First "Greenland" Dunlin for Ontario and Canada

Bob Curry, Kevin McLaughlin and Bill Crins

On 31 July 1994, Bill Crins and Bob Curry, along with Jim Heslop and John Olmsted, were birding at the southeast corner of Hamilton Harbour in the former Regional Municipality of *Hamilton-Wentworth*, Ontario. At that time, there were some shallow pools on the landfill areas with mud margins that attracted shorebirds and afforded close viewing. We were examining a mixed flock of about 165 shorebirds of 10 species when a Dunlin (*Calidris alpina)* in breeding (alternate) plumage was announced. The very early date made this noteworthy but it took several minutes of searching before we all got onto the bird. The reason Curry passed over the bird several times was because it had essentially no rufous on the dorsal surface and was very small (for a Dunlin). When we got the bird in the scope, we were immediately struck by the lack of dorsal red. Rock Sandpiper (*C. ptilocnemis*) was considered for a moment, but proportions and bare part colours quickly eliminated this possibility. Over the next hour or more, we examined the bird in detail, took notes and sketches, and consulted Hayman et al. (1986) and Jonsson (1992). That evening, Curry phoned McLaughlin, who visited the site on 1 August, and saw and studied the bird.

Description: Notes by Curry

Size and shape: About 20%, at most, larger than adjacent Semipalmated Sandpipers (*C. pusilla*). To me this was a very small Dunlin – I usually perceive them to be one third larger than this. The bill was about as long as the head with only a shallow droop. Many if not most *hudsonia* have a bill 1.5x as long as the head and with a much more sweeping downcurve.

Underparts: The breast was heavily streaked with black. Between the breast and black belly patch there was a slight break. The lower belly and undertail were pure white.

Upperparts: The face, crown and nape were, as shown in the sketch (Figure 1), densely streaked grey-brown. There was a slightly lighter superciliary stripe. In bright light, there was a warm brown hue to the centre of the crown. The back was streaked in the same grey-brown. The tertials and wing coverts were a smooth grey-brown with virtually no lighter margins (worn off?). The most striking pattern on the upperparts was two rows of scapulars (the upper rows were covered by the back feathers). These were chevron-shaped, black-centred feathers with off-white fringes. Close scrutiny revealed that the first (forward) two or three scapular feathers had gold-buff margins. The general impression was that the upperparts were in fact quite like Semipalmated Sandpiper and quite unlike *C. a. hudsonia.*

Description: Notes by Crins

Habits: Observed standing and feeding among Semipalmated Sandpipers and, when flushed, flying low across pond, circling back to same mudflat. No calls heard.

Size and shape: Slim and small for a Dunlin. Body only slightly larger (ca. 20%) than adjacent Semipalmated Sandpipers. Short-necked.

Underparts: Head, breast, belly, undertail coverts, base colour dull white. Breast streaked from chin to black breast patch, but with band of less intense streaking just above black patch. Black breast patch extending back beyond legs on both flanks, but not as far back as legs on chest.

Upperparts: Back, wings, head generally brown in colour; no evidence of rufous anywhere in plumage. First two wing coverts somewhat richer brown than others, but not rufous. Wing coverts with distinct dark-centred chevrons and pale (cream to tan) edges. Tail with white stripe on each side of brown central rectrices. Rump brown (as back).

Wings: Wings as long as tail (not longer), at rest. White wing stripe evident in flight.

Head and Bill: Facial pattern nondescript, with very faint supercilium, streaked, between slightly darker, browner cap and cheek; also slightly darker patch behind eye. Cap brownish, nape only slightly paler brown. Bill relatively straight, with only slight downward curvature.

Bare Parts: All soft parts (eyes, bill, legs) black.

Description: Notes by McLaughlin

Bill: Black, short, about the length of the head, thick at the base and tapering to a thin tip. It was slightly curved at the tip.

Head: Crown had a brownish cast, contrasting to the rest of the head. A small brown patch in the rear auriculars. A brown area at the base of the bill was probably due to staining. Ground colour of the head or at least the side of the head was white with extensive fine dark streaking. A poorly defined eyebrow with thin streaks. Nape seemed grey-brown contrasting to the browner crown. Eye was small and dark.

Upperparts: Mantle had slaty feather centres with grey fringes. All of scapulars had large blackish centres, the upper scapulars with thin whitish fringes, the lower and rear scapulars with broad white fringes creating a very contrasting pattern. Only the forward-most upper scapulars had several feathers with thin rust or tawny fringes. Also noted in one of the hindmost rear scapulars were two gold or rich buff bars in the black centre of the feather. Contrasting to the scapulars were the coverts and tertials which were dull grey-brown with no apparent pale fringes.

