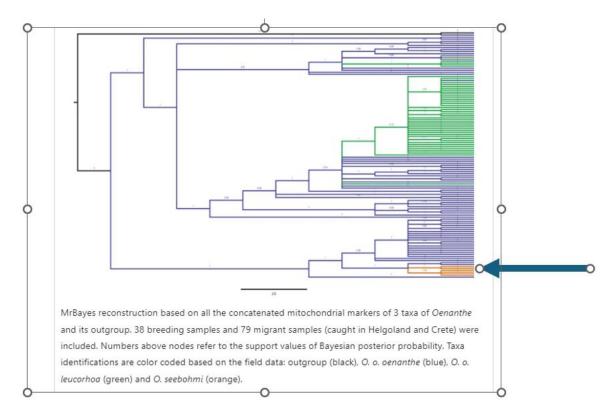


Fig. 4 of Wang et al. (2020)

Species	Ν	Sp2	Sp3	WL	P1L	P1P2	P1P3	P1P4	P1P5	P2Wt	GtWt	AtWt	TL	BL
O. oenanthe libanotica	20	24.7	22.1	98.0	16.7	57.2	60.7	59.4	53.5	3.5	56.6	78.7	57.8	11.6
O. o. seebohmi	5	25.0	21.4	92.9	19.7	50.8	54.0	53.7	50.5	3.3	52.2	73.6	57.3	11.9

Part of Appendix B of Aliabadian et al. (2007)

Förschler and Bairlein (2011) showed that some of these shape differences were at least partially explained by differences in migratory distances, and that *O. o. leucorhoa*, the longest-distance migrants, were the most different from the short-distance migrant *seebohmi* in wing length and tail length and shape, with southern European *libanotica* being somewhat intermediate. They showed a strong correlation between these and other variables and migratory distance.

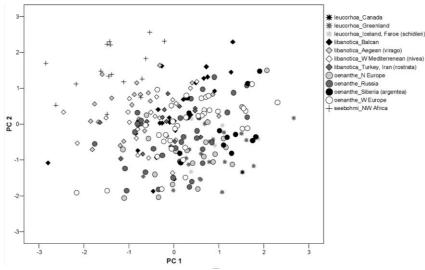
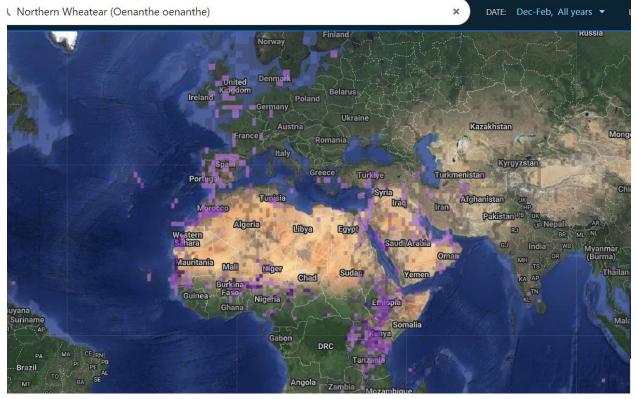


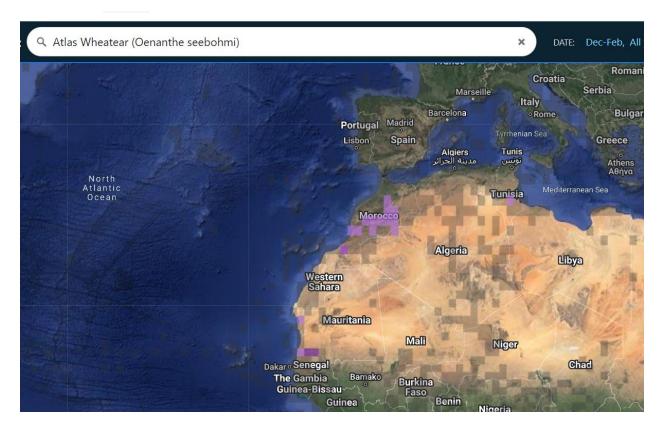
Fig. 2 of Förschler and Bairlein (2011) based on 9 morphological variables

Despite this demonstration of clinality in some of the structural characteristics distinguishing *seebohmi* from other subspecies, the fact that all the others show little variation in plumage across an immense range, while male *seebohmi* have such obviously distinct plumage and some aspects of structure, led WGAC voters to support the split of *seebohmi* at the species level, and this has been followed by Clements et al. (2022).

<u>Migratory route</u>.—Northern populations of *O. oenanthe* include perhaps the longest-distance passerine migrants, the vast majority wintering in sub-Saharan Africa (Förschler and Bairlein (2011; see eBird map of Dec-Feb reports below):



On the other hand, *seebohmi* is a relatively short-distance migrant, with most apparently wintering from Morocco to southwestern Mauritania (Browne 1992, Panov 2005), western Mali, and Senegambia (Cramp and Perrins 1988, Barlow and Wacher 1997, Förschler et al. 2008). Some individuals are especially short-distance migrants, merely moving downslope from where they breed (Collar 2005).

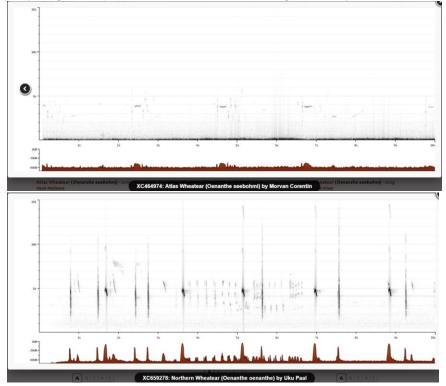


Not surprisingly for a migratory taxon, there are vagrant records of *seebohmi*, such as in mainland Spain, the Canary Islands (Gutiérrez et al. 2011), Gibraltar, Sardinia (eBird), Malta (Bonavia 2020), the Netherlands (Gelling and van der Spek 2017), Belgium (Vanhove et al. 2020), Egypt, Libya (Keith et al. 1992), and Cameroon (de Greling 1972).

<u>Vocalizations</u>.—Songs of *seebohmi* have been said to differ to some extent from *O. oenanthe* (Cramp and Perrins 1988, del Hoyo and Collar 2016, Shirihai and Svensson 2018), but no formal analysis appears to have been published, and few recordings of *seebohmi* are available online. Chappuis (1969) considered *seebohmi* to be among those species for which the song is significantly deeper in the south than in the north (in this case, comparing *seebohmi* to *O. oenanthe* from France). Collar (2005) stated the song of *seebohmi* is "slower, lower, richer", while Shirihai and Svensson (2018) stated "Song [of *seebohmi*] usually longer than Northern Wheatear and said to be more measured, melodious and sonorous." For *seebohmi*, Svensson (2023) stated "On recordings the song sounds weaker and less scratchy than Wheatear, more softly warbling."

Of those recordings of songs that do exist, the variability they show precludes more confident statements about consistent differences. For example, the song of *O. oenanthe* (not including *seebohmi*) was described by Rasmussen and Anderton (2012) as "a series of unpredictable hurried strophes that vary greatly in content and length, but with exuberant, springy, chortling, and jangling qualities, and including wheezy, slurred buzzes, complex clear, thin, squeaky or sibilant note-types, dry trills, etc. often seemingly randomly delivered within and between strophes." The vocal array described in Dunn et al. (2022) gives much more detail about the variability among songs of *O. oenanthe* s.s.; that variability in song clearly extends to *seebohmi* as well.

One Morocco recording of a call of *seebohmi*, however, seems to be unmatched among the very large sample of *O. oenanthe*, in having relatively flat rather than steeply downturned notes:



We also did not find any recordings of the calls of *seebohmi* that match the common call type (above) of *oenanthe*, described in Rasmussen and Anderton (2012) as "a short, sibilant, steeply downslurred, emphatic whistle *SFit*". There is also a recording of a well-photographed male *seebohmi* that spent the summer of 2020 in west-central Spain; when an ML recording of it is resized to the parameters of xeno-canto recordings (see below) the calls of this bird look more like the Morocco call above, but instead of being flat or prolonged, it is slightly upturned and short. This seems to accord with Svensson's (2023) description: for *seebohmi*, "Call 'heet', a bit like Horned Lark", while for *oenanthe*, "Call a straight whistle, like indrawn 'hiit'", though of course there is room for interpretation here.



Another call description is "*tuc* call apparently softer and less sharp" than for *O. oenanthe* (Shirihai and Svensson 2018). In any case, these recordings and descriptions suggest there may be differences that require further field recordings and study for confirmation. However, many wheatear songs and calls are both broadly similar and variable across the genus, and their confusing similarity to human ears may not be so for the birds themselves.

Recommendation:

We recognize that the evidence regarding the split of *seebohmi* from *oenanthe* is somewhat equivocal, as one would expect with an incipient species. Whether one considers *seebohmi* fully speciated or not, it clearly is well along the path toward speciation, and given accepted species limits in several congenerics, we favor the interpretation that *seebohmi* is best treated as a species. We also consider that ornithology would be best served by a consistent treatment between checklists and regional authorities of this taxon which is extralimital to the NACC region, and thus we recommend following the many sources (e.g., del Hoyo and Collar 2016, Shirihai and Svensson 2018, Gill et al. 2022, Clements et al. 2022, WGAC, Svensson 2023) that consider it a separate species.

Voting in this case would be a simple Yes to consider *seebohmi* a full species, or No to keep it lumped with *O. oenanthe*.

English names:

If the split of *seebohmi* is accepted, the question of English names arises. Names that have been used include "Black-throated Wheatear", including by BirdLife, which we do not prefer given its prior use also for *Oenanthe hispanica*, as well as the fact that adult male wheatears of most species have black throats. (Paul Donald of BirdLife has verbally agreed that BirdLife will change *seebohmi* to "Atlas Wheatear".) "Seebohm's Wheatear", used by e.g. Förschler et al. (2008), Borrow and Demey (2014), Shirihai and Svensson (2018), and Svensson (2023), among others, has the obvious eponym issue. "Atlas Wheatear", used by the IOC-WBL (Gill et al. 2022) and Clements et al. (2022) encompasses the entire known breeding range, and is in our opinion by far the best of these choices, with no obvious downside except that it occurs in the Atlas Mountains only (or primarily) during the breeding season. Use of "Atlas Wheatear" would also match the usage of Atlas Flycatcher (*Ficedula speculigera*), which has a similar breeding distribution to that of *seebohmi*.

Retention of "Northern Wheatear" for *Oenanthe oenanthe s.s.* seems uncontroversial as well, given its much larger range and the extremely entrenched nature of this name. Other names

that have been used include "Wheatear", "Common Wheatear", and "European Wheatear" (Inskipp et al. 1996). Of course, "Wheatear" is a non-starter in the global context; the renewed use of "Common" is controversial especially given that some other wheatears are more common in parts of the range of *O. oenanthe*, and the term "common" is generally disliked by many, as its meanings include "vulgar" and "cheap". The name "European Wheatear" has the disadvantages that it only covers a relatively small part of the species' range, as well as the fact that several other wheatears occur in parts of Europe (though none nearly so broadly). We thus strongly recommend following the many other authorities who continue to use "Northern Wheatear".

Effect on the AOS Checklist:

Passage of this proposal would affect only the Distribution and Notes statements in the *Check-list.*

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Submitted by: Pamela C. Rasmussen and Shawn Billerman

Date of proposal: 9 March 2024

Appendix.—Google Translate of Hartert (1910a) account of Oenanthe [o.] seebohmi:

"Differs from that of *oenanthe* in that the black of the ear coverts is extended over the entire throat, and that the wings are purer black: the wings are deeper black, the axillaries, which in oenanthe are largely white due to the broad margins, are deep black, with only very narrow white edges; the underwing coverts also have narrower edges, which often almost disappear completely. The 4th primary is as long as the 3rd, or barely shorter, which makes the wing tip appear somewhat blunter, the beak is usually 1-2 mm longer. Wing of 15 m ad 92.5-99.5 (usually 95-97) mm. The top is a little lighter.

The female is very similar to that of *oenanthe*, but the upper surface is lighter in spring, a little more pale yellowish, the axillary and underwing coverts have narrower, light edges, the underwing is darker. The longer 4th primary is usually a good feature. The nestling coat is lighter and yellower than that of *S. oe. oenanthe*.

S. oe. seebohmi is known as a breeding bird from altitudes of around 1700 to 2000 m in the Aurès Mountains of southwest Algeria (Djebel Mahmel, Chelia, Montagne nue), but could occur on many high mountains of the Atlas, as it also lives at the same heights where it was found near Seksawa in the southwestern Atlas of Morocco by Riggenbach, and near Tilula and Sarakten by Dodson.

During the breeding season, they inhabit mountain slopes and plateaus where there are numerous stones and boulders on grassy ground or which are criss-crossed by rocky ridges. They live there in the manner of our Wheatears, their [call] is perhaps a slightly shorter uit, to which a very quiet [note] is attached, and which is often missing if you can no longer ignore it. The song is a short, somewhat rough verse, like the European Wheatear, which can be heard sometimes while sitting, sometimes rising into the air. The loose nest is under large stones and about five young appear to be hatched. One egg measures 20.5 x 15 mm. It is a solid light blue. Since there is deep snow in the winter at the heights where these birds breed, they were certainly allowed to leave their breeding grounds, but we don't know where they stay in the winter.

The alleged occurrence in northeast Africa is based on errors."

Reconsider our taxonomic treatment of quail in the genus Cyrtonyx

Background:

Quail of the genus *Cyrtonyx* have long been a vexing taxonomic problem. We (AOU 1998) currently recognize two species of quail in this genus: the polytypic species *C. montezumae* (Montezuma Quail) and the monotypic species *C. ocellatus* (Ocellated Quail). The Montezuma Quail is divided into a northern *montezumae* group (including subspecies *mearnsi, montezumae*, and, if recognized, *merriami*) that occurs from Arizona and New Mexico south to Michoacán, Mexico, and Veracruz; and a southern *sallei* group (including subspecies *sallei* and *rowleyi*) found from Michoacán south to Oaxaca (Fig. 1). The Ocellated Quail is found from southern Mexico to Nicaragua.

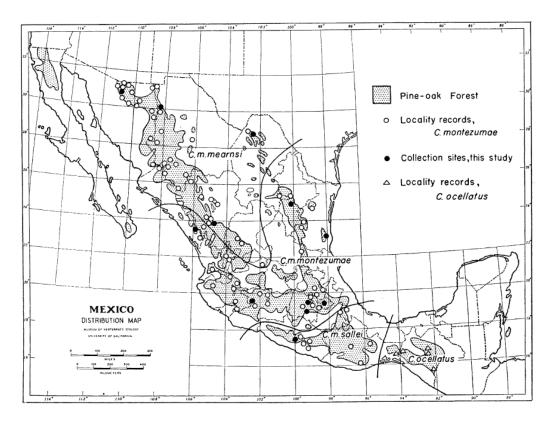


Figure 1. Distribution in Mexico of *C. m. mearnsi*, *C. m. montezumae*, *C. m. sallei*, and *C. ocellatus* (from Leopold and McCabe 1957). Subspecies *merriami* and *rowleyi* are not shown: the authors considered *merriami* to be an intergrade between *montezumae* and *sallei*, and subspecies *rowleyi*, which is endemic to the Sierra Miahuatlán in south-central Oaxaca, was not described until 1966.

Most past and contemporary sources (e.g., Ridgway and Friedmann 1946, Leopold and McCabe 1957, Johnsgard 1988, Howell and Webb 1995, Madge and McGowan 2002, Dickinson and Remsen 2013, IOC, Clements) have used the two-species taxonomy adopted by NACC, but some sources (e.g., Peters 1934, Hellmayr and Conover 1942, Birdlife) have

considered the *sallei* group to be a separate species, under the English name Spot-breasted Quail or Salle's Quail. There have also been hints that a single-species treatment might be appropriate: Peters (1934) noted that both *sallei* and *ocellatus* are representative forms of *montezumae* and should perhaps be treated as subspecies, Howell and Webb classified Ocellated Quail as *C. montezumae* [in part] or *C. ocellatus*, and Madge and McGowan (2002) noted that *C. ocellatus* was perhaps better considered to be a well-marked subspecies of *C. montezumae* than a separate species. Peterson and Chalif (1973) commented that *ocellatus* is "like a washed-out version of the Montezuma Quail and possibly should be regarded as a race of that bird."

There is evidence of intergradation between *montezumae* and *sallei*. Pitelka (1948) mentioned two specimens intermediate between the two taxa from the general vicinity of Mexico City: one from Tres Marias, 20 km north of Cuernavaca, Morelos, and the other from Rio Frio, Estado de Mexico. The type of *merriami*, collected to the east from Mount Orizaba in Veracruz, also appears to be intermediate between *montezumae* and *sallei* (Leopold and McCabe 1957).

Birdlife's rationale for separating *C. sallei* from *C. montezumae* was as follows:

May be conspecific with *C. ocellatus*. Here separated also from *C. montezumae* on account of bronzy-chestnut *vs* white lower flank spots (3), rather broad bronzy-brown *vs* narrow buff long streaks and narrow *vs* broad black bars on wing-coverts (2), white spots on upper breast sides and flanks smaller, duller and on paler grey (2), and paler chestnut mid-breast to belly (ns 1); differs from *ocellatus* in white, not pale tan, spots on upper breast sides and flanks (2), chestnut *vs* buff-tan top to central stripe down underparts (3), and black-edged pale tan streaks *vs* rich chestnut long streaks on lower upperparts (2). Two subspecies recognized.

Below are photos (Figs. 2, 3, and 4) showing two specimens of *ocellatus* (including the type of *sumichrasti*, a synonym of *ocellatus*), one specimen of *sallei*, the type specimen of *merriami*, one specimen of *montezumae*, and two specimens of *mearnsi* (including the type).

The photos, reiterating many of the characters in the Birdlife statement, show that males in this complex differ mainly in the color of the breast/belly (dark chestnut in mearnsi/montezumae/ merriami, slightly lighter chestnut in sallei, and rufous-buff in ocellatus), color of the nape (tan in mearnsi, light brown in montezumae/merriami, and darker brown in sallei/ocellatus), color and size of the spotting on the flanks and sides of the upper breast (large white spots on a dark background in *mearnsi/montezumae*, smaller white spots (and bronzy towards the lower flanks) on a gray background in merriami/sallei, and large tannish spots in ocellatus), streaking of the wing coverts and upperparts (thin and whitish-buff in mearnsi/montezumae, intermediate in merriami, and thicker and buffy-orangish in sallei/ocellatus). Perhaps of note is the fact that the splits between the different character states sometimes occur between mearnsi and montezumae, sometimes between montezumae and merriami, sometimes between merriami and sallei, and sometimes between sallei and ocellatus, indicating a certain fluidity in where characters turn over. Nelson (1897) made much of the lack of a white collar in his specimen of merriami, but Leopold and McCabe (1957) stated that the white collar is sometimes missing in montezumae. Females are much more similar than males, and those of sallei and ocellatus are probably not safely told apart from each other (Madge and McGowan 2002).



