

THE LESSONS OF *CATHARUS* THRUSHES REVISITED

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ABSTRACT.—I discuss morphological variation in United States *Catharus* thrushes with regard to in-hand and field identification, particularly in the Veery (*C. fuscescens*) and in the Gray-cheeked Thrush (*C. minimus*). Geographic variation in all United States *Catharus* is significant, creating a substantial identification challenge. Three subspecies especially are sufficiently similar to warrant caution: *C. fuscescens salicicolus*, *C. m. minimus*, and *C. ustulatus swainsoni*. As an example, I reidentified a specimen reported to be a *salicicolus* Veery and determined it to be instead a nominate Gray-cheeked Thrush. Ample recent specimens of *Catharus* in fresh plumage are needed to further elucidate geographic variation within the thrushes in this genus. Attempts at field identification of some forms should be made with the utmost care, and demand proper, thorough documentation.

Catharus thrushes present a decided identification challenge both to the museum ornithologist and to the birder. Yet members of the latter group especially frequently succumb to the belief that identification is straightforward; for example, Harding (1979) laid claim that "Given a reasonable view, the identification of North American thrushes is relatively simple." Thus, all too often nary a thrush goes by that is not identified to species. Much of this sentiment likely stems from a lack of appreciation of the extensive geographic variation exhibited by all *Catharus* species of temperate North America (Ridgway 1907, Phillips *et al.* 1964, Phillips 1991), or perhaps it is the more insidious trend of neglect of subspecies (Phillips 1975, Phillips 1991:xli, Patten *et al.* 1995). In either case, Phillips (1991:xli-xliv) warnings regarding "The lessons of *Catharus* thrushes" remain largely unheeded.

Perhaps the greatest difficulty faced in clearing the air is the lack of adequate series of fresh *Catharus* from their breeding grounds and the extraordinary degree of foxing shown by specimens of all members of this genus (Phillips *et al.* 1964:127-131, Phillips 1991:xlII-xliII). Certainly the best recent effort based on the incomplete existing data was made by Phillips and Ramos (in Phillips 1991:75-101). In addition to providing the most up-to-date and accurate assessment of geographic variation in temperate *Catharus*, Phillips (1991:94) urged that "Birders wishing to identify thrushes more accurately should study Plates 2-3, and compare them to their field guides." Plate 2 is a useful color portrait by Anne Pulich of examples of *C. bicknelli*, *C. fuscescens* "*salicicola*" [= *salicicolus*] and *C. u. ustulatus*. Plate 3, however, is more problematic, as it is a photograph of a specimen alleged to be *C. f. salicicolus* that is rather dull and heavily spotted below. I was most intrigued by this specimen, and set out to examine it myself.

Through the assistance of Allan R. Phillips and Warren M. Pulich (WMP), I was able to locate the specimen in question. Pulich (*in litt.*) salvaged this bird (it "hit a window of a farm house") at Seelington Farm, 1.6 km east of Nobility, Fannin County, Texas on 4 May 1989 (WMP 3153). It was a male with a fully ossified skull. The specimen is now housed at the Western Foundation of Vertebrate Zoology (WFVZ), Camarillo, California, where it has been cataloged as WFVZ 50311. I compared WFVZ 50311 to the available modest series of *Catharus* at both WFVZ (November and December 1992, and January 1995), and at the Natural History Museum of Los Angeles County (LACM; March 1993). These series included *C. bicknelli* ($n = 1$), *C. fuscescens* ($n = 14$; 3 *salicicolus*), *C. guttatus* ($n > 50$), *C. minimus* ($n = 11$), and *C. ustulatus* ($n = 28$) at WFVZ, and *C. fuscescens* ($n = 12$; 1 *salicicolus*), *C. minimus* ($n = 23$), and *C. ustulatus swainsoni* ($n = 32$) at LACM.

I concluded that the specimen is in fact an example of *C. minimus*, as originally identified by Pulich (*in litt.*, Phillips *in litt.*).

I was initially surprised by the dullness of the specimen; unlike the photograph reproduced in Plate 3, WFVZ 50311 is rich olive above, rather than warm rufous. This color distortion shown by a photograph under controlled conditions serves only to underscore the dangers inherent in non-specimen records of *Catharus* (Phillips 1991:xlili; see also Roberson 1993:132). The uniform olive coloration above (i.e., it lacked a contrasting reddish tail), various other plumage features, and the fact that $p_9 > p_6$, clearly eliminated *C. guttatus*, a species confused with *C. minimus* and other *Catharus* even as specimens (Pulich 1988:264-265, Phillips 1991:xlili). Furthermore, given the wing chord measure of 99.6 mm and the lack of brighter rufescent tones above (Phillips 1991, Ouellet 1993), this specimen is not an example of *C. bicknelli*, *C. u. ustulatus*, *C. u. phillipsi*, *C. u. oedicus*, *C. f. fuscescens*, or *C. f. pulichorum*. Because $p_{10} < pp$ coverts, all Middle American *Catharus* were also eliminated (Phillips 1991:71-72).