Underparts: White base colour. Chin and throat unstreaked (?). Upper breast was heavily and sharply streaked dark with the streaks meeting the belly patch in the centre but not at the side. There was a small gap of white at the front side of the belly patch. The black belly patch was small and solid in the centre and a bit mottled or irregular at the side above the legs. There was an even narrow gap of white at the side of the patch between it and the folded wings. The patch curved down evenly over the breast centre and extended back at the side, ending at the legs. The vent and undertail was white except for three thin dark streaks visible on the lower right flank.

Legs: Black.

Size: Perhaps one quarter larger than Semipalmated Sandpipers. Seemed slenderer than typical *C. a. hudsonia.*

Subspecies of the Dunlin

Of all the sandpipers in the genus *Calidris,* the Dunlin is by far the most morphologically diverse. In fact, the situation with respect to subspecies (= races) is quite confusing. Depending on the author, there are between five (Wenink 1994) and nine (Warnock and Gill 1996) races. Such variation is unusual, as only two of its congeners, Red Knot (*C. canutus*) and Rock Sandpiper, have recognized subspecies (Hayman et al. 1986).

Browning (1977) opined that three races should be recognized as breeding in North America. He recognized *C. a. arcticola* from northern Alaska, *C. a. pacifica* from western Alaska, and *C. a. hudsonia* from northern Canada. This classification was followed by Warnock and Gill (1996). However, analysis of mitochondrial DNA by Wenink (1994) concluded that only two races breed in North America: *C. a. pacifica*, which breeds in coastal Alaska, and *C. a. hudsonia*, which breeds in Arctic Canada. The large familiar rufous-backed sandpiper which some of us remember from our youth as Red-backed Sandpiper is *hudsonia*. See pages 157–158 in Saunders (1947) for a delightful description (and a drawing by Terry Shortt) of an encounter with "red-backs" at Ashbridge's Bay in Toronto. The subspecies *pacifica* winters along the west coast of North America and is, in any case, so similar to our "Red-backed Sandpiper" that it is unlikely even in breeding (alternate) plumage to be distinguishable outside its known range.

Of the races which breed outside the Americas, the two (*C. a. alpina* and *C. a. sakhalina*) which breed in Fennoscandia and Russia (Cramp 1983) are slightly duller in breeding (alternate) plumage and slightly smaller than our *hudsonia* (Hayman et al. 1986) but, again, the differences are so subtle that they would not likely be distinguishable in the field. However, two races, *C. a. arctica* and *C. a. schinzii*, breed in Greenland and are medium distance migrants which winter in Europe and North Africa (Cramp 1983).

From the perspective of this paper, these latter two are the most interesting. Not only are they the closest non-*hudsonia* breeding races to Ontario, but also they are the subspecies most distinctly different in morphology from our *hudsonia*. *C. a. schinzii* breeds as far west as southeast Greenland and Iceland (Cramp 1983). Compared to *C. a. hudsonia*, it is smaller and shorter-billed with the upperpart fringes yellowish-red (Ferns 1981, Hayman et al. 1986). *C. a. arctica* breeds in northeast Greenland (Cramp 1983) and is the smallest and shortest-billed race with pale reddish-yellow fringes above (Ferns 1981; Hayman et al. 1986). Colour illustrations of most of the recognized races of Dunlin can be found on Plate 84 in Hayman et al. (1986).

Discussion

There is no doubt that the Hamilton Harbour bird was not of

the expected *hudsonia* subspecies. The small size and relatively short, straight bill do not fit *hudsonia*. Although the bird was in worn breeding plumage, the feather fringes remaining were variously described as "tawny", "cream", "tan", and "gold-buff". None of these colours fits the rich rufous of *hudsonia*. Finally, the black breast streaks on *hudsonia* extend to the black belly patch (Ferns 1981, Hayman et al. 1986), whereas the sketch (Figure 1) and descriptions clearly note that this was not the case with the Hamilton bird.

