FIELD NOTES

Sharp-tailed Sparrow Challenges

Mystery Bird at Great Meadows

Simon Perkins and David A. Sibley

Note: On December 8, 2003, Simon Perkins, David Sibley, Steve Mirick, Wayne Petersen, and I drove to First Encounter Beach in Eastham in the aftermath of a storm and were treated to a wonderful show of seabirds. Eventually we headed off for lunch at a tavern in Orleans, and Simon pulled out his laptop computer to show us images of a curious-looking sharp-tailed sparrow. A most interesting conversation ensued about the identity of that bird. In this article, Simon and David take another shot at this perplexing sparrow.

David Larson

* * * * * * * * *

Simon Perkins: I was birding at Great Meadows NWR, Concord Unit, on October 24, 2003, when a mouse-like bird caught my eye within the weedy margin of the dike. I quickly determined that the rodent was a sharp-tailed sparrow. But, to my surprise, this particular bird lacked the bright orangey plumage of the form most frequently found at inland sites: the nominate race of the Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni nelsoni*). I spent the better part of an hour studying it and attempting in vain to secure some "digiscoped" images. Luckily, David Hake, a visiting birder/photographer from Tennessee, also arrived on the scene, and was successful in capturing a few images with a more conventional SLR telephoto system (Figs. 1 and 2).



Figure 1. Sharp-tailed sparrow at Great Meadows NWR. Photograph by David Hake.

All three forms of Nelson's Sharp-tailed Sparrow (*Ammodramus nelsoni*) have been reported from inland sites in Massachusetts (Veit and Petersen, 1993), and though the precise status of each of these within interior portions of the state is obscure due to identification issues, it appears that *A.n. nelsoni* is most frequently reported, perhaps because of *nelsoni*'s distinctive plumage. To my knowledge, Saltmarsh Sharp-tailed Sparrow (*A. caudacutus*) has never been found away from the coast in Massachusetts.

The underparts of the Great Meadows bird were virtually colorless, lacking the bright buffy-ochraceous tones across the breast and along the flanks that are typical of *A.n. nelsoni*. In this respect the bird was most similar to the dullest form of Nelson's, *A.n. subvirgatus*, except for the fact that the streaks in these areas were relatively bold, a trait that all but ruled out all three forms of Nelson's. But, while the breast and flank streaks were bold like those of a Saltmarsh, they were, at the same time, somewhat blurry, unlike the rather crisp streaks of a typical Saltmarsh. The bill shape appeared to be intermediate between *nelsoni* and Saltmarsh, being neither as short as *nelsoni* nor as heavy as Saltmarsh. The color in the base of the mandible appeared yellowish, a feature consistent with Saltmarsh. The upperparts were a flat gray, and the whitish back streaks typical of this group were rather weak.



Figure 2. Sharp-tailed sparrow at Great Meadows NWR. Photograph by David Hake.

The overall impressions of this bird were that of *A.n. subvirgatus* with atypically heavy (yet blurry) streaks across the breast and along the flanks. Given the fact that the bird appeared to possess plumage and structural characteristics that were somewhat intermediate between Nelson's and Saltmarsh sharp-tailed sparrows, the possibility that it was a hybrid remains a viable, though probably unprovable, possibility.

References:

Veit, R.R. and W.R. Petersen. 1993. Birds of Massachusetts. Lincoln, MA: Massachusetts Audubon Society..

* * * * * * * * *

David Sibley: When Simon Perkins showed me these photographs, I agreed that it seemed wrong for any of the typical subspecies of Nelson's Sharp-tailed Sparrow (the expected species inland), but at the same time was not quite right for a Saltmarsh Sharp-tailed Sparrow (which would be very rare inland). Saltmarsh Sharp-tailed should be more crisply marked, with stronger and more distinct streaks below. In this case we felt fairly confident that we could rule out a typical Saltmarsh — the streaks on the underparts were simply too blurry. Our initial reaction was that this bird was a good candidate for a Saltmarsh x Nelson's hybrid, but at the time that was nothing more than a hunch, and I wasn't very confident. So I took the photos to the Harvard Museum of Comparative Zoology and compared them with a few hundred specimens.