Figure 2. Photo showing ventral views of specimens (all males) of the *Cyrtonyx* complex. From left to right: two specimens of *ocellatus*, one of *sallei*, one of *merriami*, one of *montezumae*, and two of *mearnsi* (red labels indicate type specimens).



Figure 3. Photo showing dorsal views; same specimens as above (all males).



Figure 4. Photo showing lateral views of specimens (all males) of the *Cyrtonyx* complex. From left to right: two specimens of *ocellatus*, one of *sallei*, one of *merriami*, one of *montezumae*, and two of *mearnsi* (red labels indicate type specimens).

WGAC considered the taxonomy of *Cyrtonyx* in 2021 (prior to publication of the molecular study of Salter et al. – see below). Some of the discussion suggested that recognition of one species or three species in this complex would be more consistent than recognizing two species, and in the end the majority vote was to recognize three species.

New Information:

Genetics.—As part of a broader study of New World quail, Salter et al. (2022) sequenced UCEs for single individuals of all subspecies of *C. montezumae* and for two individuals of *C. ocellatus*. Their results differed depending on the type of analysis used. In the concatenated ML phylogeny, the seven individuals formed two well-supported clades, one consisting of *mearnsi*, *montezumae*, and *merriami*, the other consisting of *sallei*, *rowleyi*, and *ocellatus* (Fig. 5). Thus *C. montezumae* was paraphyletic with respect to *C. ocellatus*, and *sallei* and *rowleyi*, the two subspecies sometimes separated as the species *C. sallei*, did not form a monophyletic group but were instead successive sisters to *C. ocellatus*.

	cyrtonyx_montezumae_mearnsi_45132
L 100	* cyrtonyx montezumae merriami 804738
·	*cyrtonyx_montezumae_montezumae_22602
	···· * cyrtonyx_montezumae_sallei_778476 ···· * cyrtonyx_montezumae_rowleyi_19138
L <u>100</u> .	···· *cýrtonýx_montezumae_rowleyi_19138
99	···· * ourtonux occulatus 1215 · ·
4 <u>100</u>	···· *cýrtonýx_ocellatus_56792

Figure 5. ML concatenated UCE tree from the supplementary information of Salter et al. (2022), showing the paraphyly of *C. montezumae*.

The SVDquartets phylogeny (Fig. 6), despite being very similar to the ML tree in most respects, was poorly resolved regarding relationships within *Cyrtonyx*. Bootstrap support for *Cyrtonyx* as a group was 100%, but support for relationships within the genus was poor, ranging from 31% to 64%. For all practical purposes *Cyrtonyx* formed a 7-way polytomy in the SVDquartets tree, as can be seen in Fig. 7, which compares the two analyses while collapsing all nodes with <70% bootstrap support.

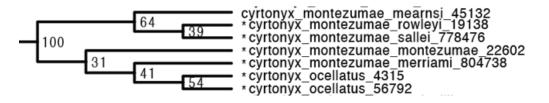


Figure 6. SVDquartets coalescent-based UCE tree from the supplementary information of Salter et al. (2022), showing the poor support for relationships within *Cyrtonyx*. Note that SVDquartets does not estimate branch lengths.

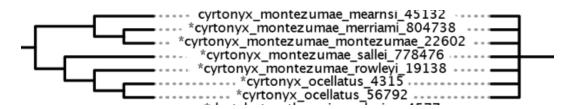


Figure 7. A comparison of the topologies of the ML analysis (left) and the SVDquartets analysis (right) with nodes that received less than 70% bootstrap support collapsed.

In summary, one analysis (ML) showed that *C. montezumae* as currently circumscribed is not monophyletic, and that *C. sallei*, if recognized as a separate species, would not be monophyletic. The other analysis (SVDquartets) showed no reliable resolution within *Cyrtonyx*, despite the fact that resolution in most other parts of the tree was similar to that in the ML tree.

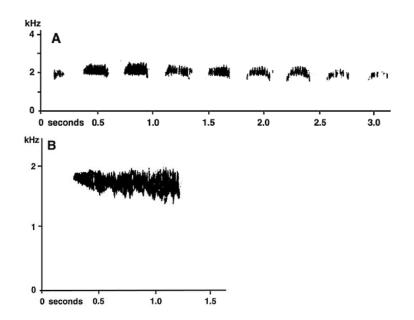
Vocalizations.—No new published information is available, but below are some descriptions of vocalizations along with sonagrams from recordings available on xeno-canto and the Macaulay Library.

Howell and Webb described the voice of *C. montezumae* as follows: "Territorial call a farcarrying, descending, quavering whinny; a twittering *whi-whi whi-hu* when alarmed." They noted that the voice of *C. ocellatus* was undescribed but "presumably much like Montezuma Quail."

The account for *C. montezumae* in Birds of the World (Stromberg et al. 2020) described two calls, a "descending call" produced by females and a "buzz call" produced only by males:

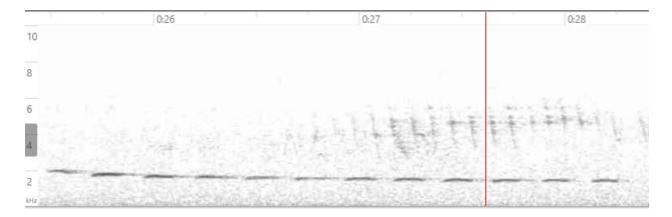
Descending Call. Figure 3A. Females produce a musical Descending Call that is owl-like (1), or a quavering series of metallic whistles with an average of 9 separate notes (17, 85) that slowly descend in pitch ((2, 5)). This call is much louder and lower-pitched during breeding season (13). This Descending Call is exceedingly difficult to localize and is ventriloquial (13, 23).

Buzz Call. Figure 3B. Produced only by males (<u>13</u>; S. Levy and J. Pratt, personal communication); an "insect-like" (<u>23</u>) descending whistle combined with a buzz with weird, intangible, and ventriloquial quality (<u>13</u>). Can be heard up to 200 m away in quiet, calm conditions (<u>13</u>, <u>85</u>).

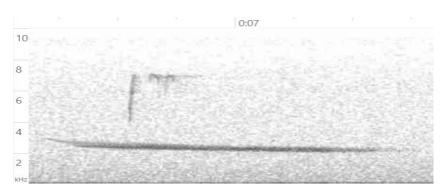


Note that these descriptions are based mainly on *mearnsi* with some information from *montezumae*; they had no recordings of *merriami*, *sallei*, or *rowleyi*. Other sounds mentioned in the BoW account, attributed to coveys or to birds in captivity, include "a "husky churring" (<u>5</u>) or "quiet moaning cries" (<u>13</u>) or "*ough, ough, ough*" vocalizations (<u>23</u>)."

Recordings available on xeno-canto or the Macaulay Library are primarily either the descending call of females or a descending whistle of males; the "buzz" prominently noted above is not usually present. Here's a typical female call of *mearnsi*, although it goes on a bit longer than most (ML226818881):

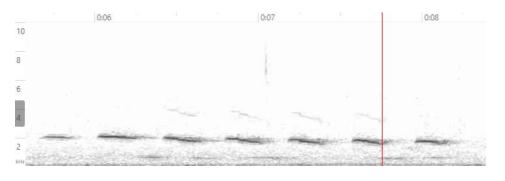


And here's a typical recording of the male's descending whistle, which is sometimes given in association with the female descending call (<u>ML76643581</u>):

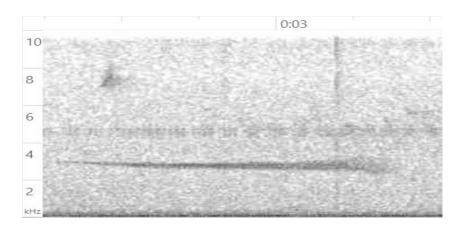


The Birds of the World account for *C. ocellatus* (Eitniear et al. 2020) indicated that its voice has not been described in detail, but that its vocalizations are similar to those of *C. montezumae*. The presumed song of the female is described as the descending series of notes as in *C. montezumae*, and the presumed song of the male is described as the descending, buzzy whistle.

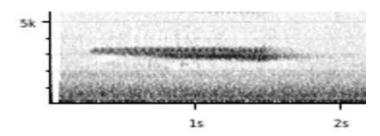
Here's an example of a female descending call of ocellatus (ML112248661):



and a male descending whistle (ML68501131):



Only one recording of *sallei/rowleyi* is available on xeno-canto or Macaulay, which is this recording of a male descending whistle of *sallei* from Oaxaca (<u>https://xeno-canto.org/344525</u>):



Vallely and Dyer (2018) described the song of *C. ocellatus* as "a long, trilled whistle that is steady or drops slightly in pitch followed by a series of short notes that drop in pitch *trrrrrrrrrreu cheu chu chu chu chu.*" This description appears to combine the male call and the female call, which are sometimes given one after the other.

It is possible that *C. ocellatus* has other calls and songs. Johnsgard (1988) wrote that a person who kept *C. ocellatus* in captivity noted a male whistled call or song that sounds like *pico-de-oro*, and Madge and McGowan (2002) repeated this information. Such a vocalization may be evident on a few recordings, such as <u>ML156540731</u>, where a snippet of song may be part of a duet with the descending female call. Both Johnsgard (1988) and Madge and McGowan (2002) also asserted, however, that no calls corresponding to the descending calls are known, whereas these are actually very common on recordings, so it's difficult to know what to make of their sections on voice.

In summary, *C. montezumae*, *sallei*, and *C. ocellatus* appear to have similar vocal repertoires, to the extent that they are known. There's some variation in the calls – in length, speed, pitch, note shape, or shape of the "descent" (some calls stay even rather than descend, and some, particularly of *ocellatus*, rise towards the end) – but despite apparent average differences between *mearnsi-montezumae* and *ocellatus*, features of calls appear to overlap between these taxa. The only available call of *sallei* or *rowleyi* may be intermediate between those of *mearnsi-montezumae* and those of *ocellatus*. Overall, the calls of the taxa are similar but would be worth

investigating in detail, including the repertoire of *C. ocellatus* and especially the virtually unknown vocalizations of *sallei/rowleyi*.

Recommendation:

This is a borderline case in which several options are available but no option has strong support. Our current two-species treatment of *Cyrtonyx* is incongruent with the phylogenetic results of Salter et al. (2022), including both the ML and SVDquartets analyses, so changes should be considered. Options, if voting for change, range from a single-species treatment to a three-species treatment, although the latter is also not supported by the phylogenetic results and is not recommended. The two-species taxonomy supported by the ML results would treat *sallei* and *rowleyi* as part of *C. ocellatus*, restricting *C. montezumae* to *mearns, montezumae*, and *merriami*, although this arrangement is not supported by the SVDquartets results. The single-species taxonomy is supported by the SVDquartets results and is also consistent with the ML results.

In my view, current phenotypic data support the single-species treatment slightly better than both possible two-species treatments and the three-species treatment. Vocalizations have not been studied quantitatively, but the primary vocalizations qualitatively appear to be similar among taxa, in both males and females, with the caveats that only one recording is available for *sallei* or *rowleyi*, that there appear to be average but overlapping differences between *mearnsimontezumae* and *ocellatus* (the taxa at the ends of the distribution of the complex), and that *ocellatus* may have additional vocalizations. Plumage differs noticeably but also varies such that geographically intermediate forms are also intermediate in plumage. The most obvious plumage differences are between the two species that we currently recognize, which would not be the species recognized if *sallei* and *rowleyi* are considered part of *C. ocellatus*. The plumage differences within *Cyrtonyx*, although considerable, are not nearly as striking as the variation present within some other species of Odontophoridae, such as *Colinus virginianus*.

Please vote on the following options:

- (a) Change our taxonomic treatment of quail in the genus Cyrtonyx, YES or NO
- (b) If voting YES on part a, vote for one of the following options: one species, two species (*C. montezumae* and *C. ocellatus*, with sallei and rowleyi placed in *C. ocellatus*), or three species (*C. montezumae*, *C. sallei*, and *C. ocellatus*).

I tentatively recommend treating all taxa of *Cyrtonyx* as a single species. This treatment has been suggested previously based solely on phenotypic characters, and the single-species taxonomy is consistent with both molecular analyses. There is much that we don't know about the southern forms of *Cyrtonyx*, and the complex may well consist of more than one species, but at this point what we know about the patterns of intermediacy seems more consistent with a single-species treatment.

English names would have to be considered separately, depending on the outcome of the voting.

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Submitted by: Terry Chesser

Date of Proposal: 10 March 2024

Transfer Habia fuscicauda and H. atrimaxillaris to new genus Driophlox

Background:

The genus *Habia* (commonly known as ant-tanagers) currently includes 5 species: *H. rubica, H. gutturalis, H. fuscicauda, H. atrimaxillaris,* and *H. cristata.* Three of these are part of the NACC checklist: *H. rubica, H. fuscicauda,* and *H. atrimaxillaris.* Genetic evidence has shown that the genus is not monophyletic. Using two mitochondrial DNA genes and four nuclear loci, Barker et al. (2015) showed that *H. rubica* was sister to *Chlorothraupis* rather than to the other four species of *Habia* (Fig. 1). Support for this relationship was strong: the posterior probability for the node uniting *H. rubica* with *Chlorothraupis* was 1.0, and the posterior probability for the node uniting all *Habia* excluding *H. rubica* was also 1.0. Although *Habia* was not monophyletic, all species of *Chlorothraupis* and *Habia* together formed an exclusive clade. Based on these results, del Hoyo & Collar (2016) merged all species of *Chlorothraupis* into *Habia*, which has taxonomic priority over *Chlorothraupis*. This merger has not been followed by other classifications and checklists.

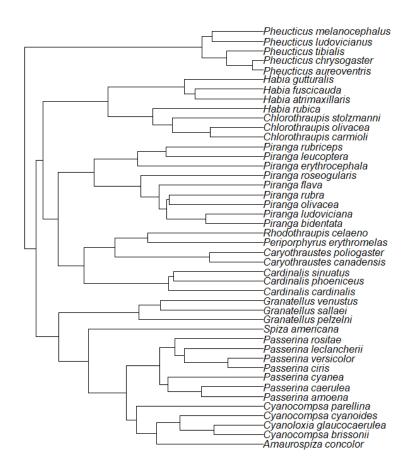


Figure 1. Phylogenetic tree (based on Barker et al. 2015). Maximum Clade Credibility tree indicating paraphyly of *Habia* and deep-time split of *Habia rubica* and *Chlorothraupis*. Note that Barker et al. (2015) did not sample *H. cristata*.

New Information:

A recent UCE study (Scott 2022) confirmed that *Habia* is not monophyletic, specifically that *H. rubica* is phylogenetically distinct from the other four species (Fig. 2). This study, encompassing phylogenetic analyses of 4,320 UCEs, used both concatenated maximum likelihood and multi-species coalescent (gene tree) approaches and showed that *Habia* is polyphyletic. Both analyses had strong support (100% bootstrap and 1.0 posterior probability) for the separation of *H. rubica* from the other species of *Habia*. Similar to Barker et al. (2015), Scott (2022) showed that *H. rubica* was sister to a clade containing species in *Chlorothraupis*. However, Scott (2022) also showed that the *Habia rubica*/*Chlorothraupis* clade was not the sister taxon to the clade containing the other four *Habia*, making merging all species into *Chlorothraupis* problematical.

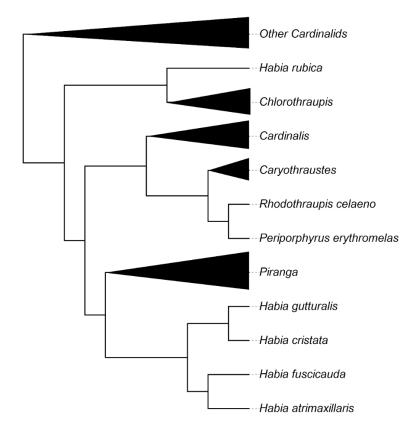


Figure 2. Maximum Likelihood phylogeny based on ultra-conserved elements (UCE) illustrating the polyphyly of *Habia* (modified from Scott 2022). Branch lengths, shortened to aid in visualization, represent relative genetic divergence but are not time-calibrated. Collapsed clades are denoted by black triangles.

The lack of monophyly of *Habia* necessitates a taxonomic change at the generic level. Because *rubica* is the type species of *Habia*, it must be included in the genus if *Habia* continues to be recognized. Therefore, Scott et al. (2024) made the following recommendations: 1) treat *Habia* as a monotypic genus, consisting of *H. rubica*, 2) continue to use *Chlorothraupis* for all species currently in *Chlorothraupis*, and 3) place the other four species currently in *Habia* in a separate

genus. Because no genus name was available, the authors described the new genus *Driophlox* for these four species.

Recommendation:

I recommend following the suggestions put forth in Scott et al. (2024). I do not recommend merging all Chlorothraupis and Habia species into Habia (as was done by del Hoyo and Collar (2016)) for several reasons. First, the species of a combined genus consisting of Habia and Chlorothraupis are more disparate phenotypically than species in other genera of the Cardinalidae. Species of the sexually monomorphic Chlorothraupis have primarily olive plumage and lack the red plumage and crown patches/crests of the males of Habia. Species of Chlorothraupis also have proportionately shorter tails, <77% of wing length, versus ≥85% in Habia. Second, the node uniting the Habia-Chlorothraupis clade in Barker et al. (2015) is much deeper than the nodes uniting other cardinalid genera such as Cardinalis and Caryothraustes. Furthermore, the more recent study of Scott (2022) showed that the clade containing H. gutturalis, H. fuscicauda, H. cristata, and H. atrimaxillaris is more closely related to other cardinalids than it is to the clade consisting of Chlorothraupis and H. rubica. Therefore, using Habia for all species currently placed in Habia and Chlorothraupis does not reflect the phylogeny of the group. Another option would be to merge Habia rubica into Chlorothraupis. However, I do not recommend this option because of the phenotypic disparity between H. rubica and species of Chlorothraupis noted above. Therefore, I recommend transferring H. gutturalis, *H. atrimaxillaris*, *H. cristata*, and *H. fuscicauda* to *Driophlox*.

The phylogeny of Scott (2022) indicates that major changes to the linear sequence in this part of the Cardinalidae may be required, but until his data are analyzed further I suggest that we simply place *Driophlox* before *Habia rubica* in the linear sequence.