The two subspecies to which the descriptions come closest are *C. a. schinzii* and *C. a. arctica*. Excellent in-hand colour photographs of the dorsal view of the breeding (definitive alternate) plumage of *C. a. schinzii*, *C. a. arctica* and *C. a. alpina* can be found in Ferns and Green (1979). The vast majority of North American populations molt near the breeding grounds, whereas Eurasian populations, as a rule, molt within their wintering areas (Cramp 1983). Nevertheless, a very few adult *hudsonia* Dunlins do migrate to southern Ontario to undergo their prebasic molt (Alan Wormington, pers. comm.). Such birds sometimes remain for an extended period of time at one location. For instance, four alternate plumaged adults lingered at Hamilton Harbour in 1961 (North 1961), and another remained at Grimsby Sewage Lagoons, *Niagara*, in 2002 (Dobos

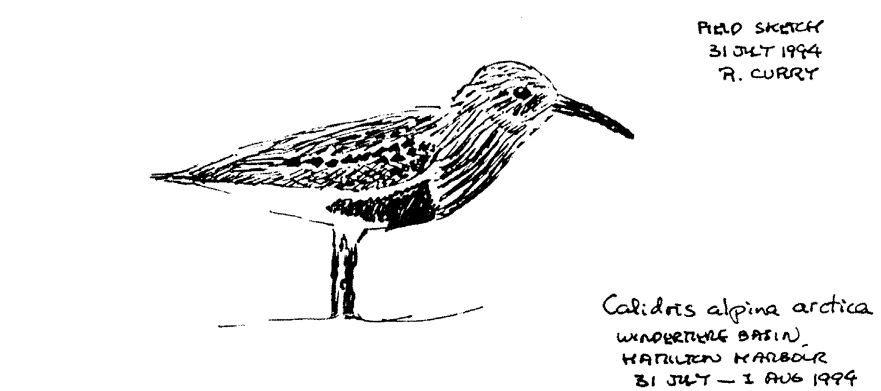

Figure 1: Field sketch of "Greenland" Dunlin at Hamilton Harbour, Ontario on 31 July 1994. Drawing by *Bob Curry*.

2002a, 2002b). The 1994 "Greenland" Dunlin appeared on 31 July at a site that was being monitored almost daily and, presumably, left two days later at the latest.

As noted by McLaughlin, *hudsonia* Dunlins at the end of July differ somewhat from fresh May birds, and would be strikingly different from the 1994 Hamilton Harbour bird. Due to abrasion, the scapulars would lose any pale fringing and become a dark red, with some black mixed in, and the belly patch would perhaps become a more intense black. As evidenced by the Grimsby bird in the summer of 2002, prebasic molt in *hudsonia* would commence by about the third week of August. Thus, one can visualize the contrast in appearance between the "Greenland" Dunlin and a *hudsonia*, with both birds being in worn alternate plumage by 31 July.

Curry submitted our descriptions to shorebird expert, John H. Marchant, who is co-author of the definitive shorebird guide, *Shorebirds: An Identification Guide to the Waders of the World*. The key points of his response were as follows (Marchant, pers. comm.): "This was a Dunlin at an unexpected season that also was surprisingly dull above, small and short-billed. There is a lot to be said in favour of this being *arctica*. This is the smallest and shortest-billed of the races on average, and also the dullest above. Dunlin is a short-hop migrant not much prone to vagrancy but, since *arctica* breed in east Greenland, a vagrant in Ontario would not be outrageously off-course. It would be normal for an adult *arctica* to be well south of the breeding grounds at this season."...."A bird like this would not be identified confidently as *arctica* in Britain, however. ... In autumn, when adults return to Britain still in breeding plumage, *schinzii* and *arctica* are both worn and faded considerably, but to variable extents, and no attempt would generally be made to separate them."...."To me, this bird could be either of the two races *arctica* and *schinzii*, although the former is more likely. Males of either of these two races would be surprisingly small and short-billed to observers used to seeing *hudsonia*."

While researching Dunlin specimens at the Royal Ontario Museum (ROM), Curry made an interesting observation. There are no specimens of Dunlin in the collection that are labeled as *C. a. arctica*. However, four specimens collected about mid-July 1992 at sea level in Iceland (all without bills!) and labeled *C. a. schinzii* are, in Curry's opinion, misidentified. These look quite different from *C. a. schinzii* and appear to be *C. a. arctica*. Perhaps these birds were called *C. a. schinzii* because this is the subspecies known to breed on Iceland. However, these birds were collected at sea level where one might expect to find *C. a. arctica* from northeast Greenland en route to their Eastern Hemisphere wintering grounds.