The Nelson's Sharp-tailed Sparrow includes three subspecies: one that is brighter, more distinctly streaked, and smaller-billed than the mystery bird (subspecies *nelsoni*, nesting on the northern prairies, apparently a rare migrant in Massachusetts); one that is drabber, grayer, and less streaked than the mystery bird (subspecies *subvirgatus*, nesting in coastal marshes from the Gulf of Saint Lawrence to southern Maine — where it hybridizes with Saltmarsh Sharp-tailed Sparrow — and a common migrant in coastal Massachusetts); and one that is intermediate between those two (subspecies *alterus*, nesting in the James Bay lowlands and apparently a regular migrant in Massachusetts in small numbers).

As it turns out, *subvirgatus*, the most frequent migrant through Massachusetts, can actually be quite similar to the mystery bird. The drab back pattern with no black or white markings, and the hint of yellow on the lores are both characteristic of *subvirgatus*. We may have been a little too quick to dismiss it, but ultimately it seems we were correct. The mystery bird seems a little too orange on the face, with the orange eyebrow behind the eye too clean and too prominent, and showing some fine dark streaks. Most importantly, the breast and flanks are not orange enough, being distinctly paler than the face, and the streaks on the underparts are too dark and distinct.

So it's too drab for *nelsoni* and too bright for *subvirgatus*, which should make it just about right for *alterus*.

The subspecies *alterus* is poorly known. It was recognized and described in 1938, and there are very few breeding season specimens in U.S. museums. Birds have been identified as this subspecies in various places along the Atlantic and Gulf coasts as well as inland, but it seems that few of these have been cross-checked with specimens from the breeding grounds. In the collection at Harvard, as in other museums I have visited, I found a confusing array of specimens from different parts of the migration

and wintering range, with apparent *alterus* misidentified as *nelsoni*, *subvirgatus* misidentified as *alterus*, and other problems.

The problem with *alterus* is that it is intermediate between the gray Eastern subspecies *subvirgatus* and the bright prairie subspecies *nelsoni*, and may overlap both in appearance. I agree with both Todd's original description in 1938, which says it is similar to *nelsoni*, and Peters' 1942 study in which he called it exceedingly close to *subvirgatus*.

At this time I would say that the Great Meadows bird is not *alterus* because of the blurry dark streaks on the breast and flanks, with the ground color of the breast and flanks being paler than the face, and the finely streaked eyebrow.

So we're left with the initial guess of a hybrid between Saltmarsh Sharp-tailed and the drab *subvirgatus* subspecies of Nelson's. These hybrids are intermediate between the parents, so we can think of them as drab like *subvirgatus*, with the more contrastingly marked and brighter orange face of Saltmarsh, the paler breast and flanks with more distinct streaks of Saltmarsh. So the diagnosis is that this is most likely a hybrid, as we initially suspected, but somehow I don't feel a lot more confident than I did at the beginning.

The conclusion of all of this is that there is still a lot to learn about sharp-tailed sparrows. The subspecies *alterus* is poorly understood and probably accounts for many or even most of the reports of *nelsoni* in the Northeast. Hybridization between Nelson's and Saltmarsh is occurring in coastal salt marshes in New England, and these birds should be expected to turn up in Massachusetts on migration (but perhaps not often inland). Most sharp-tailed sparrows can be identified fairly easily, but some individuals will be difficult or even impossible to identify in the field and will continue to challenge our knowledge and skills.

References:

Peters, J.L. 1942. The Canadian Forms of the Sharp-tailed Sparrow, *Ammospiza caudacuta*. *Annals of the Carnegie Museum* 29: 201-10.

Todd, W.E.C. 1938. Two New Races of North American Birds. Auk 55: 116-8.

Editor's Note: For additional images and information on sharp-tailed sparrows, see Rising, J.D. 1996. A Guide to the Identification and Natural History of the Sparrows of the United States and Canada. San Diego, CA: Academic Press; Beadle, D. and Rising, J.D. 2002. Sparrows of the United States and Canada: The Photographic Guide. San Diego, CA: Academic Press; and Sibley, D. A. 1996. Field Identification of the Sharp-tailed Sparrow Complex, Birding 28 (3): 196-208.