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Submitted by: Kevin J. Burns

Date of Proposal: 14 March 2024

2024-C-18 N&MA Classification Committee p. 128

Treat Colinus leucopogon as a separate species from Crested Bobwhite C. cristatus

Background:

The genus *Colinus* consists of 3-4 species of bobwhite quail. Two species, Northern Bobwhite *C. virginianus* (found from the U.S. south to northern Guatemala, also in Cuba and the Bahamas) and Black-throated Bobwhite *C. nigrogularis* (southeastern Mexico to Honduras), are generally recognized as distinct species, although with occasional suggestions of possible conspecificity (e.g., Carroll 1994, Howell and Webb 1995). They were considered by Mayr and Short (1970) to form a superspecies. The other taxa, Spot-bellied Bobwhite *C. leucopogon* (Guatemala to central Costa Rica) and Crested Bobwhite *C. cristatus* (southwestern Costa Rica south to northern South America), are sometimes considered separate species (Peters 1934, Ridgway and Friedmann 1946, Blake 1977, Johnsgard 1988, Stiles and Skutch 1989, Carroll 1994, Howell and Webb 1995, Madge and McGowan 2002) and sometimes treated as subspecies groups of *C. cristatus* (Hellmayr and Conover 1942, Sibley and Monroe 1990, Dickinson and Remsen 2013).

Intraspecific variation in species of *Colinus* is extensive: the most recent version of the IOC list recognized 20 subspecies of *C. virginianus*, 4 of *C. nigrogularis*, 6 of *C. leucopogon*, and 13 of *C. cristatus*. Despite the plumage variation within both *C. leucopogon* and *C. cristatus*, these taxa are consistently differentiated by their crests, which in *C. leucopogon* are short and straight, whereas those in *C. cristatus* are long and recurved (this feature is best seen in photos of living birds). The two also differ consistently in facial pattern, *C. leucopogon* having a brown eyeline that *C. cristatus* lacks, and the plumage in *C. cristatus* tends to have rufous coloring that is lacking in *C. leucopogon*. The photos below show males (females are more similar) of two



subspecies of *C. leucopogon* (*hypoleucus* from Guatemala and *dickeyi* from Costa Rica) on the left and males of six subspecies of *C. cristatus* on the right (*panamensis* from Panama, *decoratus, badius*, and *continentis* [= *cristatus*] from Colombia, and *macquerysi* and *barnesi* from Venezuela).



NACC and Clements currently treat *C. virginianus* and *C., nigrogularis* as separate species, and *leucopogon* as a subspecies group under *C. cristatus*, whereas IOC and Birdlife consider them to be separate species. Birdlife noted that *C. leucopogon* is often considered conspecific with *C. cristatus*, but they did not provide a rationale for their treatment, and the IOC treats them as separate species without comment. WGAC voted in 2021 to follow IOC and Birdlife and split these species, although most votes were somewhat tentative.

Hellmayr and Conover (1942) lumped *leucopogon* and *cristatus*, previously considered two species by Peters (1934), with the comment that

We do not see any reason for separating specifically *C. c. dickey* and its northern allies [i.e., *C. leucopogon*] from the South American forms [i.e., *C. cristatus*] since the characters between these groups are merely differences of degree. Griscom (Amer. Mus. Nov., 379, p. 3, 1929), it will be remembered, already has called attention to certain similarities and the practical identity in the female sex between *C. c. hypoleucus* [part of *C. leucopogon*] and *C. c. leucotis* [part of *C. cristatus*].

Stiles and Skutch (1989), perhaps with this statement in mind, based their taxonomy on the fact that the northernmost subspecies of *C. cristatus* (*sensu stricto*) differs more from *C. leucopogon* than do the more geographically distant subspecies of *C. cristatus*, as can be seen in the photos (*barnesi* of Venezuela being most similar to *dickey*), and they and Carroll (1994) also cited apparent differences in egg color (white in *C. leucopogon*, cream-colored and often with brown spots or blotches in *C. cristatus*) and vocalizations. Stiles and Skutch described vocalizations before and during the breeding season as follows (although I have difficulty hearing the differences they described as throaty vs. less throaty):

- *C. leucopogon*: "a throaty, scratchy *bobwhite* or *bob, bobwhite*; song of hoarse, throaty phrases repeated from a perch;"
- *C. cristatus*: "notes clearer; less throaty" than those of *leucopogon*, calls sounding like "*pwit pwit PWEET*; also a wheezy *WHEE-cher*, repeated 4-6 times."

Differences in vocalizations were also cited in the Birds of the World account (Sandoval 2020), where it was stated that the song of *C. leucopogon* consists of two notes (*bob* and *White*) and that the *bob* portion may or may not be repeated, whereas that of *C. cristatus* consists of two flat notes (*bob* and *White*), the former always repeated at least twice (however, available recordings indicate that two-note calls are occasionally given). An analysis of variance including all species of *Colinus*, cited as "in prep." and apparently still unpublished, indicated that differences in song between *C. leucopogon* and *C. cristatus* exceeded the differences between *C. virginianus* and *C. nigrogularis*, thus arguing for species status for each of the former taxa if *C. nigrogularis* is recognized as separate from *C. virginianus*.

New Information:

As part of their UCE study of the Odontophoridae, Salter et al. (2022) sampled extensively within the genus *Colinus*, sequencing single individuals of 19 subspecies of *C. virginianus*, 3 subspecies of *C. nigrogularis*, 6 of *C. leucopogon*, and 13 of *C. cristatus*. Their Maximum Likelihood analysis (Fig. 1) indicated that the species in *Colinus* form two clades, one consisting

of *C. virginianus* and *C. nigrogularis*, the other of *C. leucopogon* and *C. cristatus*. Bootstrap support for these relationships and for monophyly of the four taxa was strong (all nodes 100%).

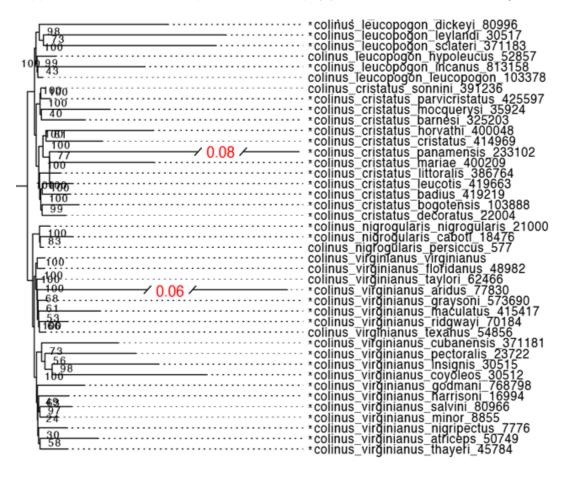


Figure 1. Subspecies-level tree, from the supplementary information of Salter et al. (2022) inferred using maximum likelihood analysis of UCE loci. The tree inferred using SVDquartets was similar except that the two low-quality samples with long branches above (*C. cristatus panamensis* and *C. virginianus aridus*) were pulled out as sisters to the rest of *C. cristatus* and to all *Colinus*, respectively. This is a known problem in analyses using SVDquartets that include low-quality samples.

The branching pattern in the SVDquartets analysis was the same as that in the ML analysis, except that the phylogeny suffered from a known problem with low-quality historical samples, which in SVDquartets analyses aggregate as sister to all other members of their respective clades (Salter et al. 2022). This happened with the two low-quality samples of *Colinus* in their analysis: *C. virginianus aridus*, which was sister to the entire *Colinus* clade rather than nesting within *C. virginianus* as it did in the ML analysis, and *C. cristatus panamensis*, which was a weakly supported sister to the remainder of *C. cristatus* rather than nesting within it as in the ML analysis. Perhaps for this reason, bootstrap support for parts of the SVDquartets tree was lower than in the ML tree: although support for the two main clades (*virginianus-nigrogularis* and *leucopogon-cristatus*) was 100%, and support for monophyly of *C. virginianus* (excluding the problematical sample) and *C. nigrogularis* was 100%, support for monophyly of *C. leucopogon* and *C. cristatus* (excluding the problematical sample) was 71% and 72%, respectively.

Recommendation:

This is a borderline case in which reasonable arguments can be made for and against recognizing *C. leucopogon* as a separate species. I weakly recommend that we recognize *C. leucopogon* as separate, for three main reasons:

(1) Hellmayr and Conover (1942) provided little explanation for their lump of *leucopogon*, which contrasted with the two-species treatment of Peters (1934) and Ridgway and Friedmann (1946), stating that the differences between them "are merely differences of degree" without providing specifics other than citing Griscom's statement on similarity of females as supporting evidence. It's difficult to discern a pattern of intermediacy that would support "differences of degree" in the various forms of *Colinus* such as is found, for example, among taxa within *Cyrtonyx*.

(2) The genetic data show that the proposed *C. leucopogon* and *C. cristatus* form monophyletic groups. Of course this might have been expected, given their allopatric ranges, and it says nothing about species status *per se*. However, it does demonstrate that the similarities in plumage originally used to distinguish them as species have been verified independently, and that the similarities in plumage between some subspecies of the two proposed species (e.g., between *C. leucopogon dickeyi* and *C. cristatus barnesi*) are not due to close evolutionary relationships.

(3) The yardstick approach within *Colinus* indicates that recognizing *C. leucopogon* as a separate species from *C. cristatus* would appear to be consistent with our recognition of *C. virginianus* and *C. nigrogularis* as separate species, based on similar or lesser degrees of difference between *C. virginianus* and *C. nigrogularis* in genetics, vocalizations (although anecdotal or unpublished), plumage, and egg color. An alternative would be to propose a lump of *C. virginianus* and *C. nigrogularis*, but this would require a separate proposal.

English names:

AOU (1998) used Spot-bellied Bobwhite for the *leucopogon* group and Crested Bobwhite for the *cristatus* group, as does Clements, and these are the names used for the separate species by Birdlife and the IOC list, as well as many other sources. The distribution of *C. cristatus* is much greater than that of *C. leucopogon*, so retaining the name Crested Bobwhite for *C. cristatus* would be consistent with our guidelines on English names. As Pam has noted elsewhere, Spotbellied is an unfortunate name, as it applies only to some subspecies of *C. leucopogon*, and *C. cristatus* also has spotting on its underparts. Nevertheless, I recommend that we retain Crested Bobwhite for *C. cristatus* and adopt the seemingly entrenched Spot-bellied Bobwhite for *C. leucopogon*.

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Elliot, and J. Sargatal (eds.). Handbook of the Birds of the World. Vol. 2. New World Vultures to Guineafowl. Lynx Edicions, Barcelona, Spain.

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Submitted by: Terry Chesser

Date of Proposal: 18 March 2024

Add Icterine Warbler Hippolais icterina to the Main List

Background:

On 22 September 2022, Rodney Ungwiluk, Jr., photographed an Icterine Warbler (*Hippolais icterina*) at Gambell, St. Lawrence Island, Alaska. His photos were outstanding, and the Alaska Checklist Committee (Gibson et al. 2023) and the ABA Checklist Committee (Pyle et al. 2023) quickly reviewed and unanimously accepted the record. Three color images were published in Gibson et al. (2023), including on the cover of Western Birds (Vol. 54, No. 2, 2023). Photos have appeared elsewhere including in North American Birds and various places online.

This species is in the family Acrocephalidae. The genus *Hippolais* (a new genus for North America) is comprised of four species. These are rather large and stocky Old World "warblers" and all are found primarily in the Western Palearctic. Two species, Icterine Warbler and Melodious Warbler (H. polyglotta), a shorter-distance migrant breeding in Western Europe and West Africa, show much yellowish coloration. Icterine Warbler really can only be confused with Melodious Warbler, but they are rather easily separated by Icterine's much longer primary projection past the tertials and by the presence of a distinctive pale wing panel. The primary projection has been stated as follows in Svensson et al. (2023): "in Icterine the primary projection is equal to 2/3 of the exposed tertials, while in Melodious it is usually much less than half." These characters show very well in the photo on the above-cited cover of Western Birds. Also, the primary tips are equally spaced in Melodious, whereas in Icterine they become wider towards the wing tip. Icterine has a slightly larger bill. Icterine is a much longer-distance migrant, breeding in northern Europe to western Asia and wintering in southern Africa, so seemingly is much more likely to occur in western Alaska than Melodious Warbler, although Melodious is also migratory and there are exceptional records from the Azores and Iceland. Both species are annual migrants to the United Kingdom and Icterine has bred rather recently in Scotland.

The species is now pretty universally considered to be monotypic.

Recommendation:

I see nothing controversial about this record and recommend that Icterine Warbler be added to the Main List of North American birds, following earlier actions by the Alaska Checklist Committee and the ABA Checklist Committee.

Linear placement on the Check-list:

Dickinson and Christidis (2014) and the current Clements list place the genus *Hippolais* in the family Acrocephalidae between the genera *Iduna* and *Acrocephalus*. The monotypic genus *Arundinax* precedes *Iduna*, which precedes *Hippolais*. Thus, Icterine Warbler would be placed in our list between Thick-billed Warbler *Arundinax* aedon and Millerbird *Acrocephalus familiaris*. A new genus heading will be needed for *Hippolais*.

English name:

I have seen no other English name used for *Hippolais icterina* other than Icterine Warbler.

Draft new species account for the Check-List:

Genus HIPPOLAIS Conrad

Hippolais Conrad, 1827, Neue Alpina, 2, p. 77. Type by monotypy, *Hippolais italic* Conrad = *Sylvia polyglotta* Vieillot.

Hippolais icterina (Vieillot). Icterine Wabler.

Sylvia icterina Vieillot, 1817, Nouv. Dict. Hist. Nat., nouv. éd. 11, p. 194. (France.)

Habitat.—Breeds in somewhat open woodland, including parkland with an understory, deciduous woodlands in the northern part of the range, mixed (deciduous and coniferous) woods in the southern part of the range. Winters in open woodlands (e.g., acacia woodlands).

Distribution.—*Breeds* in northwestern Europe from northeastern France and southern Fennoscandia south to northern Italy, Serbia, Bulgaria, Ukraine, the Caucasus, northern Iran, and southwestern Siberia east in a narrowing latitudinal belt to Nazorovo, Krasnoyarsk Krai, Russia. Has bred in Scotland and Turkey.

Winters in Africa south of the Sahara and mostly south of the Equator, mainly in southcentral Africa from Rwanda, western Uganda, and Zaire south to Namibia and southern Mozambique.

Migrates through the Mediterranean region and much of the northern half of Africa, mostly west of Lake Victoria. Rare but annual (primarily fall) to the United Kingdom and through Kazakhstan. Casual to northwestern and East Africa and southern South Africa. Casual or accidental to Iceland, the Faeroes, Madeira, and Kuwait.

Accidental to Alaska (Gambell, St. Lawrence Island; 22 September 2023; photos; Gibson et al. 2023).

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Submitted by: Jon L. Dunn

Date of Proposal: 20 March 2024

Add Western Marsh Harrier Circus aeruginosus to the U.S. list

Background:

The Western Marsh Harrier is already on the AOS Checklist due to a previously accepted record from the West Indies (Guadeloupe, 28 Nov. 2002–14 Apr. 2003). A female was well-documented (numerous photos) from 25-27 August 2022 in Knox County, Maine, and from Morris County, New Jersey, from 8-19 November 2022. These records were accepted unanimously by the Maine Records Committee in October 2022 (Bevier et al. 2023) and the New Jersey Bird Records Committee in April 2023. The records were accepted unanimously by the ABA Checklist Committee in July 2023 (Pyle et al. 2023). Pyle et al. (2023) detailed (with published photos showing the molt progression) why the two individuals were "almost certainly" the same bird. The New Jersey bird was struck and killed at Newark International Airport on 19 November 2022 and its identification was genetically confirmed by analyses of feathers at the National Museum of Natural History by Carla Dove (Pyle et al. 2023). Pyle et al. (2023) did not note whether there was an archived specimen, or even feathers, of the bird. A previous sight record from Chincoteague, Virginia (Shedd et al. 1998), was not accepted (AOU 1998).

Recommendation:

I recommend adding this species to the U.S. list based on the Maine and New Jersey's rarities committees accepting their records, decisions endorsed by the ABA-CLC. Their report in North American Birds (Pyle et al. 2023) included excellent color images of the bird in flight.

References:

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Submitted by: Jon L. Dunn

Date of Proposal: 20 March 2024

Treat Gelochelidon macrotarsa as a separate species from Gull-billed Tern G. nilotica

Background:

The Gull-billed Tern *Gelochelidon nilotica* has long been recognized as a cosmopolitan species with breeding populations on every continent except Antarctica. Many taxonomic authorities had recognized 6 subspecies, sometimes grouped into two distinct groups (Dickinson and Remsen 2013, Clements et al. 2022), with *macrotarsa* recognized by its larger size, overall different structure, paler plumage, and darker and more extensive black around the eye in juvenile and basic plumages, along with differences in molt, ecology, and behavior (Rogers et al. 2005, Mlodinow 2023). These differences have led some global taxonomic authorities to recognize the taxon *macrotarsa* as a distinct species (e.g., del Hoyo and Collar 2014, Gill and Donsker 2019). In their assessment of the system using the Tobias et al. (2010) scoring criteria, del Hoyo and Collar (2014) justified the split on the following basis:

Hitherto treated as conspecific with *G. nilotica*, but differs in its considerably larger size, with effect size for bill 3.69 (published data (Rogers et al. 2005); score 2); differently shaped bill, with culmen more decurved and negligible gonydeal angle (2); nomadic, opportunistic and kleptoparasitic behaviour decoupled from tightly scheduled migration patterns (1); paler grey upperparts (1); more extensive black patch around the eye and ear-coverts in winter (1). Monotypic.

WGAC considered the split because of the differing treatments among global taxonomic authorities, voting unanimously to split *G. macrotarsa* from *G. nilotica*. This has now been adopted by the Clements checklist (Clements et al. 2023). Although *G. macrotarsa* has never occurred within the NACC area, we are considering the issue to bring our concept of *G. nilotica* into alignment with that of other global checklists.

New Information:

As far as I am aware, NACC has never considered this split. What follows is a brief summary of the published information on differences between the *macrotarsa* group and the *nilotica* group, mostly from Rogers et al. (2005), who studied the two groups in northwestern Australia, where they overlap during the nonbreeding period.

Plumage Differences

Australian *macrotarsa* and the *nilotica* group are very similar, but do differ in some aspects of plumage. Australian *macrotarsa* has much paler gray to almost white upperparts, including an entirely white tail and rump, whereas *nilotica* has darker gray upperparts and a pale gray tail with white outer tail feathers. In basic and juvenile plumages, *macrotarsa* has a much larger blackish patch over the eye and auriculars. In addition, in basic plumage, *macrotarsa* usually has some black speckling in the crown, whereas *nilotica* has a white crown.

Morphological Differences

Australian *macrotarsa* is larger in most measurements, with a significantly longer bill, deeper bill, longer total head length, longer wings, longer tarsi, and greater mass (Rogers et al. 2005). In addition to these size differences, bill shape also differs, with a decurved culmen and a gonydeal angle close to the bill tip, giving the bill a decurved appearance, versus the relatively straight appearance of the bill of the *nilotica* group, with a straighter culmen and gonydeal angle closer to the bill (Rogers et al. 2005).