Non-*hudsonia* Dunlins in North America

There is just a handful of non-*hudsonia* Dunlin records from eastern North America. Griscom (1937) documented two non-North American subspecies of Dunlin from Massachusetts: 1. *C. a. arctica*, Monomoy, 11 August 1900, an adult male in worn breeding plumage. In examining this bird (a specimen), Griscom noted its very small dimensions, upperparts devoid of any rusty tone, and that it agreed minutely with two early August specimens of *C. a. arctica* from East Greenland. He further noted that it was easily separable from specimens of *C. a. schinzii* in comparable plumage. In so far as description and date of occurrence are concerned, this bird is very similar to the Ontario bird under discussion herein. 2. *C. a. alpina*, Monomoy, 8-16 August 1936. It is not clear that this bird collected by Griscom is the subspecies claimed. For instance, he described it as lacking cinnamon tone on very dark upperparts, which is not a character of this race. Rather, *C. a. alpina* is quite rufous above, although not so much so as *C. a. hudsonia*. Even at this late date, *C. a. alpina* ought to have had some remaining unworn rufous feather edges; see Plate 84 on page 205 in Hayman et al. (1986). Moreover, the bird was in some type of confused molt state as a result of disease. Finally, the bill length of 37.2 mm is beyond the maximum for female *C. a. alpina* of 36 mm listed in Cramp (1983). Nonetheless, it should be noted that Veit and Petersen (1993) included both these subspecies in *Birds of Massachusetts*.

Bull (1974) mentioned an Old World subspecies taken in 1892 on Long Island, but as the specimen was lost he recognized no such subspecies in *Birds of New York State*. However, Davis (1983) discussed an early September bird at Jamaica Bay, New York, which, based on size and some plumage characters, he suggested was *C. a. schinzii*. The description is very brief.

The AOU Check-list, Fifth Edition (American Ornithologists' Union 1957), which included all described subspecies of North American birds, notes another *C. a. alpina* from Sullivan Island, South Carolina. It also, incidentally, lists two records of *C. a. pacifica* from the Gaspé and Newfoundland that surely were based on morphometrics of specimens from the era of extensive collecting.

Shanahan (ONTBIRDS, 22 October 2000) reported observing a small, short-billed Dunlin on 22 October 2000 at Presqu'ile Provincial Park, Ontario. As he suggested, this was quite possibly one of the two western "Palearctic" races under discussion. Only in-hand measurements could determine the identity of a bird in winter (basic) plumage.

It is possible that there are other documented sightings unknown to the authors. A check with some authorities revealed no others, e.g.,

Paul Lehman knew of none, nor did Angus Wilson. Thus, the present record is one of very few non-*hudsonia* Dunlin documentations for eastern North America.

Documentation of this observation was accepted by the Ontario Bird Records Committee as "Palearctic" Dunlin, *Calidris alpina arctica/schinzii*, (Dobos 1998). To our knowledge, it represents the first documented record of a "Greenland" Dunlin for Ontario and Canada. We utilize the term "Greenland" rather than "Palearctic" Dunlin for the *arctica* and *schinzii* subspecies since they breed in Greenland, and it is not part of the Palearctic.

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PUBLICATION NOTICE

Sibley's Birding Basics. 2002. By David Allen Sibley. Alfred A. Knopf, New York. Softcover, 154 pages. $23.95. ISBN 0-375-70966-5.

Following on his very popular *Guide to Birds* (2000) and *Guide to Bird Life & Behavior* (2001), David Sibley has now put together an extensive overview of what birders need to know to more effectively identify birds. Bird identification by experts involves a greater understanding of what is being seen and more knowledge of what should be seen, as much as heightened senses of sight and hearing, according to Sibley. He contends that most birds are easily identified if one knows how to "gather and weigh the evidence". *Birding Basics* is "about interpreting what you see and hear in order to make better judgements".

Chapter headings and their featured concepts include: Getting Started (seeing details and patterns, experience and learning from mistakes, equipment, field guides, further reading); Finding Birds (field skills, pishing, going where the birds are, keeping records); The Challenges of Bird Identification (sorting differences and similarities, field marks, relative and proportional differences, gestalt, partial cues); Misidentification ("group hysteria", judging size and proportions, color perception, abnormal birds, escapes); Taxonomy (bird names, the Species Concept); Using Behavioral Clues (foraging, flight, seasonal changes); Voice (structure of bird vocalizations, sonograms, vocalization types); Understanding Feathers (types of feathers, feather groups, topography and terminology); Feather Arrangement and Color Patterns; Structure of Tail and Wings; Bare Parts; Molt (four basic patterns of feather replacement, comparison of Life Year and Humphrey-Parkes systems of molt terminology); Feather Wear (variation due to wear and fading); Age Variation; and Ethics and Conservation.

This book would be interesting, instructive and an important ongoing reference for every Ontario birder, from beginner to advanced. Although novices may find the coverage of some topics such as molt to be "heavy going", there is much here of great value to everyone who enjoys finding and identifying birds. *Ron Tozer*