

FIELD IDENTIFICATION NOTES: THE TWO WATERTHRUSHES

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The Northern Waterthrush (*Seiurus noveboriensis*) and the Louisiana Waterthrush (*Seiurus motacilla*) occur regularly in Massachusetts both as migrants and as summer residents. Although extreme individuals of these two species are easily identified by sight, other intermediate birds can be quite confusing. This article summarizes information bearing on the field identification of the two waterthrushes.

Binford (1971:1) states that "the ornithological literature is confusing and misleading. Field guides vary considerably as to which characters are mentioned or stressed, and none adequately depicts the subtle differences between the two species. Most guides overemphasize the throat spotting, incorrectly describe the eyeline, and fail to mention the flank color."

Habitat

Where the two species overlap in range they tend to occupy different habitats, the Northern in bogs along the edges of small pools (still water), and the Louisiana next to brooks and small streams (running water). Thus, both species are seen most often in places of deep shade. Crooked Pond, Boxford, where both occur in close proximity, is marvelously gloomy.

Unfortunately, those visual field marks that separate the two species have to do with tints of grey, buff and yellow. I have always counted myself lucky to view either species in enough light to see that the back color is brown and not black. Determination of the ground color of the underparts was beyond the pale. Hence, this article concludes with a discussion of the territorial songs and call notes of the two species, both of which are absolutely diagnostic.

Discussion of the Field Marks

1. Posture

Both species maintain a quite horizontal posture and walk with a bobbing motion reminiscent of a Spotted Sandpiper. This teetering continues even when the bird is at rest.

2. Size

Peterson (1947:150) remarks that the Louisiana Waterthrush is larger. According to Robbins, et al (1966:271) the difference in average size is approximately 1/4" on birds of length 5", a size difference of only 5%. As Binford (1971:2) states, "The differences in over-all size ... are so slight that only an expert birder who is very familiar with both species and has an exceptional eye for size could distinguish between even the extremes of the two species."

3. Bill Size (Somewhat useful)

The bill of the Louisiana Waterthrush is, on the average, longer, deeper and wider. - It looks big for the head of the bird, whereas the bill of the Northern Waterthrush is less prominent, more in proportion to the rest of the head. However, there is overlap in absolute measurements, and thus this field mark should not be used except when encountering either of the extremes.

4. Color of the eyestripe (A useful character)

Most authorities state that the eyestripe of the Louisiana Waterthrush is invariably a glistening, pure white throughout. Although this is often one's first impression, the facts are otherwise. Close examination will show that the anterior part of the eyestripe (between the bill and eye) is "always washed with grayish-olive or grayish-buff and hence is similar to the same portion of the eyeline in noveboracensis" (Binford 1971:2). Clearly, it is the rear half of the eyeline that is critical. This part of the eyeline is indeed pure white on 80% of the Louisiana Waterthrushes. On the other 20% the posterior is marked with buff.

The eyestripe color on a Northern Waterthrush is uniform, usually buffy or clear yellow or deep cream. However, many individuals of the western race (Grinnell's Waterthrush) have eyestripes so white as to be indistinguishable from Louisianas. Griscom and Snyder (1955:206) say, "Students are warned that individuals of this species with white eyebrows and whitish underparts are regular transients in this state and have led to a spate of incompetent sight records of the Louisiana Waterthrush in late May and fall."

The following chart may be useful:

	Color of the posterior half of the eyeline	Species
a)	clear yellow	Northern
b)	uniformly buffy	Northern
c)	marked with buffy	Louisiana
d)	uniformly whitish	Northern or Louisiana

5. Shape of the eyestripe (Excellent character)

Wallace (1976:28) points out that although the color of the supercilium is a difficult mark to see and to use, the shape is completely diagnostic. The field mark is well-illustrated by Singer (Robbins, et al, 1966:271). The eyestripe of a Northern Waterthrush is narrower, shorter, of a uniform width throughout. On the Louisiana Waterthrush, the eyestripe is wider (and therefore brighter) and extends farther around the head.

6. Throat spots

Contrary to the comments in the field guides, the presence or absence of throat spotting is a nearly useless field mark. Wallace (1976:28) says, "Some Louisianas have larger and better defined spots than some Northerns." Approximately 3% of the Northern Waterthrushes have no throat spots at all (and sport immaculately white throats!)