Ecological Differences

Molt strategy differs significantly between *macrotarsa* and *nilotica*. Because they appear to breed opportunistically when conditions are right (they breed at inland wetlands in Australia, which are ephemeral, with specific breeding locations only occupied certain years), molt in *macrotarsa* can occur at different times of year, and molt can be suspended in ways that is not observed in *nilotica*, which has regular breeding and molting seasons. Although most breeding occurs in *macrotarsa* during the austral spring and summer (September to April; Mlodinow 2023), breeding has also been recorded between May and August (Rogers et al. 2005). This variability in breeding time can result in simultaneous waves and extensive overlap of prealternate and pre-basic primary molt in *macrotarsa*, with it being able to suspend molt if the right breeding conditions arise, whereas *nilotica* may only show slight overlap of pre-alternate and pre-basic molts at specific times of the year.

In addition to molt and breeding timing differences, there are also strong behavioral and feeding differences between *macrotarsa* and *nilotica*, with *macrotarsa* regularly engaging in kleptoparasitim of the Whimbrel *Numenius phaeopus*; in one study, there was a significant association of *macrotarsa* with Whimbrel, with *macrotarsa* waiting until a Whimbrel would catch a large crab, at which point the tern would fly in and steal it from the Whimbrel. This behavior was never observed among migrant *nilotica* in northwestern Australia.

Vocal Differences

Kimball Garrett and Kathy Molina, first author of the Birds of the World account for *G. nilotica*, provided comments to RTC when WGAC considered separating *G. macrotarsa* last year (see Appendix). Contact calls of adult *macrotarsa* were not available online, but they compared sonograms of apparently analogous calls from *macrotarsa* (Higgins and Davies 1996) and *nilotica* (Cramp 1985) and concluded that they were quite different. They also compared the presumed begging call of a juvenile *macrotarsa* (<u>https://macaulaylibrary.org/asset/352981901</u>) with those of the subspecies to be grouped under a split *G. nilotica*, noting that they had never heard a remotely similar call from *vanrossemi* in California or Mexico. In contrast, they noted that the begging call of a juvenile *nilotica* from India

(<u>https://macaulaylibrary.org/asset/113211471</u>) sounded very similar to those of juveniles of *vanrossemi* (e.g., <u>https://macaulaylibrary.org/asset/248285331</u>). The sample sizes for the juvenile calls are small but nevertheless suggestive.

Genetic Differences

No genetic data are available for the two taxa, except for limited mtDNA barcode sequence data that suggests the two represent reciprocally monophyletic groups, leading the authors to designate them as "potential distinctive taxonomic entities" (Tavares and Baker 2008).

Recommendation:

Based on the pronounced morphological differences (different bill shape and significantly larger measurements in *macrotarsa*), differences in molt timing (apparent ability of *macrotarsa* to suspend molt and resume molt abruptly at different times of year in response to environmental conditions that dictate breeding), differences in timing of breeding (ability to breed most months of the year to take advantage of good conditions), and apparent vocal differences between both adult and juvenile *nilotica* and *macrotarsa*, we recommend voting to split *G. macrotarsa* from *G. nilotica*. Given the large difference in range size of the two species, continuing to use "Gull-billed Tern" for *G. nilotica* is appropriate; *G. macrotarsa* has been given the English name Australian Tern by other global checklist authorities, whereas Gull-billed Tern was retained for *G. nilotica* (Gill et al. 2023, Clements et al. 2023). This decision would also bring the AOS *Check-list* in alignment with WGAC and other global taxonomic authorities.

Effect on the AOS Checklist:

Because *macrotarsa* has never occurred in the AOS region, the only changes needed to the *Checklist* would be (1) adjustment of the distributional statement for *G. nilotica*, (i.e., removal from the statement of its Australian breeding range as well as its distribution throughout inland Australia, as *nilotica* only occurs along the northern and eastern coast during the nonbreeding season), and (2) mention of the split in the Notes.

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Date: 31 March 2024

Appendix: External Comment on the proposed separation of *Gelochelidon macrotarsa* from *G. nilotica*

Regarding the Gull-billed Tern split, I would say that neither Kathy nor I previously held strong feelings either way, but might now lean toward splitting for several reasons. Our thoughts are outlined below, but I would hasten to add a couple of caveats. First, our experience is almost exclusively with Gull-billed Terns in southern California and western Mexico (*Gelochelidon nilotica vanrossemi*), and to a lesser extent with *G. n. aranea* in the se. United States and Cuba. We saw Gull-billeds in Cairns, Queensland (Australia) in November 1990 but only at a distance and we did not pay close attention to the subspecies issue (Kathy didn't begin her field work on these terns in California until 1991). The second caveat is that some of the "evidence" we point to below comes from Macaulay Library/eBird and we can't vouch for the subspecies designations of the birds photographed or audio-recorded therein, though they make geographical sense.

G. n. macrotarsa is really the only well-differentiated subspecies of GBTE -- all other named subspecies vary only subtly from one another and individuals are often (usually?) unidentifiable without knowledge of locality. In other words, all ssp. other than *macrotarsa* are based on average differences that are real, but with much overlap in characters. We suspect that essentially all individual *macrotarsa* would be diagnosable in the hand and probably in the field.

Morphological differences in *macrotarsa* seem consistent and should distinguish virtually all of them from virtually all individuals of all other ssp. Differences include overall size, bill size and shape, foot size, dorsal coloration, and tail coloration, as well as basic and (see below) juvenal plumage.

Here is an interesting comparison of bill size and shape of two birds in June at Cairns, Queensland; the upper larger-billed bird is *macrotarsa*; the lower smaller-billed bird might be a migrant (*affinis/nilotica*?) although the fully black crown would seem to be unusual for a northern migrant in winter (June). So it might represent the small extreme of *macrotarsa*, which runs counter to the "easily diagnosable" conclusion. [A fully black crown in winter might not be unusual for *macrotarsa*, which can be nomadic and breed at all seasons.] https://macaulaylibrary.org/asset/463685481

In any case, a perusal of Macaulay photos from Australia and elsewhere confirms the morphological distinctness of (nearly all) *macrotarsa*.

We can't readily find any recordings of adult *macrotarsa* contact calls (none in XenoCanto, none in Macaulay/eBird). HANZAB (v. 3, p. 581) presents a sonogram of the "Yelp" call (rendered as 'kuh-wuk') which we presume is equivalent to the common contact call of all GBTE. One can compare this sonogram with that of Fig. IV in Birds of the Western Palearctic (v. 4, p. 14), the analogous call of a nominate *nilotica* from Spain. They look pretty different in structure.

This recording is said to be of a presumed begging call of a juvenile *macrotarsa* following an adult at Darwin, Northern Territory:

https://macaulaylibrary.org/asset/352981901

We have never heard any begging call remotely like this from *vanrossemi* in California or w. Mexico. I don't know how typical this recording might be.

For comparison, here is the begging call of a juvenile from India (presumably *G. n. nilotica*) which sounds very close to what we hear from *vanrossemi* . <u>https://macaulaylibrary.org/asset/113211471</u> and here are begging calls of a *vanrossemi* juvenile in California: <u>https://macaulaylibrary.org/asset/248285331</u>

We found some Macaulay photos of juvenile *macrotarsa*; the distinct black feather tips against a very white background are quite different from the brown feather tips and extensive buffy background of juvenile *vanrossemi* (even, seemingly, when accounting for fading over time of the buffy areas).

Juvenile at Cairns, Queensland <u>https://macaulaylibrary.org/asset/570919781</u> Juvenile in Victoria <u>https://macaulaylibrary.org/asset/298922551</u> another juv. in Victoria: https://macaulaylibrary.org/asset/69300261

For comparison, here is a juvenile from Ecuador (ssp. *aranea*? or possibly *vanrossemi*, or *gronvoldi*):

https://macaulaylibrary.org/asset/205008021 And here is video of a juvenile with sound from USA:

https://macaulaylibrary.org/asset/449808

Also, the Birds of the World on-line species account has a good photo of a juvenile *vanrossemi* with an adult on the "Subspecies" page.

Given the above and what is discussed in the 2005 Rogers et al. paper in Emu (including differences in ecology, migration/nomadism, etc.), we would agree this is a reasonable species-level split. However, it seems that more work should be done to document the vocal repertoire of *macrotarsa* (field recording and/or diving more deeply into the literature and Australian recording archives).

Kimball Garrett Kathy Molina Natural History Museum of Los Angeles County

Treat *Automolus cervinigularis* as a separate species from Buff-throated Foliage-gleaner *A. ochrolaemus*

Description of the problem:

Automolus ochrolaemus (Tschudi, 1844) is a wide-ranging polytypic species of the lowland Neotropics, found in lowland rainforest nearly throughout the Neotropics from southern Mexico through the Amazon Basin. Until 2018, this was generally considered a single polytypic species with seven subspecies. From north to south, these taxa were: *cervinigularis* (Sclater, 1857) of Mexico to Guatemala; *hypophaeus* Ridgway, 1909, of Nicaragua to northwestern Panama on the Caribbean slope; *exsertus* Bangs, 1901, of the Pacific slope of Costa Rica and far southwestern Panama; *pallidigularis* Lawrence, 1862, of eastern Panama south through the Choco to northwestern Ecuador; *turdinus* (Pelzeln, 1859) of the western Amazon Basin and Guiana Shield; *ochrolaemus* (Tschudi, 1844) of the southwestern Amazon Basin; and *auricularis* Zimmer, 1935, of the southeastern Amazon Basin (Birds of the World, 2023). Another subspecies, *amusos*, is sometimes recognized from Honduras and Nicaragua, or considered a synonym of *cervinigularis* or *hypophaeus*.

Ridgway (1911) considered the complex to comprise three species: *A. cervinigularis* (including *hypophaeus*), *A. pallidigularis* (including *exsertus*), and, although not covered in his volumes, *A. ochrolaemus*, which was implicitly recognized for all the extralimital taxa.

NACC proposal 2018-A-2 elevated *exsertus* to species rank based on allopatry from *hypophaeus*, mitochondrial divergence, and song discrimination in playback trials between *exsertus* and *hypophaeus*, and adopted the common name Chiriqui Foliage-gleaner. NACC adopted this split 8-2, with some committee member comments mentioning that the rest of the taxa found west of the Andes might eventually be split from the Amazonian taxa, pending further research. WGAC, in addressing discrepancies among global lists, also chose to adopt the split of *A. exsertus*, but went one step further and split the other two Middle American taxa as a species (*A. cervinigularis*, with *hypophaeus*) separate from the South American taxa. They opted, however, to retain *pallidigularis* of eastern Panama and the Choco as a subspecies of *A. ochrolaemus* of the Amazon Basin and Guiana Shield.

New information:

Genetics:

Smith et al. (2014) sampled all taxa in this group using the mitochondrial gene cytochrome b, and estimated a gene tree that was fairly well resolved. Below (Fig. 1) is the supplemental figure for the genus from Smith et al. (2014) showing the sampling map, ecological niche model, and the gene tree. On the left is the time-calibrated gene tree, and on the right is the same tree with species as circumscribed by the species delimitation method bGMYC.

Broadly, Smith et al. (2014) found that *exsertus* and *cervinigularis/hypophaeus* were sister groups, which in turn were sister to the remainder of the *ochrolaemus* complex. The Choco

taxon *pallidigularis* was embedded within the rest of the South American taxa from east of the Andes. To better illustrate these relationships, I have included an enlarged version of the bGMYC tree (Fig. 2), with the corresponding taxa labeled to the right of each cluster. Note that

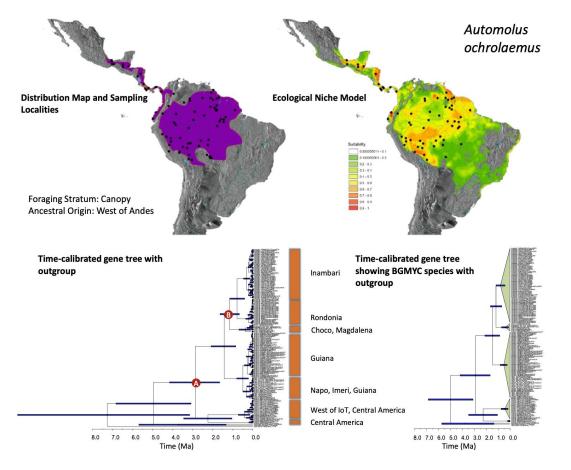


Figure 1. Supplemental figure from Smith et al. (2014) showing the sampling map, ecological niche model, and the gene tree. On the left is the time-calibrated gene tree, and on the right is the same tree with species as circumscribed by the species delimitation method bGMYC.

that outgroup has been removed here to better highlight the few samples of *exsertus* at the bottom of the tree. The time scale is in millions of years.

Shultz et al. (2017) sampled two mitochondrial genes (ND2 and cytochrome b) for most taxa in the group, except *exsertus*, and recovered a similar topology (Fig. 3) to Smith et al. (2014). However, they recovered *pallidigularis* as sister to the remaining South American taxa rather than embedded within them. Shultz et al. (2017) also sequenced three nuclear genes for these samples, but they showed no differentiation across the group, as is often the case. They are not shown here.

Harvey et al. (2020) sampled two individuals in the complex; one *hypophaeus* from Costa Rica, and one *turdinus* from Peru. These samples were sisters, with a divergence time of about 2 Ma,

which is consistent with the mitochondrial data, but doesn't provide much information for taxonomy.

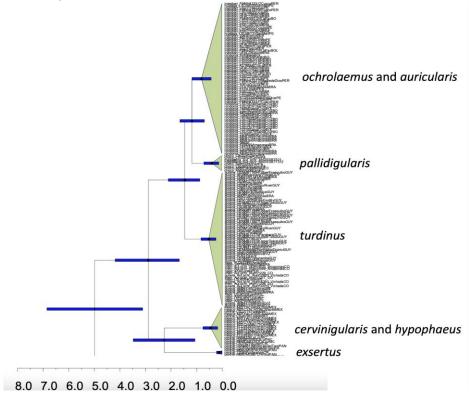


Figure 2. Enlarged version of the bGMYC tree from Fig. 1 above (from suppemental data from Smith et al. 2014.

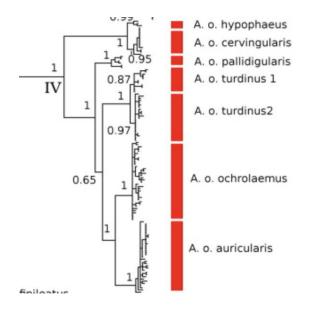
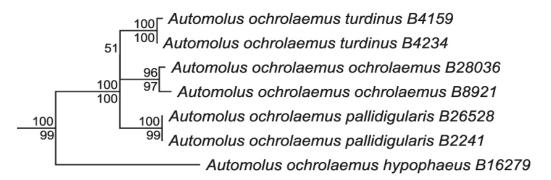


Figure. 3. Tree from Shultz et al. (2017) based on two mitochondrial genes (ND2 and cytochrome b).

Claramunt et al. (2013) sequenced three mitochondrial and three nuclear genes and recovered a topology consistent with the other studies included here, with *pallidigularis* clustering with the Amazonian taxa, and *hypophaeus* sister to the rest (*exsertus*, *cervinigularis*, and *auricularis* not sampled). A portion of the tree from Claramunt et al. (2013) is shown below.



Voice:

Although nothing is published on vocalizations that I can find, there is considerable vocal variation in the group, and this was partly the basis for elevating *exsertus* to species rank. In listening to vocalizations, there are essentially two vocal groups in the complex: one with a slower series of nasal descending notes comprised of *ochrolaemus*, *auricularis*, *turdinus*, and *pallidigularis*, and another with a faster song comprised of harsher notes sometimes strung into a longer rattle. This latter group is comprised of *cervinigularis*, *hypophaeus*, and (to an extent) *exsertus*. In listening to recordings, it does seem like *exsertus*

(<u>https://birdsoftheworld.org/bow/species/butfog4/cur/multimedia?media=audio</u>) has consistently slower songs than *cervinigularis/hypophaeus*

(<u>https://birdsoftheworld.org/bow/species/butfog9/cur/multimedia?media=audio</u>) with a somewhat harsher quality to the notes (so very unlike the South American group). Some recordings of *cervinigularis/hypophaeus* also have a two-parted aspect to the song, with the note shape being distinctly different in the first half of the song, and with the second half often trailing off into a long rattle.

Songs of the three Amazonian taxa (*ochrolaemus*, *auricularis*, and *turdinus*) are remarkably constant across their range:

<u>https://birdsoftheworld.org/bow/species/btfgle1/cur/multimedia?media=audio</u>. However, *pallidigularis* adds a bit of complexity to the matter. Recordings from the southern end of its range in Ecuador closely resemble those of the Amazonian taxa (e.g.,

https://macaulaylibrary.org/asset/140267791), whereas those at the northern end of its range in eastern Panama and northwestern Colombia are a bit faster

(https://macaulaylibrary.org/asset/60369, https://macaulaylibrary.org/asset/286906,

<u>https://macaulaylibrary.org/asset/610186681</u>). That variation aside, there does seem to be a rather sharp break between sweeter-sounding birds in the canal zone (e.g.,

<u>https://macaulaylibrary.org/asset/28412</u>) and rattling birds in the far west of Panama on the Caribbean slope (<u>https://macaulaylibrary.org/asset/214530601</u>). It is also possible that some of the recordings linked above are after playback so the birds may be singing a more intense song, as at least some recordings from the canal zone are slower and much more like Amazonian birds (<u>https://xeno-canto.org/448169</u>).

Plumage:

David Vander Pluym was nice enough to photograph a series of specimens of the taxa in this complex from the Louisiana State University Museum of Natural Science (LSUMNS). Photos in dorsal, lateral, and ventral views are shown below. In each photo, 2-3 individuals of each taxon are shown, with the taxon name written above, and the red vertical lines separating the proposed species. The taxa from left to right are: *auricularis, ochrolaemus, turdinus, pallidigularis, exsertus, hypophaeus,* and *cervinigularis*.





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Ridgway (1911) had some insights into the plumage and morphometrics of this complex. As noted above, he recognized three species in the group; although these are not the same as those currently being considered, it is also not the broad polytypic circumscription. Regarding *cervinigularis*, he noted:

Mexican specimens average decidedly deeper in color than others, especially the buff of superciliary stripe, throat, etc., and brown of pileum, the latter almost sooty in its darkness. Guatemalan examples have the back, etc., more rufescent or castaneous, those from Honduras, British Honduras, and Nicaragua more olivaceous than Mexican specimens. The series examined is, however, inadequate.