Identifying Juvenile Sharp-tailed Sparrows

Richard S. Heil

Editor's Note: In early August 2003, a birder observed two juvenile sharp-tailed sparrows which apparently showed certain characteristics of Nelson's Sharp-tailed Sparrow. This prompted a query to other birders on the Massbird email list as to whether there was any evidence of them nesting in Massachusetts. A discussion ensued, including the analysis that follows from Rick Heil. The photos are courtesy of http://www.virtualbirder.com © Don Crockett 2004.

Observers should be very cautious in identifying juvenile Nelson's Sharp-tailed Sparrows in Massachusetts in late summer. The excellent images posted by Don Crockett (see http://www.virtualbirder.com/vbirder/rba/sts_c/index.html) show well all the features of juvenile Saltmarsh Sharp-tailed Sparrows. This plumage, and the equivalent plumage of Nelson's, are short-lived and are unlikely to be observed far from where the birds were fledged. I would be surprised to see birds in this plumage during migration. In general, juvenile Saltmarsh sparrows are not as bright, or as extensively buffy orange as are juvenile Nelson's. I think part of the current confusion is that the Sibley guide possibly depicts juvenile Saltmarsh sparrows as too heavily streaked on the breast and flanks, at least in my New England experience with these plumages.

Characters of juvenile Saltmarsh Sharp-tailed Sparrow versus juvenile Nelson's Sharp-tailed Sparrow:

- + Crown DARK in Saltmarsh, lacking the well-defined buffy median crown stripe of juvenile Nelson's;
- + Supercilium less clear, more suffused with streaks in Saltmarsh; cleaner, brighter in Nelson's;
- + Throat contrastingly paler than submoustachial or supercilium in Saltmarsh; throat more nearly equivalent in color to these areas in Nelson's;
- + Nape dull, strongly suffused with grayish brown in Saltmarsh; brighter, clearer buffy orange nape in Nelson's;
- + Breast and flanks streaked on sides in Saltmarsh (though extent and darkness probably variable); underparts much less marked in Nelson's, with perhaps just a few streaks (often just spots) on the sides of the breast; otherwise, virtually unmarked buffy orange underparts;
- + Ear coverts more solidly grayish in Saltmarsh; less uniform and more internally buffy in Nelson's;
- + Generally darker dorsum in Saltmarsh, with strong blackish lines; brighter appearance in Nelson's.

(See Sibley, D.A. 1996. Field Identification of the Sharp-tailed Sparrow Complex. *Birding* 28:(3) 196-208. This is an excellent article on the identification of these sparrows, from which much of the above was gleaned.)



Images of juvenile Saltmarsh (left) and Nelson's (right) Sharp-tailed Sparrows by Don Crockett from http://www.virtualbirder.com/vbirder/rba/sts_c/index.html © 2004.

During the past breeding season I looked at, or listened to, more than 400 different Saltmarsh Sharp-tailed Sparrows at various locations while trotting around in the marshes of Newbury, Newburyport, Salisbury, and Rowley, and found six nests. I did not find any Nelson's Sharp-tailed Sparrow nests.

Regarding the recent paper in The Wilson Bulletin (Hodgman, T.P., W.G. Shriver, and P.D. Vickery. 2002. Redefining Range Overlap between the Sharp-tailed Sparrows of Coastal New England. Wilson Bulletin 114: 38-43), without conclusive evidence of actual nesting I remain skeptical of the authors' assertion of a breeding range extension into Massachusetts. The Massachusetts breeding season observations (audios?) were not made by the authors, but rather by a graduate student under the supervision of the principal investigators. Furthermore, none of the investigators have been forthcoming with the precise details of the breeding evidence obtained for Nelson's Sharp-tailed Sparrows in these marshes, despite the fact that such absolute confirmation would constitute a first Massachusetts breeding record. It seems, therefore, possible that their conclusion of a major range extension into Massachusetts is based solely on observations by an intern of unknown experience. I contacted all three authors and received much-appreciated responses from Peter Vickery and Tom Hodgman; however, they were unable to provide details about the Massachusetts Nelson's observation, since apparently it was Greg Shriver who was responsible for the southern New England portion of the survey.