In-hand separation of *C. ustulatus swainsoni* (and the similar subspecies *C. u. appalachiensis* and *C. u. incanus*), *C. fuscescens salicicolus* (and perhaps *C. f. levyi*, which should be more richly-colored above), and *C. m. minimus* (and *C. m. aliciae*) is more difficult. Although WFVZ 50311 has upperpart coloration similar to *C. u. swainsoni*, it lacked a distinct pale eyering and did not have pale lores; also, the throat was whitish, contrasting with a buff wash on the breast, whereas both *ustulatus* and *fuscescens* typically show uniform buff from the chin through the breast. I am confident that WFVZ 50311 is not an example of *ustulatus* of any subspecies.

Distinguishing between *C. f. salicicolus/fuliginosus* and *C. m. minimus/aliciae* is more challenging still (especially *salicicolus* from nominate *minimus*), as both show distinct breast spotting, warm rufescent-olive upperpart coloration, and gray auriculars. Furthermore, Ridgway (1907:59-60,67-68) and Phillips (1991:72) indicated extensive overlap in all mensural characters, although *minimus* is longer-winged and *fuscescens* has a deeper bill. WFVZ 50311 has a depth at the gonys of 3.8 mm, which Phillips (*in litt.*) acknowledged was "indeed small"; bill depth on *fuscescens* should be more than 4 mm. The other formulas given by Phillips (1991:72) were: P (longest primary - p_1) = 25.7 and B (longest primary - p_6) = 6.1. Although both are outside of what is listed for typical *minimus*, Phillips (1991:72) noted extensive overlap, and based on all measurement ranges provided by Ridgway (1907) and Phillips (1991), my measurements of WFVZ 50311 placed it well within the range of either *C. fuscescens* or *C. minimus*.

Thus, my diagnosis was based on plumage rather than measurements. To this end, several features proved conclusive in my determination that WFVZ 50311 was indeed an example of *C. minimus*: (1) Upperpart coloration of *salicicolus* is much duller and more olive than on nominate *fuscescens*, but is still brighter rufescent than on all *minimus* I examined, and brighter than on WFVZ 50311. Indeed, upperpart coloration of WFVZ 50311 was matched only by specimens of *C. minimus* (e.g., WFVZ 18720 from March 1987 in Costa Rica, and WMP 2454 [housed at WFVZ] from late April 1978 in Texas). (2) WFVZ 50311 has a bold slate-gray malar streak like all specimens of *minimus*, but matched by only one nominate *fuscescens* (LACM 51941), and by none of the *salicicolus*. (3) As noted above, the throat of WFVZ 50311 was white, contrasting with a buff wash across the breast. All examples of *fuscescens* have buff in lower throat, with six nominate *fuscescens* showing buff chins. (4) As on *minimus*, there was no contrast between the sides of the breast and the flanks on WFVZ 50311, with both being a grayish-olive. All *fuscescens* showed a distinct contrast between richer brownish-rufous sides of the breast and cold gray flanks. (5) Again as on *minimus*, the auricular was more gray on WFVZ 50311 than on any *fuscescens*. (6) There was a thin strip of pale grayish feathering along the upper

rear edge of the eye on WFVZ 50311, a feature typical of *minimus*; *fuscescens* shows a thin but complete eyering that is more whitish. (7) Lastly, the breast spotting on WFVZ 50311 was much darker gray than on all nominate *fuscescens* and on all but one *salicicolus* (LACM 12815, a hatch-year bird taken 14 August 1911 in Idaho), and was matched by several *minimus* (e.g., WPM 2454).

Unfortunately, I lacked an adequate series of *C. minimus* of comparable age and season, so I could not make a racial determination of WFVZ 50311; it is most likely *aliciae* on geographic grounds, but more like nominate *minimus* in plumage (Phillips *in litt.*). As stated repeatedly by Phillips (1991), museums simply lack sufficient comparable material, and fresh material is even more scarce. In this regard, an inadequate sample would also make it difficult or impossible to eliminate a potential *fuscescens* × *minimus* hybrid (Phillips 1991:96, *in litt.*), although I saw nothing in the plumage of WFVZ 50311, save perhaps the breast spotting, that gave me cause to suspect a hybrid instead of a pure *minimus*.

Catharus identification can be tricky indeed, and “in difficult cases, all characters must be considered” (Phillips *in litt.*); some birds may defy identification in the hand (even with a comparable series), let alone in the field. WFVZ 50311 is a fine case in point of the pitfalls one may encounter. Another good example is provided by *C. bicknelli*, a taxon now receiving much attention from birders because of its “elevation” to full species status (A.O.U. 1995). Although in-hand identification of *C. bicknelli* and *C. minimus* is far from straightforward (Ridgway 1882, Phillips 1991:95-96, Ouellet 1993), means of field identification are now being pursued (Curson 1994, McLaren 1995). Given the difficulty in distinguishing some *C. u. swainsoni* from some *C. minimus*, and some *C. f. salicicolus/fuliginosus* from some *C. minimus*, field identification of *bicknelli* away from known breeding areas will be necessarily tenuous, and similar cautions should be applied to every case of *Catharus* identification.

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