For *hypophaeus*, he noted that it was "Similar to *A. c. cervinigularis* but coloration decidedly darker, especially under parts of the body, which are isabella color medially darkening laterally into deep buffy olive, contrasting strongly and abruptly with the buff or ochraceous-buff of chin and throat." Ridgway (1911) considered specimens from Veraguas in western Panama to be *hypophaeus*, but had no samples between there and the canal zone, which he considered *pallidigularis*. Thus, no specimens from the potential contact zone were available to him. Regarding these samples of *pallidigularis*, he noted that it was "Somewhat like *cervinigularis* but superciliary stripe much less distinct (the supra-auricular portion more or less obsolete), general coloration paler, feathers of chest without darker margins, and size smaller." Regarding *exsertus*, which he considered a subspecies of *A. pallidigularis*, he said it was "Similar to *A. p. pallidigularis* but slightly larger, with relatively longer bill, color of back, etc., more olivaceous, chest uniform in color, and buff of throat, etc., deeper."

All of Ridgway's comments seem (unsurprisingly) consistent with the patterns shown in the photos above. Plumage is clearly conserved across the group, with more intra-specific (if the split is adopted) than inter-specific plumage variation. To my eye, the pale throat of *pallidigularis* really stands out, as do the generally warmer underparts of *cervinigularis*. However, other

characters like bill size, degree of mottling on the chest, and intensity of the olive below, all seem to vary.

Cory and Hellmayr (1925) merged all taxa into a polytypic *A. ochrolaemus*, which seems to be the basis for much of the modern treatment of the group until *exsertus* was elevated to species rank by NACC. Although they did not elaborate on the decision to merge all these taxa into one species, the following footnote for *pallidigularis* is of particular interest:

It will be remembered that Salvin and Godman (Biol. Centr.-Americ, Aves, 2, p. 158, 159) record both *A. cervinigularis* and *A. "pallidigularis"* from the Veraguas. Although no specimens are available I have little doubt that all the birds of that region will ultimately prove to belong to *A. o. exsertus*. One of our Bogava skins, by reason of its distinct postocular stripe and decidedly rufous under tail-coverts, closely approaches the eastern *hypophaeus*, and it is probable that similar examples (which obviously represent only the extreme of individual variation) have given rise to the reported occurrence of "*cervinigularis*" in the Veraguas.

Bogava is in the lowlands of Chiriqui, well within the range of *exsertus*. If I am interpreting this passage correctly, Cory and Hellmayr (1925) are suggesting that *exsertus* from the far east of its range might approach *hypophaeus* in plumage. There are low passes over the Talamancas in this region, and it is possible that the two taxa might locally be in secondary contact.

Effect on AOS-CLC area:

Splitting *cervinigularis* from *ochrolaemus* would add one new species to the checklist area.

Recommendation:

I very tentatively recommend a YES vote on splitting *cervinigularis* from *ochrolaemus*, which would bring us in line with WGAC. The vocal differences between the *cervinigularis* group and the *ochrolaemus* group are certainly much greater than those that led to the split of *exsertus* from *cervinigularis*. However, those taxa are allopatric and had good data on vocal discrimination, whereas *cervinigularis* and *ochrolaemus* are certainly in contact in west-central Panama but without any data from the contact zone.

The split then rests on two primary factors: the primarily mitochondrial gene trees showing a close relationship between *cervinigularis* and *exsertus* (thus rendering *ochrolaemus sensu lato* paraphyletic if it includes the *cervinigularis* group) and the very qualitative assessment of vocal differences included here. The mtDNA and vocalizations are admittedly quite highly differentiated between the *cervinigularis* and *ochrolaemus* groups, and exceed the differences that led to the split of *exsertus*. WGAC used this same reasoning to strongly advocate for the split of *cervinigularis*.

The Clements and IOC lists have adopted the English names of Fawn-throated Foliage-gleaner for *A. cervinigularis* and Ochre-throated Foliage-gleaner for *A. ochrolaemus*, and if the split passes I recommend that we follow suit. Because this is a parent-daughter split (mostly, anyway), new names should be adopted for the daughter species and Buff-throated should be

abandoned. I note, however, that Ridgway (1911) used Buff-throated for *cervinigularis sensu stricto*. 'Cervinus' refers to 'stag-like', hence the common name of Fawn-throated, which I think is a good name. Ochre-throated also parallels the scientific name for *ochrolaemus* and is similar to the "Ochraceous-throated" used by Cory and Hellmayr (1925). Ridgway (1911) used Pale-throated for *pallidigularis sensu stricto*, which is an appropriate name if that taxon is eventually elevated to species rank.

Please vote on the following:

1) elevate *cervinigularis* (including *hypophaeus*) to species rank

2) adopt the English names Fawn-throated Foliage-gleaner for *A. cervinigularis* and Ochrethroated Foliage-gleaner for *A. ochrolaemus*

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Submitted by: Oscar Johnson

Date of proposal: 2 April 2024

Transfer Gray Francolin Francolinus pondicerianus to Ortygornis

Background:

The Gray Francolin (*Francolinus pondicerianus*) has long been placed in the genus *Francolinus* (type *Francolinus vulgaris* Stephens = *Tetrao francolinus* Linnaeus 1766, the Black Francolin *F. francolinus*), whether in the broad sense (a *Francolinus* encompassing most or all francolins and African spurfowl; e.g., Hall 1963) or when more or less restricted to the Asian francolins (e.g., Crowe et al. 1992). Some authors, such as Wolters (1975-82), have instead placed the Gray Francolin in *Ortygornis* Reichenbach 1853. Among works partitioning francolins into subgenera, Hall (1963) left this species unplaced, whereas Crowe et al. (1992) treated it in a monotypic subgenus *Ortygornis* within a *Francolinus* restricted to the five Asian francolin species. (See proposal 2019-A-15 for further notes on the generic history of francolins.)

Bloomer & Crowe (1998), sampling the mitochondrial gene cytochrome *b* from various francolins and other phasianid taxa, recovered a clade comprising Gray Francolin, Swamp Francolin (*F. gularis*), and Crested Francolin (*F./Dendroperdix sephaena*), which formed a polytomy with Black Francolin and a clade of several African species (*Scleroptila* and *Peliperdix* of e.g. Crowe et al. 2006 and other recent authors).

Gray Francolin has been placed in *Francolinus* since it was added to the *Check-list* when coverage expanded to include Hawaii (AOU 1982). The species was retained in *Francolinus* when Erckel's Francolin was transferred to *Pternistis* (Chesser et al. 2019).

The four major global checklists currently restrict *Francolinus* to Black, Painted (*F. pictus*), and Chinese (*F. pintadeanus*) francolins, placing Gray, Swamp, and Crested francolins in *Ortygornis*, alongside *Peliperdix*, *Campocolinus*, and *Scleroptila* for the various additional African members of the "true" francolin or "quail-francolin" group. (These checklists had previously placed all five Asian francolins, either with or without the African Crested Francolin, in *Francolinus*, as well as placing those species now in *Campocolinus* in a broader *Peliperdix*; the recognition of multiple genera of true francolins came in concert with the recognition of *Pternistis* for the more distantly-related African spurfowl or "partridge-francolins", on which see proposal 2019-A-15.)

New information:

Multiple phylogenetic studies from the past decade have included broad taxonomic sampling of the true francolins (*Francolinus*, *Peliperdix*, *Scleroptila*, and allies). The five Asian francolins do not consistently form a clade exclusive of various African francolins now commonly placed in separate genera; and in those studies that do find the Asian francolins (plus the African Crested Francolin) monophyletic, divergence time estimates between Black Francolin and its close relatives, and Gray Francolin and its close relatives, are similar to those between other pairs of genera in that part of the phasianid tree.

Stein et al. (2015) conducted a Bayesian phylogenetic analysis of Galliformes using a dataset of nine mitochondrial and five nuclear loci. They found the five Asian francolins plus the Crested Francolin to form a clade. The node uniting Black, Painted, and Chinese francolins (*F. pictus, F. pintadeanus*, and *F. francolinus*; the "spotted" group of Mandiwana-Neudani et al. 2019 and prior authors) with Gray, Swamp, and Crested francolins (*F. pondicerianus, F. gularis*, and *Dendroperdix sephaena*; the revised "striated" group of Mandiwana-Neudani et al. 2019) is of a similar age to that uniting most of *Peliperdix* (i.e. *Campocolinus* Crowe et al. 2020) with *Scleroptila*, or *Gallus* and *Bambusicola* (the two of which are sister to the true francolins). The relevant portion of their phylogeny (Fig. 1) is below (node brightness denotes posterior support from white=1 to black=0.36, and the vertical line at left corresponds to 33.9 million years ago):

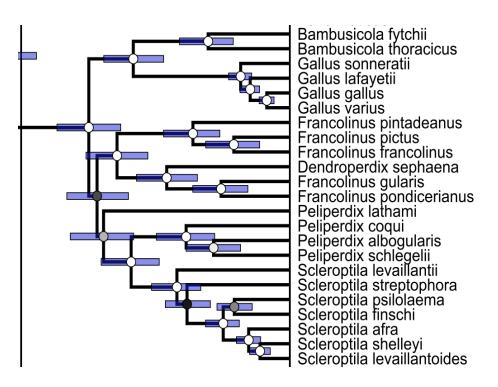


Figure 1. Relevant portion of the Bayesian phylogeny from Stein et al. (2015).

Cai et al. (2017) estimated a phylogeny for Phasianidae from four mitochondrial and six nuclear loci (Fig. 2). As in Stein et al. (2015), the Asian francolins plus Crested Francolin form a clade, but the split between the spotted and striated groups was relatively old, this time somewhat older than that between *Scleroptila* and *Campocolinus* or between *Gallus* and *Bambusicola*. The relevant portion of their phylogeny (with timescale) is below:

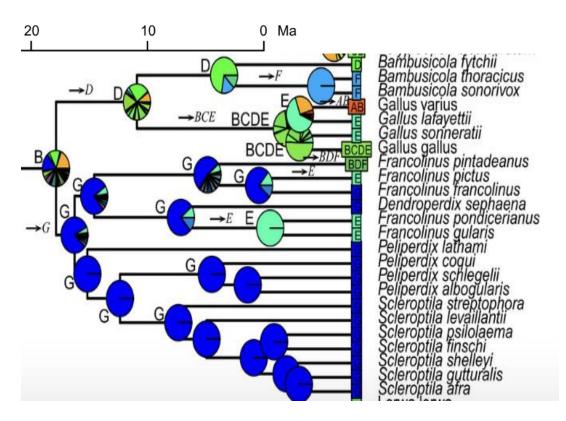


Figure 2. Relevant portion of the phylogeny from Cai et al. (2017).

Mandiwana-Neudani et al. (2019), in their parsimony analysis of a combination of mitonuclear data and morphological+vocal characters, found the striated francolins to be sister to the clade comprising *Peliperdix* (and *Campocolinus* Crowe et al. 2020) and *Scleroptila*, with Chinese and Painted francolins together sister to the previous and Black Francolin sister to all the above (Fig. 3). They placed the three striated francolins in *Ortygornis* (*O. sephaena*, *O. grantii*, and *O. rovuma* together correspond to *O. sephaena* of other authors).

Kimball et al. (2021) constructed and analyzed a phylogenomic supermatrix of Galliformes using 4500 UCEs. In their ML tree, both the spotted and striated groups were once again reciprocally monophyletic, but the two clades were not sister taxa: the spotted group was sister to the *Scleroptila+Campocolinus* clade (albeit without strong support), with the striated francolins (alongside, with low support, Latham's Francolin *Peliperdix lathami*) sister to all the previous. The relevant portion of their phylogeny is reproduced in Fig. 4 (with bootstrap support indicated above branches when it is <100%).

Recommendation:

Given that Gray Francolin and its close relatives, and Black Francolin and its close relatives, are not consistently recovered as sister taxa, they ideally should not be maintained in the single genus *Francolinus*—at least, not one exclusive of *Peliperdix, Campocolinus*, and *Scleroptila*. One option to remedy this would be to place all the true francolins in *Francolinus*. However,

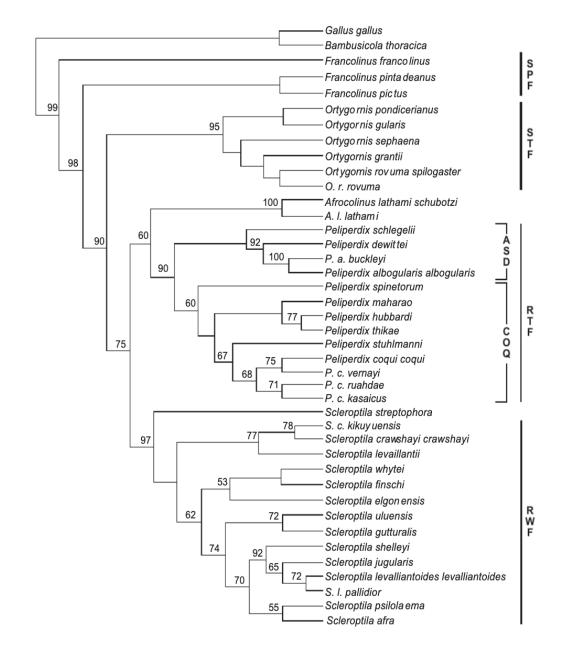


Figure 8: Strict consensus parsimonious tree of Afro-Asiatic francolins constructed from two most parsimonious trees. Numbers above nodes are jackknife support values. SPF = Hall's (1963) Spotted francolins, STF = Striated francolins, RTF = Red-tailed francolins, RWF = Red-winged francolins. ASD = albogularis/schegelii/dewittei clade. COQ = coqui sensu lato clade

Figure 3. Parsimony phylogeny based on morphological and molecular characters from Mandiwara-Neudani et al. (2019).

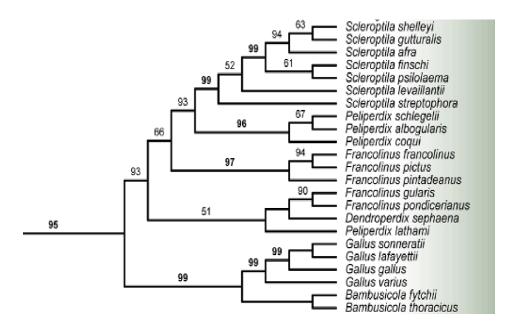


Figure 4. Relevant portion of the maximum likelihood phylogeny from the Galliformes supermatrix study of Kimball et al. (2021).

because (in studies in which the striated and spotted groups are recovered as sister taxa) the divergence time estimates among and between these francolin clades are similar to, if not older than, those between the related genera *Gallus* and *Bambusicola*, and given that all global checklist authorities now recognize the genera *Scleroptila*, *Campocolinus*, and *Peliperdix* and have opted to recognize *Ortygornis* for Gray Francolin and its extralimital relatives (and because this is a primarily extralimital group only represented by two introduced species in the *Check-list* area), I recommend that we follow suit and transfer Gray Francolin to *Ortygornis*.

A YES vote on this proposal is for recognition of *Ortygornis* and transfer of Gray Francolin from *Francolinus* to this genus, whereas a NO vote would retain Gray Francolin—and perhaps, implicitly, the extralimital *Peliperdix*, *Campocolinus*, and *Scleroptila*—in a broad *Francolinus*.

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Submitted by: Max T. Kirsch

Date of Proposal: 3 April 2024

Establish English names for Campylorynchus rufinucha sensu stricto, C. humilis, and C. capistratus

p. 472

NACC recently (in Proposal C-4) separated Rufous-naped Wren *Campylorhynchus rufinucha* into three species: *C. rufinucha*, *C. humilis*, and *C. capistratus*. The 7th edition of the *Checklist* (AOU 1998) used the English names Rufous-naped Wren, Sclater's Wren, and Rufous-backed Wren for the *rufinucha*, *humilis*, and *capistratus* groups, respectively. We recommend using Rufous-backed Wren, which is a straightforward name that highlights a distinctive plumage feature not found in other members of the complex, for *C. capistratus*, but we should consider alternatives for the other names.

English names used in the past for *C. rufinucha sensu stricto* include Rufous-naped Wren, Veracruz Wren, and Veracruz Cactus Wren. Continuing to use Rufous-naped Wren would contradict the committee's guidelines on English names following splits, and would likely create a not insignificant degree of confusion, especially since the most widespread species in the complex is *C. capistratus*, not *C. rufinucha*. Veracruz Wren is a very appropriate name that highlights the restricted geographic distribution of this species, and we strongly recommend using this name. Veracruz Wren was recently adopted by the IOC checklist for *C. rufinucha* and it is used by Clements for subspecies *rufinucha*, presumably for the same reasons.

Sclater's Wren (or Sclater's Cactus Wren) has traditionally been the English name for *C. humilis* when recognized as a separate species or subspecies group (e.g., Ridgway 1904, AOU 1998). Alternatives to these names include the following:

Distribution-related names:

- West Mexican Wren, highlighting its distribution. Drawbacks of this name are that *C. humilis* isn't the only wren endemic to western Mexico (others being Happy Wren *Pheugopedius felix* and Sinaloa Wren *Thryophilus sinaloa*) and that the name isn't very exciting or memorable. However, West Mexican Chachalaca isn't the only chachalaca endemic to west Mexico either (and its southwest Mexican distribution happens to parallel that of the wren). The name also parallels "Rufous-naped Wren (West Mexico)" once used in eBird/Clements.
- 2. Mazatlan Wren, highlighting the stated type locality. However, use of Mazatlán for the type locality was apparently in error (see, e.g., the citation in Mayr and Greenway 1960), because this species does not occur as far north as Mazatlán, so this name is pretty much dead on arrival.
- 3. Guerrero Wren, the common name used by Nelson (1897) for subspecies *rufus* (now widely synonymized with *humilis*) in his description of that subspecies. However, unlike Veracruz for *C. rufinucha*, Guerrero constitutes a relatively small portion of the range of *C. humilis*, because this species occurs from Colima and Michoacán south as far as Oaxaca and Chiapas. Nevertheless, this name is somewhat more interesting than West Mexican Wren.

Plumage-based names:

- Russet-naped Wren, highlighting the same distinctive plumage feature (and excellent fieldmark) used in the previous English name for *C. rufinucha*, but using a different name to prevent confusion in the literature through use of the Rufous-naped Wren for different species concepts. This name would apply equally well to *humilis* and *rufinucha* (the nape and back of *capistratus* are the same color, so the nape does not stand out and the name is less appropriate). However, there's a different and highly appropriate English name (Veracruz Wren) available for *C. rufinucha*, whereas geographical names for *humilis*, as noted above, are less appealing. We're not aware of this name having been used previously for *C. rufinucha* or any other species.
- 2. Brown-crowned or Brown-capped Wren, highlighting the typically browner crown of *humilis* relative to the black crowns of *rufinucha* and *capistratus*. This would prevent using a name for *humilis* similar to that previously used for *C. rufinucha*, although the crowns of some *humilis* are blackish and approach the coloration of the crowns of other taxa in this complex. More importantly, a brown crown really doesn't stand out among wrens generally, making these names less distinctive and memorable.