Will Russell suggests that, if the throat is spotted, then "there is a useful field character in the pattern of marks across the lower throat and upper chest. If there are many sharp spots noticeably clustered there, the conspicuous collar or gorgette so formed is indicative of Northern" (Wallace, 1976:29).

7. Throat color (Good character)

The throat color of the Louisiana is always a pure, glistening white. About 97% of the Northern Waterthrushes have a ground color that is yellowish or off-white. Unfortunately, the other 3% have immaculately white throats.

8. Underparts (Best mark)

The underparts of Northern Waterthrushes are usually of a uniform ground color, lemon yellow, yellowish or off-white. On Louisianas the underparts are two-toned: flanks and undertail coverts are "clear pale buff, ochraceous buff, cream buff, pale cinnamon, or pale fawn color ... [and] this buff color is usually rather bright, often very bright" (Binford, 1971:4). Binford regards this field mark as the single most reliable field character, but Dr. A. D. Brewer stresses that absence of showy flank patches does not exclude a Louisiana, since a very few of this species have a yellowish cast throughout the underparts.

9. Territorial song

The territorial songs of both species descend in pitch. The Northern's song is forceful throughout, speeding up slightly toward the end and usually ending with an emphatic "chew, chew, chew."

Pough (1949:182) describes the song of the Louisiana Waterthrush thus: "It opens with 3 or 4 long, upslurred, rather slowly uttered notes, then breaks into a hurried jumble of short, almost explosive notes, some high, some low, but usually trending downward."

10. Call notes

Call notes of the two species are quite similar but yet sufficiently distinctive to be diagnostic. Field guides describe these notes as a sharp "clink" or "pink." To me these are possible representations of the notes, but they fail to portray their smack-like sound.

Most birders will find it fairly easy to learn to differentiate these two notes from those made by other warblers. Distinguishing between them is hard to describe but plain to the ear.

The call note of the Louisiana Waterthrush sounds like that of the Northern Waterthrush, but with an added element, a certain popping sound uttered in the middle of the note. This popping sound tends to color the over-all quality. Hence, I would render the call of the Louisiana as a "chock" to contrast it with the "chink" of the Northern Waterthrush. However, transliterations such as these are notoriously subjective. Rather than attempting to record these call notes as words, it would be more to the point to compare the extra popping sound with other sounds

possibly already familiar to the reader. At times this pop reminds me of the sound made by wooden orchestral blocks. More often I am reminded of one of the Bantu clicks that Miriam Makeba uses in the songs of her native South Africa. To make this sound, cup the tongue tightly against the roof of the mouth (as if holding a marble in place), create a suction above the tongue, and then jerk the tongue downwards to break the suction.

Summary

Binford (1971:5) says that "no single character is one hundred percent diagnostic. A bird that has strongly ochraceous-buff flanks or a combination of pure white eyeline (posterior part) and pale buff flanks is definitely a Louisiana. Any bird with a yellowish tint on the posterior part of the superciliaries or strong yellow on any portion of the underparts is definitely a Northern." Binford, it should be remembered, does not discuss the shape of the eyeline; Wallace apparently believes this mark to be diagnostic.

It must be remembered that the Louisiana Waterthrush normally arrives some two weeks earlier than the Northern Waterthrush. Reports of migrants are most common from the third week of April through the first week of May. Bailey (1955:193) says that "the nesting period probably extends from May 5 to 30. This warbler is one of the earliest to move south and normally disappears between July 15 and 30."

Northern Waterthrushes arrive usually in the last week of April. Peak counts normally fall between May 17 and 23. Fall migrants appear in early August, with the bulk of the flight moving through from August 21 to September 21.

Literature Cited

- Bailey, W. 1955. Birds in Massachusetts. The College Press, South Lancaster, Massachusetts.
- Binford, L. C. 1971. "Identification of Northern and Louisiana Waterthrushes," California Birds (2):1-10.
- Griscom, L., and D. E. Snyder. 1955. The Birds of Massachusetts, An Annotated and Revised Check List. Peabody Museum, Salem, Massachusetts.
- Peterson, R. T. 1947. A Field Guide to the Birds. Houghton Mifflin, Boston.
- Pough, R. H. 1949. Audubon Land Bird Guide. Doubleday and Co., Garden City, New York.
- Robbins, C. S., B. Bruun and H. S. Zim. 1966. Birds of North America. Golden Press, New York, New York.
- Wallace, D. I. M. 1976. "A review of waterthrush identification with particular reference to the 1968 British record," British Birds (69):27-33.