In June 2003 I visited five of the sites where the researchers cited above claimed the presence of Nelson's Sharp-tailed Sparrows, but failed to find any. However, I would reiterate what Jim Berry has already pointed out, that it's a large marsh, and there certainly could be a few pairs of Nelson's out there. Also, the observations and conclusions of the Shriver study may indeed be correct. I simply have been unable so far to find any of these sparrows, despite considerable effort. I would welcome evidence of breeding-season Nelson's Sharp-tailed Sparrow in Massachusetts, but to date I remain unconvinced that such nesting has occurred.

Greater Yellowlegs Feeding Behavior

Mark Daley

Over the past Columbus Day weekend my family and I visited my in-laws at their home on Cape Cod. With three young children, finding time to fit in some serious birding can be hard to do. An opportunity presented itself when I took my (then eightmonth-old) son for a drive where he could enjoy his nap, and I could bird Cape Cod Bay from the car at several of the north-facing beaches. My plan was to hit Chapin, Corporation, and Cold Storage beaches in Dennis to watch the seabird migration. If time (read: my son's nap) permitted, I would also check for shorebirds at Gray's Beach in Yarmouthport.

The Dennis beaches were everything I had hoped for as I watched large numbers of scoters (all three species), Common Eiders, and Double-crested Cormorants moving back and forth across the bay. They were joined by lesser numbers of Redbreasted Mergansers, a few Common and Red-throated loons, and a small flock of plunge-diving gannets. After a couple of hours of watching, my son was still asleep, so I headed over to Gray's Beach.

There the flats were exposed and occupied by over 100 Black-bellied Plovers. Additionally, there were several Red Knots, Dunlins, Sanderlings, and Ruddy Turnstones along with a fair number of Greater Yellowlegs. After a short time a lone yellowlegs flew from the flats toward the shoreline, which was quite close to my car, and began to feed. Anyone familiar with either of the yellowlegs species knows that they are very active feeders, moving quickly, jabbing rapidly, and often chasing their prey. However, I had a front row seat to watch this bird feed like no other yellowlegs that I had ever seen before.

As I watched this bird, it leaned its head down and opened its bill until the lower mandible was in the water. It then ran rapidly along the shore searching for prey. Elphick and Tibbits (1998) state, "They will also capture small fish by running toward surface ripples with its bill open and lower jaw submerged, plowing the water." While feeding in this manner, the bird very much resembled a Black Skimmer, albeit without the flight. In fact, when the yellowlegs felt a prey item its head even "jerked back" in a similar fashion to that of a skimmer. At times the bird ran fast enough that a wake

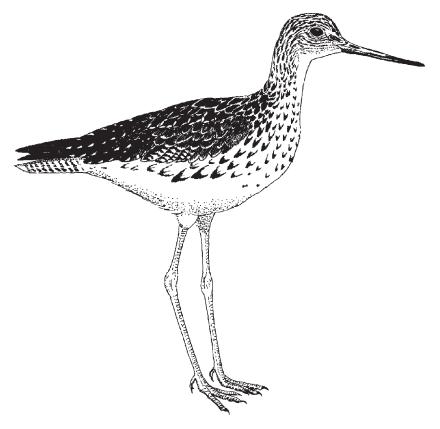
curled up and over its head (Zusi 1968). I observed this bird successfully find prey at least four times in the short time I watched him feeding in this manner. The bird caught three small minnows and what appeared to be a grass shrimp. I enjoyed watching for about ten minutes until the bird "skimmered" around a corner of the marsh grass and out of sight.

I watched thousands of birds in those few hours, but this lone yellowlegs was the highlight of my day. The experience reminded me that even those birds that you see on a regular basis exhibit fascinating behavior worthy of your study, a lesson I can pass on to my sleeping son another day.

References

Zusi, R. 1968. Ploughing for Fish by the Greater Yellowlegs. *The Wilson Bulletin* 80 (4): 491-

Elphick, C. S. and T. L.Tibbits. 1998. Greater Yellowlegs (*Tringa melanoleuca*). In *The Birds of North America*, No. 355. A. Poole and F.Gill, eds. Philadelphia, PA: The Academy of Natural Sciences; Washington, DC: The American Ornithologists' Union.



GREATER YELLOWLEGS BY GEORGE C. WEST