Recommendation:

We recommend Rufous-backed Wren for *C. capistratus*, Veracruz Wren for *C. rufinucha*, and Russet-naped Wren for *C. humilis*. If Russet-naped Wren is considered too similar to the previous name, our second choice of the names suggested above for *C. humilis* (and the only other one that seems worth considering) is West Mexican Wren. We are also open to ideas for names other than those suggested above.

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Submitted by: Max T. Kirsch and Terry Chesser

Date of Proposal: 4 April 2024

Establish English names for barn owls Tyto alba s.s., T. javanica, and T. furcata

Given the global occurrence of the parental species *Tyto alba*, the length of time its taxonomy has been studied, and the production and enactment of varied taxonomic treatments in the interim, as well as its popularity in trade and use as a pest-control agent and study organism, it is not surprising that English name usages are highly inconsistent. No name options are known that accurately describe the morphological characters that distinguish the now-species, refer to discrete geographic regions accurately reflecting the species-level divisions being enacted, or have not been used in other ways (e.g., including for different subsets of taxa). That said, the IOC-WBL (Gill et al. 2023) names have gained by far the most traction for the three-species split. These are: Western for *T. alba s.s.*, Eastern for *T. javanica* (including the *delicatula* group), and American for *T. furcata* (including all New World taxa except *glaucops*). The Appendix lists a sample of recent field guides and publications to demonstrate the variety and preponderance of English names used.

Recommendations:

Western Barn Owl *Tyto alba.*—Complications include the fact that "Western" here has a different meaning than in, for example, the Western Cattle-Egret (in that it does not include the New World, to which the egret was self-introduced), not to mention the many other species named "Western", from different continents! Here, "Western" is used in the sense of Western Palearctic + Africa. (However, I found one usage of Western for *Tyto furcata* in Argentina, and multiple Asian books have used Western for *T. javanica*, as in the Appendix.) "Common Barn-owl" has been used very widely for *T. furcata* as well as *T. alba s.s.* (see Appendix), and for the entire species *s.l.*, and it has the additional problem in that *T. alba s.s.* is only common (or familiar or ordinary) within its region, while the others may be common elsewhere. Clements et al. (2023 and earlier versions) use "(Eurasian)" for several races, with other group names for Macaronesian and African taxa. A more apt name than Western Barn Owl for *T. alba s.s.* does not appear to have been used, and thus I strongly recommend we follow IOC-WBL and adopt it here for this extralimital species. Of course, people will continue simply to informally refer to barn owls without the modifier in any case. Use of the hyphen in the group name can only be advised if "Barn-" is added to that of Ashy-faced Owl *T. glaucops*, which is not recommended.

Eastern Barn Owl *Tyto javanica.*—This name has variously been applied to *Tyto delicatula* (see Appendix) or *Tyto javanica* (including the *delicatula* group). However, it is now extremely widely adopted for *T. javanica*, including in the extensive Australian literature. Also, Clements et al. (2023 and earlier versions) use "(Eastern)" for the *javanica* group including *delicatula*, but not *crassirostris* of the Bismarck Archipelago. Despite the obvious potential for confusion (e.g., Eastern U.S., etc.), it seems by far the best and now most familiar English name for this extralimital group of taxa.

American Barn Owl *Tyto furcata.*—The English name American Barn Owl has been used extensively (see Appendix) to refer to the *Tyto furcata* group (although not always including exactly the same taxa, e.g., *nigrescens* and *insularis* of the Lesser Antilles may be placed with *T. glaucops*). It should also be noted that Clements et al. (2023 and previous versions) use

"(American)" as a group name for the *tuidara* group. Nevertheless, the name American Barn Owl is by far the best-established and its meaning is relatively clear and apt, with the exception of the above taxa and some other marginal usages. I strongly recommend its adoption.

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Submitted by: Pamela C. Rasmussen, Cornell Lab of Ornithology

Date of Proposal: 9 April 2024

Appendix.

Usage of English names in recent field guides adopting a split:

English names used for **Tyto alba s.s.** (as defined herein, e.g., including African and African regional insular groups): Western Barn-Owl, e.g. *Birds of Oman* (Eriksen and Porter 2017), *Birds of the Indian Ocean Islands* (Sinclair and Langrand1998), the *Larger Illustrated Guide to Birds of Southern Africa* (Sinclair et al. 2020). The vast majority of regional sources simply use Barn Owl for *T. alba* and it is not necessarily clear if a split has been adopted or not.

English names used for **Tyto javanica s.s**. (as defined herein): Eastern Barn[-]Owl, e.g. *Birds of the Indonesian Archipelago. Greater Sundas and Wallacea* (Eaton et al. 2021), *Birds of Melanesia* (Dutson 2011), *Guide to the Birds of China* (Mackinnon 2022).

English names used for **Tyto furcata s.s.** (as defined herein, e.g., including New World insular groups: American Barn-Owl *T. furcata*, e.g. *Birds of Argentina and the South-west Atlantic* (Pearman and Areta 2021), *Birds of the West Indies*, as American Barn-owl *Tyto (alba) furcata* (Kirwan et al. 2019). Most regional sources simply use Barn Owl (no doubt following NACC and SACC).

Complications: "Western Barn Owl" has been used for New World birds:



"Western Barn[-]Owl" has also been used for Asian birds in the *T. alba* group: e.g., in *Birds of Cambodia* (Cambodia Bird Guide Association 2019), *Birds of Vietnam* (Craik and Minh 2018), *Birds of Thailand* (Treesucon and Limparungpatthanakij 2018), and *Birds of Malaysia Covering Peninsular Malaysia, Malaysian Borneo and Singapore* (Puan et al. 2020).

"Eastern Barn[-]Owl" has been used for the *delicatula* group of Australasia, e.g., *Birds of New Guinea Including Bismarck Archipelago and Bougainville* (Gregory 2017) and *The Australian Bird Guide* (Menkhorst et al. 2017).

Australian Barn[-]Owl has been used for the *delicatula* group of Australasia, e.g., *Birds of New Guinea. Distribution, Taxonomy, and Systematics* (Beehler and Pratt 2016).

Common Barn[-]Owl has been used for the cosmopolitan species except the *delicatula* group of Australasia, e.g., *Birds of South Asia. The Ripley Guide.* 2nd Ed. (Rasmussen and Anderton 2012).

Galapagos Barn[-]IOwl *Tyto [alba] punctatissima* has been used for the Galapagos group, e.g., *Birds and Mammals of the Galapagos* (Brinkhuisen and Nilsson 2020).

(Western/Common) Barn Owl has been used for *T. alba* in Bolivia, e.g., *Birds of Bolivia. Field Guide* (Herzog et al. 2019).

English names other than Barn Owl in Google search for Tyto javanica:

Diet of an eastern barn owl **Tyto javanica** on the Patho Plains, northern Victoria <u>JA Fitzsimons</u>, D Marshall... - Australian Field ..., 2008 - search.informit.org A small sample of eastern Barn Owl **Tyto javanica** pellets, from native grasslands on the Patho Plains in northern Victoria in February 2007, contained the remains of 48 prey individuals: ... ☆ Save ワワ Cite Cited by 5 Related articles All 5 versions

Further dietary items of the eastern barn owl **Tyto javanica** in Diamantina National Park, Queensland

SJS Debus, AJ Ley, AB Rose - Australian Field Ornithology, 2008 - search.informit.org

... The diet of the eastern Barn Owl **Tyto javanica** was ... of the eastern Barn Owl **Tyto javanica** in Australia, particularly the ... eastern Barn Owl by the characteristic **Tyto** 'glazed' coating on the ... ☆ Save
\$\Dymbox\$ Cite Cited by 6 Related articles All 7 versions

Diet of the Eastern Barn Owl'**Tyto** (**javanica**) delicatula'in Diamantina National Park, South-Western Queensland, in 2008-2009

SJS Debus, AJ Ley, AB Rose - Australian Field Ornithology, 2010 - search.informit.org

... the Barn Owl subspecies javanica belongs with the Common Barn Owl Tyto alba of eurasia

... Lesser Sundas to Oceania, should be known as Tyto delicatula [see Penhallurick, J. (2009),

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Further dietary samples for Eastern Barn Owls **Tyto javanica** near vTamworth, New South Wales, revealed by habitat clearance

SJS Debus, LR Tsang - Australian Field Ornithology, 2023 - search.informit.org The diet of the Eastern Barn Owl **Tyto javanica** was investigated by examination of two samples of pellets (n = 11 and 39), pellet debris and prey remains from: (1) an occupied nest with ... ☆ Save 50 Cite Related articles All 3 versions

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<u>JRR OLSeN</u>, S Trost, SD Myers - Australian Field Ornithology, 2009 - search.informit.org ... No specific attempts were made to find other species, although we did look for Eastern Barn Owls **Tyto javanica** sumbaensis in three church buildings in the town of Waingapu (939'27... ☆ Save 奶 Cite Cited by 6 Related articles All 4 versions

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D WestawayA, S BurnettAB, Y Shimizu-KimuraA... - environlegacy.org.au

... novaehollandiae novaehollandiae) and the eastern barn owl (Tyto javanica) throughout the

... Table 1: Area of occupancy and extent of occurrence calculated for each forest dwelling Tyto ...

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[PDF] OWL DEPREDATION AT A RE-ESTABLISHING COLONY OF WHITE-FACED STORM PETREL PELAGODROMA MARINA.

N Carlile, C Lloyd - Marine Ornithology, 2022 - marineornithology.org

... We report the depredation by a single Eastern Barn Owl **Tyto javanica** delicatula on prospecting White-faced Storm Petrels Pelagodroma marina during the re-establishment phase of a ... ☆ Save ワワ Cite Cited by 1 Related articles All 5 versions ≫

A genus by any other name: The science of taxonomy

G Czechura - Wildlife Australia, 2009 - search.informit.org

... The discovery requires **Tyto** alba to be 'split' into several species. Australian 'barn owls' were initially thought to be a subspecies of the eastern barn owl (**Tyto javanica**), ie **Tyto javanica** ... \clubsuit Save \mathfrak{D} Cite Cited by 1 Related articles All 2 versions

Changes in richness and abundance of rodents and native predators in response to extreme rainfall in arid A ustralia

CR Pavey, CEM Nano - Austral Ecology, 2013 - Wiley Online Library

... We recorded occurrence of two species of nocturnal raptors known to occur in the study area specifically eastern barn owl **Tyto javanica**, and letter-winged kite Elanus scriptus. Both ... \therefore Save \mathfrak{W} Cite Cited by 69 Related articles All 5 versions

Surveys of the vertebrate fauna in native grasslands of the Riverine Plain, New South Wales

DG Parker - Victorian Naturalist, The, 2009 - search.informit.org

... The Eastern Barn Owl **Tyto javanica** was the most common, and was observed at ten of the 12 study sites. Birds were typically observed flying over the site; however, individuals were ... \therefore Save 59 Cite Cited by 4 Related articles

Corella, 2014, 38(4): 81-94

Diet of 25 sympatric raptors at Kapalga, Northern Territory, Australia 1979–89, with data on prey availability

Laurie Corbett^{1,2,3}, Tony Hertog¹ and Johnny Estbergs¹

diet samples), the major prey types of the Whistling Kite, Black Kite Milvus migrans and Black Falcon Falco subniger were mammals and birds; mammals and invertebrates for the Barking Owl Ninox connivens; mammals for the Rufous Owl Ninox rufa, Eastern Barn Owl Tyto javanica and Eastern Grass Owl T. longimembris; birds for the Red Goshawk Erythrotriorchis radiatus; and reptiles for the White-bellied Sea-Eagle Haliaeetus leucogaster and Brown Falcon Falco berigora. These diets were generally similar to those reported for these species elsewhere in Australia, although the Black Falcon took more rats than birds at Kapalga, and the Barn Owl and Grass Owl had a narrower food niche (rats only) than elsewhere.

A reassessment of the predator responsible for Wakefield's' Native Cat den'subfossil deposits in the Buchan district: Sooty Owl, not Eastern Quoll

RJ Bilney - Victorian Naturalist, The, 2012 - search.informit.org

... that the Masked Owl **Tyto** novaehollandiae was most likely responsible for these two sub-fossil deposits primarily because it is larger than the Eastern Barn Owl **Tyto javanica** and more ... ☆ Save 55 Cite Cited by 5 Related articles All 3 versions

[PDF] Birds of the hundred of Encounter Bay listed by John W Crompton from 1909 to 1925

P Paton - South Australian Ornithologist, 2013 - birdssa.asn.au

... is extremely rare and superficially similar to the Eastern Barn Owl, **Tyto javanica**. Thus the only other owl that JWC is likely to have recorded (and both Cleland and Symon listed) is the ... \clubsuit Save \mathfrak{W} Cite Cited by 2 Related articles All 4 versions \mathfrak{W}

Diet of the eastern barn owl (**Tyto** delicatula) in the Simpson Desert reveals significant new records and a different mammal fauna to survey data

AS Kutt, PL Kern, P Schoenefuss, K Moffatt... - Australian ..., 2020 - CSIRO Publishing The eastern barn owl (**Tyto** delicatula) is a significant native predator of small mammals in Australia. Regurgitated pellets can provide important data on species presence, current or ... ☆ Save 55 Cite Cited by 9 Related articles All 6 versions

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MK Tarburton - Corella, 2009 - absa.asn.au

... Cats, quolls, sparrowhawks, falcons and Eastern Barn Owls **Tyto javanica** have been found preying on birds near entrances or in the twilight zone of caves but none have been ... ☆ Save 奶 Cite Cited by 16 Related articles All 3 versions ≫

Occurrence of the Eastern Barn Owl'**Tyto** alba delicatula'in the Centennial Parklands, Sydney

<u>M Mo</u> - Australian Field Ornithology, 2019 - search.informit.org The occurrence of owls in the urban environment has been of interest, with recent records of the Eastern Barn Owl '**Tyto** alba delicatula' in highly urbanised locations in Sydney, New … ☆ Save 55 Cite Cited by 3 Related articles All 4 versions

Contents of Eastern Barn Owl'**Tyto** delicatula'regurgitation pellets at the Werribee Sewage Farm, Victoria, suggest possible decline in abundance of Fat-tailed Dunnart' ...

WK Steele, H Brunner - TheVictorian Naturalist, 2021 - search.informit.org The contents of 502 Eastern Barn Owl **Tyto** delicatula regurgitation pellets collected at the Werribee Sewage Farm, Victoria, between 2008 and 2021 were analysed to investigate the ... ☆ Save 切 Cite Cited by 3 Related articles All 2 versions

[PDF] Birds and bats of Rotuma, Fiji

<u>A Cibois</u>, JC Thibault, D Watling - Notornis, 2019 - researchgate.net ... in 2018 described nocturnal birds, different from the eastern barn owl (**Tyto javanica**), calling in flight above the villages; other mentioned birds on islets entering burrows during the ... ☆ Save 55 Cite Related articles All 2 versions to the section of the

Pacific Barn Owl for T. javanica:

Exploiting boom times. Southern Boobook Owl *Ninox novaeseelandiae* diet during a rodent irruption in central Australia

PMcDonald, C Pavey - Australian Zoologist, 2014 - meridian.allenpress.com

Australasian Barn Owl for T. javanica:

[нтмь] The Harry Potter effect: The rise in trade of owls as pets in Java and Bali, Indonesia

<u>V Nijman, KAI Nekaris</u> - Global Ecology and Conservation, 2017 - Elsevier ... barn owl **Tyto javanica** (including taxa delicatula, sumbaensis, stertens and **javanica**). ... closed bar the mean number of other owls (**Tyto javanica**, Phodilus badius, Ninox spp, Bubo spp, ... ☆ Save 55 Cite Cited by 89 Related articles All 8 versions ≫

Digital media and the modern-day pet trade: a test of the 'Harry Potter effect'and the owl trade in Thailand

P Siriwat, <u>KAI Nekaris, V Nijman</u> - Endangered Species Research, 2020 - int-res.com ... (2016) and König & Weick (2008), with the exception of the Australasian barn owl **Tyto javanica**, which we re cognise as a species (Aliabadian et ... 27 Australasian barn owl **Tyto javanica** ... ☆ Save 55 Cite Cited by 15 Related articles All 6 versions

Malaysian Barn Owl:

[PDF] Barn owl predatory behavior and response to prey abundance: Towards an ecologically-based agricultural practice

CL Puan, <u>GS Baxter</u>, AW Goldizen, <u>M Zakaria</u>... - Ornis ..., 2012 - researchgate.net Although Malaysian Barn Owls (**Tyto** alba **javanica**) were once considered vagrants, they are now the most common owl species in Malaysia. Their proliferation is largely due to the ... ☆ Save 切 Cite Cited by 10 Related articles All 3 versions ≫

Indian Barn Owl:

[статом] Breeding of the Indian Barn Owl [**Tyto** alba **javanica** (Gmelin)] in Bhavnagar KS Dharmakumarsinhji - J. Bombay nat. Hist. Soc, 1939 ☆ Save 翊 Cite Cited by 2 Related articles

All three:

Climate-driven convergent evolution of plumage colour in a cosmopolitan bird <u>A Romano</u>, <u>R Séchaud</u>, AH Hirzel... - Global Ecology and ..., 2019 - Wiley Online Library ... barn owl group, the Western barn owl (**Tyto** alba), the American barn owl (**Tyto** furcata) and the Eastern barn owl (**Tyto javanica**). The three evolutionary lineages inhabit geographically ... ☆ Save 奶 Cite Cited by 43 Related articles All 7 versions

Using Wikipedia to measure public interest in biodiversity and conservation JC Mittermeier, <u>R Correia</u>, <u>R Grenyer</u>... - Conservation ..., 2021 - Wiley Online Library ... more inclusive species (Barn Owl [**Tyto** alba]) and the 3 split species (Eastern Barn Owl [**Tyto javanica**], Western Barn Owl [**Tyto** alba], and American Barn Owl [**Tyto** furcata]) and for the ... ☆ Save 奶 Cite Cited by 32 Related articles All 14 versions

New genome assembly of the barn owl (Tyto alba alba)

<u>AL Ducrest</u>, S Neuenschwander... - Ecology and ..., 2020 - Wiley Online Library ... the bay owls Phodilus and the barn owls **Tyto**. Among them the Barn owl ... **Tyto** alba (Figure 1), the American Barn owl **Tyto** furcata and the Australasian or Eastern Barn owl **Tyto javanica**... ☆ Save 切 Cite Cited by 9 Related articles All 13 versions

Eastern Barn Owl for Tyto delicatula:

Diet of the eastern barn owl (**Tyto delicatula**) in the Simpson Desert reveals significant new records and a different mammal fauna to survey data <u>AS Kutt</u>, <u>PL Kern</u>, P Schoenefuss, K Moffatt... - Australian ..., 2020 - CSIRO Publishing The eastern barn owl (**Tyto delicatula**) is a significant native predator of small mammals in Australia. Regurgitated pellets can provide important data on species presence, current or ... ☆ Save ワワ Cite Cited by 9 Related articles All 6 versions

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The contents of 502 Eastern Barn Owl **Tyto delicatula** regurgitation pellets collected at the
Werribee Sewage Farm, Victoria, between 2008 and 2021 were analysed to investigate the …
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Diet of the Eastern Barn Owl'**Tyto** (javanica) **delicatula**'in Diamantina National Park, South-Western Queensland, in 2008-2009

SJS Debus, AJ Ley, AB Rose - Australian Field Ornithology, 2010 - search.informit.org The diet of the Eastern Barn Owl '**Tyto** (javanica) **delicatula**' was determined by analysis of 185 pellets from a roost in Diamantina National Park, Queensland, collected in March-April ... ☆ Save ワワ Cite Cited by 5 Related articles All 4 versions

European Barn Owl T. alba s.s.:

Unexpected post-glacial colonisation route explains the white colour of barn owls (*Tyto alba*) from the British Isles

<u>AP Machado, T Cumer, C Iseli</u>, E Beaudoing... - Molecular ..., 2022 - Wiley Online Library ... The new refence genome for European barn owl (**Tyto** alba) has been deposited at DDBJ/ENA/GenBank under the accession JAEUGV000000000, and the corresponding PacBio reads ... ☆ Save 奶 Cite Cited by 12 Related articles All 14 versions

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Molecular phylogeny of owls (Strigiformes) inferred from DNA sequences of the mitochondrial cytochrome b and the nuclear RAG-1 gene <u>M Wink</u>, AA El-Sayed, H Sauer-Gürth, J Gonzalez - Ardea, 2009 - BioOne

... The Eurasian Barn Owl **Tyto** alba has been divided into several subspecies, of which a ... **Tyto** soumagnei from Madagascar is a sister to T. alba and T. furcata, which together share ... ☆ Save 59 Cite Cited by 141 Related articles All 6 versions

Common Barn[-]owl used for T. furcata:

Common barn-owl population decline in Ohio and the relationship to agricultural trends

BA Colvin - Journal of Field Ornithology, 1985 - JSTOR

... **Common Barn-Owl** population indices were highly correlated ... 3), and since then the **barnowl** population in Ohio has been ... a major role in **barnowl** population changes. Organochlorine ... \clubsuit Save $\overline{55}$ Cite Cited by 101 Related articles All 2 versions

Food habits and prey specificity of the **common barn owl** in Ohio

BA Colvin, EB McLean - 1986 - kb.osu.edu

... **barn owl** food habits in Ohio, and compared **barn owl** diets among different collection locations and times. Because the **barn owl** ... habitat components supportive of **barn owl** populations. ... ☆ Save 55 Cite Cited by 66 Related articles All 4 versions ≫

Food habits of the common barn-owl in British Columbia

RW Campbell, DA Manuwal... - Canadian journal of ..., 1987 - cdnsciencepub.com
... Barn owl pellets and small mammal populations near ... barn owls in North America. Auk,
69: 227-245. TICEHURST, CB 1935. On the food of the barn owl and its bearing on barn owl ...
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Trends in North American small mammals found in **common barn-owl** (*Tyto alba*) dietary studies

DR Clark Jr, CM Bunck - Canadian Journal of Zoology, 1991 - cdnsciencepub.com ... compiled from published studies of **common barn-owl** (Tyto alba) ... We used **common barn-owl** data because of this species' ... Food habits and prey specificity of the **common barn owl** in ... ☆ Save 切 Cite Cited by 68 Related articles All 4 versions

A long-term study of food-niche dynamics in the **Common Barn-Owl**: comparisons within and between populations

CD Marti - Canadian Journal of Zoology, 1988 - cdnsciencepub.com Food niches of **Common Barn-Owl** (Tyto alba) populations were studied for 8 years in Utah ... the **barn-owl's** range. Mean prey weight was nearly identical between the two **owl** populations... ☆ Save 99 Cite Cited by 110 Related articles All 6 versions

Standard rate of metabolism in the **common barn-owl** (Tyto alba)

TC Edwards - The Wilson Bulletin, 1987 - JSTOR

... measurements estimating the standard metabolic rate of the Common Barn-Owl (Tyto alba).

... Oxygen consumption by Common Barn-Owls differs little from values reported for other owls. ...

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Food-niche pattern of the **Barn Owl** in intensively cultivated agricultural landscape

A Horváth, A Morvai, GF Horváth - Ornis Hungarica, 2018 - sciendo.com

... A long-term study of food-niche dynamics in the **Common Barn Owl**: comparisons within and between populations. – Canadian Journal of Zoology 66(8): 1803–1812. DOI: 10.1139/z88-... ☆ Save 奶 Cite Cited by 25 Related articles All 4 versions ≫

[нтмь] <u>Using GPS tracking to determine movement patterns and foraging habitat</u> <u>selection of the **common barn-owl** (Tyto alba)</u>

C Massa, FM Gabelli, GR Cueto - El hornero, 2015 - SciELO Argentina

... to track **Common Barn-owl** individuals. We evaluated the use of a commercial and economic GPS pet tracker device (with a large storage capability) to track a **Common Barn-owl** ... ☆ Save 奶 Cite Cited by 20 Related articles All 10 versions ≫

Mammalian prey of the **common barn-owl** (Tyto alba) along the Texas coast RH Baker - The Southwestern Naturalist, 1991 - JSTOR

... of **common barn-owls** at the roost locality in Aransas County. Revealed as **common barn-owl** ... This was located well within the presumed foraging range of **barn owls** roosting in buildings ... ☆ Save 奶 Cite Cited by 14 Related articles

American Barn Owl for Tyto furcata:

[нтмL] A Comparison of Aerodynamic Parameters in Two Subspecies of the American Barn Owl (*Tyto furcata*)

H Wagner, PM Piedrahita - Animals, 2022 - mdpi.com

... The American continent harbors the species **Tyto furcata**. The body mass of the subspecies in ... –log relation for the two subspecies of **Tyto furcata** that we studied (see arrow in Figure 4). ... \clubsuit Save \mathfrak{W} Cite Related articles All 14 versions \mathfrak{W}

Kocuria tytonis sp. nov., isolated from the uropygial gland of an American barn owl (*Tyto furcata*)

MS Braun, E Wang, S Zimmermann... - ... of Systematic and ..., 2019 - microbiologyresearch.org Avian uropygial glands have received increasing attention in recent years, but little is known about micro-organisms in uropygial glands. In this study, we isolated a strain of Gram-stain-... Δ Save \mathfrak{M} Cite Cited by 12 Related articles All 4 versions

[HTML] The Cervical Spine of the American Barn Owl (*Tyto furcata* pratincola): I. Anatomy of the Vertebrae and Regionalization in Their S-Shaped Arrangement <u>M Krings, JA Nyakatura, MS Fischer</u>, H Wagner - PloS one, 2014 - journals.plos.org

... This work is based on the data from 3 American barn owls (**Tyto furcata** pratincola, formerly **Tyto** alba pratincola) from the breeding colony of the Institute of Biology II at RWTH Aachen ... ☆ Save ワワ Cite Cited by 54 Related articles All 15 versions ≫

Wing and tail myology of **Tyto furcata** (Aves, Tytonidae)

GE Lo Coco, MJ Motta, MC Mosto... - Journal of ..., 2020 - Wiley Online Library ... the wing and tail of the American Barn Owl (**Tyto furcata**). A total of 11 specimens were dissected ... **furcata** has the wing and tail myological pattern present in other species of Strigiformes, ... ☆ Save ワワ Cite Cited by 4 Related articles All 7 versions

[HTML] Development of ear asymmetry in the American barn owl (**Tyto furcata** pratincola)

M Krings, L Rosskamp, H Wagner - Zoology, 2018 - Elsevier

... For this study embryos of the American barn owl (**Tyto furcata** pratincola) from the colony of the Institute of Biology II at RWTH Aachen University, Aachen, Germany were used. Eggs ... \clubsuit Save \mathfrak{W} Cite Cited by 13 Related articles All 3 versions

[HTML] Muscular Arrangement and Muscle Attachment Sites in the Cervical Region of the American Barn Owl (*Tyto furcata pratincola*)

MLLM Boumans, <u>M Krings</u>, H Wagner - PLoS One, 2015 - journals.plos.org ... Data from this study were collected from five carcasses of the American barn owl (**Tyto furcata** pratincola, formerly **Tyto** alba pratincola) (Aves: Strigiformes: Tytonidae); three males (two, ... ☆ Save 切 Cite Cited by 17 Related articles All 10 versions ≫

A case of partial leucism in the American Barn Owl (*Tyto furcata*) (Temminck, 1827), from Buenos Aires province, Argentina

MC Chiale, L Pagano - Revista Brasileira de Ornitologia, 2014 - Springer ... During periodic field-work sampling at Carhué (37º10', 62º45'W), SW Buenos Aires province, a pair of American Barn Owls (**Tyto furcata**) was found in an old abandoned barn. One of ... ☆ Save 勁 Cite Cited by 7 Related articles All 9 versions

Diet Composition of a Pair of **Tyto furcata** pratincola (American Barn Owl) in an Urban Park and Natural Area Fragment in South Florida

NN Cortés-Viruet, <u>M Gamba-Rios</u>, FN Ridgley - Southeastern Naturalist, 2023 - BioOne **Tyto furcata** pratincola (American Barn Owl) is a widespread bird of prey with great adaptability that can be found in partially urbanized areas. We examined the prey composition of a ... ☆ Save 99 Cite Related articles All 5 versions

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M Krings, JA Nyakatura, MS Fischer... - Anatomy of the ..., 2014 - pdfs.semanticscholar.org ... This work is based on the data from 3 American barn owls (**Tyto furcata** pratincola, formerly **Tyto** alba pratincola) from the breeding colony of the Institute of Biology II at RWTH Aachen ... ☆ Save 55 Cite Cited by 1 Related articles All 6 versions ≫

New records of small mammals in American barn owl, **Tyto furcata** pellets from southeastern Ecuador

H Cadena-Ortiz, MC Ríos, <u>R Vargas</u>... - Therya ..., 2023 - mastozoologiamexicana.com ... americana, **Tyto furcata** en las tierras bajas del Pacífico y en los valles interandinos, resaltando un alto consumo de roedores. Describimos por primera vez la dieta de T. **furcata** en la ... ☆ Save 奶 Cite Related articles ≫

Diet of the American Barn Owl, *Tyto furcata* (Temminck, 1827), in a Tabuleiro Atlantic Forest remnant in southeastern Brazil

B Köhler, LJ Guimarães... - The Wilson Journal of ..., 2019 - meridian.allenpress.com ... A Coruja-das-torres (**Tyto furcata**) é uma ave de rapina que se alimenta ... **furcata** ao longo de sua distribuição nas Américas e com T. alba. **Tyto furcata**, embora em geral seja uma ... ☆ Save 切 Cite Cited by 3 Related articles All 12 versions

Change (A) the English name and (B) the type locality of *Puffinus Iherminieri*

Note:

This proposal follows up on the acceptance of NACC Proposals 2024-A-4 and 2024-A-5, which drastically reduced the distribution of *P. Iherminieri* due to the separation of *P. baillonii*, *P. bannermanni*, *P. persicus*, and *P. boydi* as four distinct species.

Background:

Small black-and-white shearwaters were originally collected in the Gulf of Mexico off western Florida by John James Audubon in 1826 (Audubon 1844). However, he identified them as Dusky Shearwater *Puffinus obscurus* (Gmelin) which had been described 40 years prior from Christmas Island in the tropical Pacific. Although it is now not known to what taxon *P. obscurus* refers (possibly *P. bailloni dichrous/polynesiae*; Murphy 1927), the location is likely erroneous and the identity possibly that of a larger species (Olson 2013).

Puffinus Iherminieri was described in 1839, by René Lesson, the same year that Audubon published a final distribution statement for "Dusky" Shearwater in the Gulf of Mexico and the Atlantic Coast of the U.S. *Puffinus Iherminieri* was apparently named for the young zoologist Ferdinand J. L'Herminier (see below), who was born and lived on Guadeloupe and likely provided Lesson with specimens (Palmer 1931). The original type locality of *Puffinus Iherminieri* was given as "ad ripas Antillarum" (banks or shores of the Antilles), which encompasses a rather broad region (Lesson 1839, Olson 2013).

In 1872 Otto Finsch described *P. auduboni* from a specimen collected by German botanist Ferdinand Deppe in the late 1820's and deposited in the Berlin Museum. This specimen was mentioned by Bonaparte as *P. floridanus*, but not described by him, and although Finsch was aware of Lesson's description of *Iherminieri*, he mistakenly believed that it had not been validly published (Riley 1902, Palmer 1931, Olson 2013). Finsch gave the type locality of *P. auduboni* as "Kap Florida (Cape Florida)" (Olson 2013).

The English name of Audubon's Shearwater came from the scientific name *P. auduboni* (Finsch), a species included in the first two editions of the AOU checklist (American Ornithologists Union 1886, 1895) prior to it being synonymized in 1902 (Riley 1902, Palmer 1931). The 3rd edition of the AOU checklist (1910) was the first to include *P. Iherminieri*. Riley, in a paper in *The Auk* (Riley 1905), referred to *Iherminieri* as Antillean Shearwater, although in the same year a different paper in *The Auk* (Allen 1905) referred to *Iherminieri* as Audubon's Shearwater. Audubon's Shearwater continued to be used for *Iherminieri*, however, after Murphy (1927) lumped *P. bannermani*, *P. bailloni*, *P. boydi*, and *P. subalaris*, this name came to represent a pantropical species. Later, *P. persicus* was also lumped with *Iherminieri*, and both *P. heinrothi* and *P. baroli* have also been treated as conspecific with *Iherminieri*. The treatment of Audubon's Shearwater as a pantropical species has until recently been widely followed.

Part A:

Despite the drastic reduction in range resulting from the separation of *P. baillonii*, *P. bannermanni*, *P. persicus*, and *P. boydi* from *P. Iherminieri* (see NACC Proposals 2024-A-4 and 2024-A-5), an argument can be made for retaining Audubon's Shearwater as the English name for *P. Iherminieri* because the recent splits are not true parent-daughter splits and because this could be seen as reverting to the original name. However, for nearly 100 years (since Murphy 1927) this name has been attributed to up to 8 taxa (including *Iherminieri*) that we now consider distinct species, and it was originally used for the now-synonymized *auduboni*. Given this, a new name is needed for the restricted taxonomic concept of *Iherminieri*.

Several names besides Audubon's have been used in the literature for *Iherminieri*; these can be broken up into plumage, geographic, or local names. Besides being originally attributed to "Dusky" Shearwater, *Iherminieri* has also been known as Dusky-backed Shearwater (Eisenmann 1955), which was used for the species complex rather than strictly for *Iherminieri*. Given that all *Puffinus* shearwaters are "dusky backed" and that this name was also used for what are now known to be multiple species, we do not recommend this name. There are also several local names known for the species including Cahow, pemlico, pimblico, pimlico, diablotin, pampero, pufino, wedrego, and wedrigo (McAtee 1962). Several of these are better known for other species of seabirds, i.e., Cahow (Bermuda Petrel *Pterodroma cahow*) and diablotin (Black-capped Petrel *Pterodroma hasitata*), whereas others may invite confusion with other species (pufino, wedrego). The name pimblico (or pimlico/pemlico/pemblyco) was once widespread across the English-speaking Caribbean and Bermuda (Murphy 1936). This name originated in the early 1600's from British sailors believing the calls of the bird resembled the name of a famous inn located just outside of London (Coates 1995). This name was generally considered to be the old name for the species by the 1950's (Murphy and Mowbray 1951).

This leaves us with two geographical names: Antillean Shearwater and Caribbean Shearwater (Riley 1905, McAtee papers). Although both names appear to have been formally used only once, the species has been referred to as a Caribbean or Antillean species numerous times. Although the species was originally described from the Antilles, and largely breeds on Antillean Islands, subspecies *loyemilleri* breeds on islands off Panama (Bocas del Toro) which are not part of the Antilles but are part of the Caribbean region. The Caribbean region almost completely encompasses the breeding range of the species, with only a former population in Bermuda and tiny populations on Fernando de Noronha and the Itatiaia Islands off eastern Brazil being outside the Caribbean region. Thus, for the geographical names we prefer Caribbean over Antillean.

Newer options for English names are Sargasso Shearwater and Sargassum Shearwater, both recently suggested by the eBird group. The rationale for these names is as follows:

(1) The at-sea distribution of *P. Iherminieri* corresponds well to the western edge of the Sargasso Sea.

(2) Feeding *P. Iherminieri* are strongly associated with *Sargassum* (Moser and Lee 2012, Howell 2012, Howell and Zufeldt 2019), a genus of algae that gives the Sargasso Sea its name, forming large rafts on or beneath the ocean surface and serving as a refuge, breeding, or

feeding area for many marine animals, including fish, crab, and shrimp. *Sargassum*-associated prey occurred much more commonly in stomachs of *P. Iherminieri* than in the other three species of shearwater included in Moser and Lee's (2012) study off the North Carolina coast (they classified *P. Iherminieri* as a *Sargassum* specialist, whereas *P. gravis*, *P. puffinus*, and *P. griseus* were classified as occasional or incidental *Sargassum* users); however, they did note that the extent to which the foraging of many other species of seabirds is associated with *Sargassum* is not known. Nevertheless, the fact *P. Iherminieri* is the only species of shearwater mentioned in Howell (2012) and Howell and Zufeldt (2019) as associated with *Sargassum* ("often seen near and associated with") does suggest that this feeding preference is not widespread among species of *Puffinus*.

(3) An English name referencing the unusual association of a specific pelagic habitat/vegetation type with a particular species would likely be memorable and helpful to observers.

Part B:

When *P. Iherminieri* replaced *P. auduboni* in the 3rd edition of the checklist (AOU 1910), the type locality used for *P. Iherminieri* was "ad ripas Antillarum". In the 4th edition (AOU 1931), however, the type locality for *P. Iherminieri* was changed without comment to "ad ripas Antillarum = Straits of Florida", and this was retained through the 7th edition (AOU 1998). This may have been due to confusion with the type locality of *P. auduboni*, which was Kap Florida (Cape Florida), although Cape Florida, at the southern end of Key Biscayne, is not in the Straits of Florida, which separate Florida and Cuba (Olson 2013). Palmer (1931) concluded that the species was named for the young zoologist Ferdinand J. L'Herminier, who was born and lived on Guadeloupe and likely provided Lesson with specimens. Others have argued *P. Iherminieri* may have been named for his father, who was also from Guadeloupe (see Olson 2013), but in either case this would appear to narrow the type locality from the broad Antilles to Guadeloupe.

Palmer's argument likely led Hellmayr and Conover (1948) to restrict the type locality to "ad ripas Antillarum' = Guadeloupe, Lesser Antilles". However, as noted above, the type locality had previously been restricted, erroneously, to the Straits of Florida, and this error was perpetuated until at least 1998. Moreover, the type specimen of *P. Iherminieri* is likely lost or destroyed. Olson (2013) corresponded with curators of museum collections that might correspond to the repository named by Lesson for the type specimen ("Mus. Rupifortensis"), but the type could not be located, and no one has apparently examined the type or confirmed its existence since the description of *P. Iherminieri* in 1839 (Olson 2013). Even if the type is extant, it is unlikely that it could be confirmed as the specimen designated by Lesson or that its geographical origin could be ascertained (Olson 2013). To resolve these uncertainties, Olson (2013) designated a neotype collected from "Saint Barthélemy, "Guadeloupe," West Indies". Saint Barthélemy is now an independent overseas collectivity of France but until 2003 was part of France's overseas department of Guadeloupe. Per article 76.3 of the code (ICZN 1999), the locality of the neotype becomes the type locality of the species. Therefore, we recommend changing the type locality to "Saint Barthélemy, "Guadeloupe," West Indies". (A definitive type locality for Iherminieri would also be important if auduboni is a cryptic taxon within P. Iherminieri, as has been suggested (Howell 2012).)

Recommendations:

A: DVP: I previously supported Caribbean or Sargassum over the other names, but after reading Marshall's comments I no longer have strong feelings on the name.

Caribbean is a name that has prior use and that highlights the unique breeding range. *Puffinus lherminieri* is the only shearwater to breed in the Caribbean, and the Caribbean encompasses nearly the entirety the breeding range, helping connect a bird most birders see far from where it breeds with those tropical breeding grounds.

Sargasso connects with an evocative region, though not all *P. Iherminieri* occur around it as most *loyemilleri* are thought to be resident in the east Caribbean (per Birds of the World) and other species occur around the Sargasso Sea especially its ill-defined eastern edge (*P. boydi* and *P. baroli*). Though no species really occurs in the sea itself but rather around the edges, the sea was named for *Sargassum* (see below) and could be seen as a shorten version of this habitat type.

Sargassum would be unique and memorable, tying the species with a macroalgae it is most often associated with. The genus *Sargassum* is found in warmer climates worldwide and shearwater diets are generally poorly known, so it is likely other shearwaters will associate with it, though I do suspect, given the ecology of the genus *Sargassum* and the prevalence of *Sargassum* in its range, that *Iherminieri* probably is more tied to it than other species of shearwater.

RTC: My original preference was for Sargassum Shearwater as a distinctive and memorable name that reflects the strong association of this species with *Sargassum* (which appears to be unique among shearwaters) and that also has educational value, and I objected to Sargasso Shearwater because other shearwaters appear to occur in the Sargasso Sea to a similar extent (e.g., *P. boydi* and *P. baroli* in the east). Caribbean Shearwater was my original second choice. Caribbean Shearwater still seems to me to be a good name; Marshall's arguments against this name seem weak and seem applicable to many other species with geographical names, including Sargasso Shearwater, which co-ccurs with at least three other species of shearwater in the western Sargasso Sea, describes only part of its non-breeding distribution, etc.

Having read Marshall's comments on the name Sargasso, however, my preference has changed to Sargasso Shearwater because (1) the name Sargasso can refer to Sargasso Sea habitat or the Sargasso ecosystem (i.e., *Sargassum*) rather than to the Sargasso Sea itself (after all, the Sargasso Sea was named for *Sargassum*, so that a bird named for *Sargassum* could also reasonably be called Sargasso); and (2) there seems to be some difference of informed opinion as to how far east the Sargasso Sea extends, and therefore the extent to which *P. boydi* and *P. baroli* occur there; these species are also not known to be strongly associated with *Sargassum*.

Other factors that persuaded me to change to Sargasso Shearwater include (1) the unusual opportunity to tie a seabird name to a pelagic ecological association or habitat; (2) the distinctive and memorable nature of the name; (3) the educational value of the name, and (4) the strong

association of the range of *lherminieri* with the w edge of the Sargasso Sea, as shown in the maps (unlike other co-occurring species such as *P. puffinus*, *Ardenna gravis*, and *A. grisea*, whose ranges extend well beyond this area). Although these factors also apply to the English name Sargassum Shearwater, Sargasso Shearwater is a more mellifluous and less matter-of-fact sounding name than Sargassum Shearwater, the term Sargasso is already used in the name Sargasso Sea, and Sargasso Shearwater was strongly endorsed over Sargassum Shearwater, perhaps for these reasons, in informal polling of experienced pelagic birders, eBird reviewers, and others.

B: We recommend a YES vote, based on Olson (2013), on changing the type locality of *P. Iherminieri* to Saint Barthélemy, "Guadeloupe," West Indies.

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Submitted by: David Vander Pluym, Louisiana State University, and Terry Chesser

Date of Proposal: 25 April 2024

External comment on 2024-C-26(a): a new English name for Puffinus Iherminieri

I dislike Caribbean Shearwater for several reasons. First, to me, the name suggests that it is a bird of the Caribbean and that it is somehow restricted to that region, when it actually is common as a non-breeding visitor in the Gulf of Mexico and pelagic waters off the eastern United States. Also, Cory's (especially) and Great Shearwater are regular in the Caribbean and Gulf of Mexico, and Manx and Sooty occur as well. Scopoli's Shearwater is likely more regular than we yet know. While *Iherminieri* is surely the most frequently encountered shearwater in the Caribbean, it is far from the only species, and I fear this could be a bit misleading for unwitting observers.

Indeed, this is true of many other seabird names—Cape Verde Shearwater, Hawaiian Petrel, Galapagos Petrel, Bermuda Petrel, etc.—wherein wide-ranging taxa are named for their breeding islands or region. But for all seabirds, most of their annual cycle is spent away from immediate breeding areas. Furthermore, this species is extremely commonly seen from North Carolina to Florida, and also fairly common in season from Virginia to Massachusetts and in the Gulf of Mexico off the southern United States, eastern Mexico, Cuba, and Central America. Almost half (n=2941) of the global observations for the species in eBird (n=5899) hail from North Carolina and Florida, which does not indicate the inappropriateness of the name Caribbean but shows just how often birders encounter it away from the Caribbean portion of its range (obviously if other states were included the majority would be overwhelming).

But most of all, I find the name Caribbean mundane; one friend referred to it as "vanilla". It is an OK name and not inappropriate, but we already have four birds named Caribbean something (Caribbean Dove, Caribbean Elaenia, Caribbean Martin – and, for eBird and IOC – Caribbean Hornero). While it can be especially hard to find interesting and evocative seabird names, I find this to be an exciting chance to give an appropriate, unique, and memorable name, and either

Sargasso Shearwater or Sargassum Shearwater would suit the bird well. Subjectively, I find both names poetic (but Sargasso especially so; see below).

Below are some additional thoughts about the names Sargasso or Sargassum Shearwater:

An argument against the name Sargasso Shearwater might be that Audubon's Shearwater is really only a species tied to the western edge of the Sargasso Sea and that other (eastern Atlantic breeding) species may occur at the eastern edge of the sea. In general, we don't think there are lots of shearwaters or seabirds of any species using the central Atlantic (or central Sargasso Sea) since the richest feeding areas tend to be where currents meet and ocean bathymetry creates upwellings.

Regardless, it seems open to some interpretation as to where the Sargasso Sea actually lies. It can be defined as the area between the four currents:

"The sea is bounded on the west by the Gulf Stream, on the north by the North Atlantic Current, on the east by the Canary Current, and on the south by the North Atlantic Equatorial Current, the four together forming a clockwise-circulating system of ocean currents termed the North Atlantic Gyre." (Wikipedia)

Some maps, such as one of the two on Wikipedia <u>https://en.wikipedia.org/wiki/Sargasso_Sea</u>, show an expansive definition of the Sargasso Sea. Note however that the right map below is more in line with defining the Sargasso Sea as lying primarily in the western Atlantic (west of the mid-Atlantic ridge).





Fig. 1: Two maps of the Sargasso Sea from Wikipedia, showing a somewhat more expansive area (extending well west of the mid-Atlantic ridge) versus a more narrow one on the right, showing it centered more in the western Atlantic.

The Sargasso Sea Commission highlighted that the boundaries of the sea are not static and vary with currents. They assessed presence of *Sargassum*, prevalence of eddies, and ocean topology to produce a map for their purposes

(<u>http://www.sargassoseacommission.org/storage/documents/Sargasso.Report.9.12.pdf</u>) and for their use restricted the sea to areas west of the mis-Atlantic ridge. They note:

"Because the Canary current is more diffuse and variable than the other currents the eastern boundary is more ill-defined, so the eastern boundary of the Sargasso Sea is pragmatically considered to lie to the west of the mid-Atlantic Ridge in the western basin of the Atlantic Ocean"

Furthermore, I would note that the southbound Canary current means that the water temperatures at the eastern edge of the sea are significantly lower. This is then quite a different oceanic habitat than the very warm waters of the western Atlantic in the Gulf Stream and western edge of the Sargasso Sea.

But for me, the important piece is that the Sargasso Sea influences the entire distribution of *Puffinus Iherminieri* strongly. The North Atlantic Equatorial Current is a pipeline that pushes *Sargassum* towards and into the Caribbean. *Sargassum* is a common sight throughout the Caribbean, where it is as both used for fertilizer and cursed as it "pollutes" sandy beaches. A name that refers to this association thus is appropriate in both the Caribbean and Atlantic (instead of the just the former). If the Sargasso Sea ecosystem (at least in the western Atlantic) is defined as a region of warm, clear, deep blue water with especially high incidence of *Sargassum*, and regular mixing through eddies and warm core rings, then a reference to a Sargasso ecosystem or Sargasso habitat (of or like the Sargasso Sea) is an especially appropriate descriptor for *P. Iherminieri*.

The association of *Sargassum* with *P. Iherminieri* is strong and well-known by pelagic operators up and down the eastern United States. The key strategy for finding the species north of Cape Hatteras tends to be by finding warmer water, deeper blue water, and water with high incidence of Sargassum, since this often indicates eddies from the Gulf Stream that have spun into colder

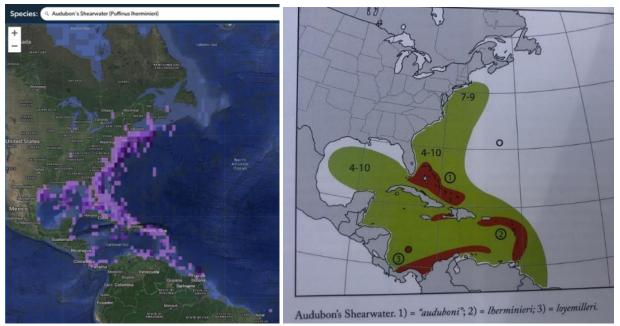


Fig. 2. On left, eBird map for *Puffinus Iherminieri* (the *sensu stricto* version recently adopted by AOS-NACC); on right, the Howell (2014) map for the same taxon.

Atlantic waters. When areas with intact mats of *Sargassum* are found in summer and early fall, *Iherminieri* is usually present and no other species, except for Bridled Tern, has such as strong association with these "weed lines". For birdwatchers venturing to sea, it can be hard to understand and assess marine habitats, but areas with lots of floating *Sargassum* represent a distinct habitat that is visible and obvious. And the association with *P. Iherminieri* is strong enough to be mentioned by Birds of the World, Howell and Zufelt (2019) and Howell (2014)—three of the 14 images in the latter show *Sargassum* in the same image with a shearwater!

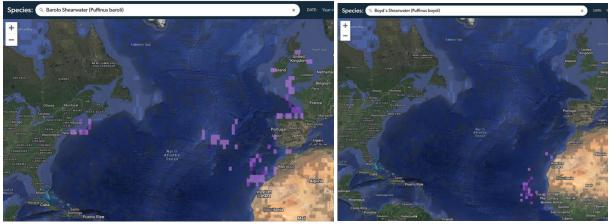


Fig. 3. On left, eBird map for *Puffinus baroli* (left) and *P. boydi* (right). The observations correlate well with the range summary from Howell and Zufelt (2019) below.

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Audubon's Shearwater (Puffinus lherminieri) Complex

Here considered as 3 species; Barolo long treated as an isolated race of Little Shearwater, and sometimes lumped with Boyd's Shearwater as Macaronesian Shearwater; Boyd's sometimes treated as a race of Audubon's. Several small shearwater taxa in Indian and Pacific Oceans historical have been treated as races of Audubon's Shearwater (but see Austin et al. 2004).

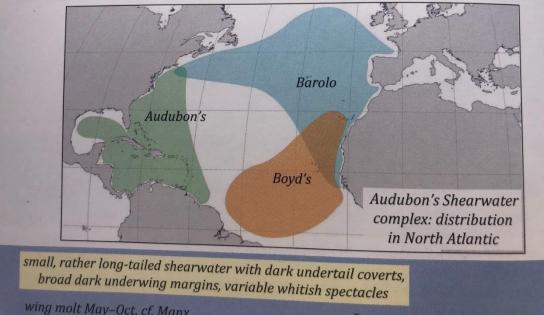


Fig. 4. Map for Audubon's complex from Howell and Zufelt (2019)

Final thoughts

I feel that Sargasso Shearwater (or Sargassum Shearwater) would be easily adopted and will help educate birders about the species, its habits and habitat, and an association above and beyond its nesting area (which, frankly, is how very very few people interact with the species).

Personally, I feel much more strongly than I usually do about bird names in this case. Sargasso Shearwater would be unique and memorable for a group of birds that bias strongly towards geographical names and rarely get interesting ones. I find Sargasso Shearwater a *much* more poetic and beautiful name. It is alliterative and flows off the tongue well. It conjures the mystique of a rarely visited, but popularly known, region of the ocean. Connections to the Bermuda Triangle only add to the mystique. And it is a region that typifies a certain habitat: warm water, deep blue and clear water, and of course, lots of *Sargassum* weed. To me, this really helps get at the essence of this species in a helpful and interesting way.

Sargassum would be similarly appropriate, but the genus for the seaweed is less well known than the sea and it highlights a specific portion of the habitat rather than a region and the ecosystem that typifies it. More than anything though, I find it a bit clunkier to say and a bit less poetic. As shown below, of those I asked for unbiased opinions on this, 42 preferred Sargasso and 10 preferred Sargassum (just three preferred Caribbean); I have not asked all for reasons why, but I suspect the poetic qualities of the name factored into those preferences.

Other opinions

I asked a large number of experienced birders for opinions on these names. Responses can be summarized as follows:

- Of twelve birders (George Armistead, Todd Day, Peter Flood, Steve Howell, Doug Gochfeld, Jay McGowan, Holly Merker, Brian Patteson, Luke Seitz, Kate Sutherland, Jeremiah Trimble, and Brian Sullivan) who I consider to have particularly extensive experience with the species on East Coast pelagics, opinions broke down as follows: one (Howell) declined to give an opinion beyond a preference for retaining Audubon's, one (Patteson) preferred Sargassum Shearwater, the other ten all strongly preferred Sargasso Shearwater.
- Among the team I work with at the Cornell Lab (eBird/Macaulay Library, including Jenna Curtis, Ian Davies, John Garrett, Evan Griffis, Cullen Hanks, Alli Smith, Andrew Spencer, Chris Wood), all preferred Sargasso Shearwater
- Tom Schulenberg and Alvaro Jaramillo, both of whom have long provided opinions for SACC and in other discussions of English names, both preferred Sargasso Shearwater.
- Jeff Gerbracht collected opinions from a few Caribbean partners within eBird. Of those, four preferred Sargasso (Jeff, Anthony Levesque, Eddie Messiah, and Will McPhail) while one preferred Caribbean Shearwater (Lisa Sorenson), but is "also good with Sargasso".
- I informally polled eBird reviewers and received the following responses: 22 votes (3 from people listed above though) for Sargasso Shearwater, 10 for Sargassum Shearwater, and 2 for Caribbean Shearwater

- One person pointed out that Sargassum can have a negative connotation, given some of the recent media coverage and the fact that it can "pollute" sandy beaches. Personally (MJI), I agree that is worth being aware of, but it is not a reason not to use an appropriate name.
- Below are a few quotes I received in response:
- "Funny you should mention this, I just gave a talk about Gulf Stream seabirds in December with the Audubon's labelled as the Sargassum Shearwater. I could live with either Sargasso or Sargassum (since it is a species tied to this macroalgae and the subsequent ecosystem). I looked at it more from a habitat point of view than a location point of view."
- "Funny, but I want to say I had a conversation with xxx about this some time ago and seem to recall we tossed around the idea of Sargasso/Sargassum Shearwater. I think either/or would be a very cool and very appropriate name given its affiliation with sargassum. I agree Caribbean Shearwater is a bit vanilla. Anyways you can count me in for Sargasso Shearwater. As much as I cringe with a lot of these name changes whether necessary or politically driven, I do like Sargasso Shearwater."
- "I really like Sargasso, assuming that association is true for the species"
- "I really like the idea of Sargasso/Sargassum Shearwater, with a slight preference for Sargassum because thats the more familiar term to me personally. The association of the shearwater with Sargassum would be well familiar to regulars on NC pelagics, which makes it feel like the bird picked its own name already."
- [response to above] "Counterpoint: I think that Sargasso is more widely known outside of naturalist communities, thanks to the name of the Sargasso Sea and the Jean Rhys novel. Sargasso is also the older term (see https://en.wiktionary.org/wiki/Sargassum#Translingual)."
- "I love Sargasso Shearwater!"
- "Strongly in favor of Sargassum or Sargasso. As others have said, it is a helpful ID point and a memorable name, and it also has the benefit of applying in both their Atlantic and Caribbean range, rather than just the latter."
- "Sargasso Shearwater is an awesome name."
- "Not sure about Sargasso Shearwater [but] overnight it has grown on me."
- "About the Shearwater the French name could be "Puffin des Sargasses", OK, but the sargassums gave many troubles here when they arrive by tons on the beach so sargassum have not a good pictures but 99.99999% of the people don't know the Shearwater and probably nobody will care really about this name.... or another... so it's probably ok..."
- "I like Caribbean Shearwater since it's the only shearwater breeding in the Caribbean, but Sargasso Shearwater is fine."
- I like Sargasso Shearwater, it nicely describes its affiliation with the Sargasso Sea. My second choice would be Caribbean Shearwater for similar reasons, i.e. it's the only shearwater breeding in the Caribbean (with some outlying colonies off South America). I would not go with Sargassum Shearwater as the genus Sargassum is global in nature.

While we could certainly conduct a more expansive survey of opinion, it is clear that Sargasso Shearwater resonates with a lot of thoughtful consumers of bird names and that is my strong recommendation.

Submitted by: Marshall lliff

Date of Comment: 28 April 2024