

## Gleanings from the Northumberland Bird Database

### SUMMER SHOREBIRDS

*By Clive E. Goodwin*

On June 25 last two Ruddy Turnstones turned up in Cobourg harbour. Apparently they were in high breeding plumage [technically, the 'alternate' plumage], and it seems a debate ensued as to whether they were heading north or south. It's not unusual for shorebirds to appear in the period between late June and late July, and it's always a matter of speculation as to where they are going, and indeed as to whether they are really going anywhere at all. In this case the database seemed to suggest that the birds were probably still northbound, but I thought it might be interesting to look at shorebird migration records as a whole, and see whether there was any pattern to these movements.

Why do shorebirds move so late? As a group they have one of the latest migration periods, with birds still moving in numbers in early June, and yet their return flight starts as early as late July. Most of the shorebirds moving in late May are high arctic breeders, and the late spring movement simply reflects the severity of the arctic climate. Certainly in former years their breeding grounds could still be snowbound in late May, so the species' strategy would be to migrate rapidly and arrive in the north as winter finally released its hold. Recent shorebird tracking shows that these birds are capable long sustained flights over relatively short time periods.

Once in the north the breeding season is very short, so usually the birds will lay only a single brood, rather infrequently attempting re-nesting in the event of failure. Last year on Akimiski Island in James Bay, well south of the destination of most of the latest migrants, it was reported that Ken Abraham's research team found Semipalmated Plovers re-nesting after their first nests had been lost to a high tide on June 8. The first young hatched on June 24, but the high arctic migrants had been still moving through there in mid-month. This gives a sense of the tight schedules these birds are forced to maintain, and it means is that if a nest fails its owner may start its return journey at once - appearing in the south in July.

Another factor in shorebird movements is the non-breeders, usually first or second year birds, that make part or all of the journey to the nesting grounds, but which do not nest. Some first-years spend our summer on the wintering grounds, but some do move north, although research has shown that not all make the full journey.

Even those birds that do nest successfully can leave quite soon after the eggs hatch – shorebird incubation can take about three weeks, and the downy young can often fend for themselves in two weeks or so, and so a nest initiated in early June could have independent young by mid-July. This should mean that we see our shorebirds in two 'waves', the adults first, followed some time later by the young – and this, of course, is exactly what we do see. Fortunately [or perhaps not, for those trying to sort out one species of shorebird from another], the alternate plumages are often quite different from

those the birds develop over the rest of the year [called the ‘basic plumage’], and the young usually have different plumages again, with those first- and second-years often being intermediate in their appearance. Shorebird identification has its challenges!

So what about these late June-early July birds? What the database can tell us is how often birds are seen in this interval, and just how much time is involved. I simply looked at the commonest migrants: these were birds for which we had essentially daily records through May and July, and in each case I looked for the ‘gap’ between the spring and fall records to see where it occurred, how long it was, and how many birds were seen in this interval. Consequently not all the species listed below are high arctic breeders:

Species	Almost daily to:	Intervening records	Almost daily from:	Total recs.
Black-bellied Plover	6/30	7/3, 7/21, 7/25	7/28	1868
Semipalmated P.	7/2	7/4 [2], 7/5, 7/8, 7/9	7/12	1932
Lesser Yellowlegs	6/5	None	6/17	1072
Greater Yellowlegs	6/6	None	6/29	825
Ruddy Turnstone	6/22	6/25, 6/29, 7/1[2], 7/4, 7/8	7/12	1112
Sanderling	6/15	6/22[2], 6/29, 7/1, 7/2, 7/8	7/11	1758
Least Sandpiper	6/6	6/7[2], 6/9, 6/13, 6/15, 6/22	6/25	1674
Semipalmated S.	6/26	6/30, 7/1, 7/3, 7/4	7/6	1721
Dunlin	7/22	7/27, 8/8	8/12	1892
Short-billed Dowitcher	6/9	6/19, 6/20, 6/30	7/3	673

A number of interesting points arise. All species showed a separation of 10 days to a month between the periods when birds were fairly consistently present. One or two showed smaller gaps as well; the most pronounced being with Black-bellied Plover, where there was one of 2 days between June 17 and 20, and of 3 between June 21 and 25, suggesting movement was tapering off in that period. The pattern was not confined to high arctic nesters: more southerly breeders, like the two yellowlegs and dowitcher, showed similar, but earlier, patterns. Dunlin, the only migrant species that in our area that molts before migrating, is much later than the rest.

The ‘gaps’ for all species include very few records each: they range from none at all to 6, and at most represent under a half percent of the total records in the database for any species. So sightings of birds in these periods are very rare. Does it follow that on a species by species basis, most birds can be assigned a flight direction if they occur outside the short periods when we lack daily records? Perhaps so, but it will always be an informed guess, based to a large extent on the plumage of the individual bird.

Our data on Dunlin suggest a different interpretation, at least for this one species. Spring Dunlin movement follows the typical high-arctic spring migration pattern, but unlike the other species there is a long period before the fall movement seems to begin. In late May and early June large numbers of birds pour through, all in their very distinctive breeding plumage. By June 5 it is all over: we only have 4 records of flocks of more than 10 birds after that time, yet we have reports of singles daily to July 22. Unfortunately we only have plumage data on a very small number of records for any shorebird, but for Dunlin

we can say with some confidence that few if any of those singles were in high breeding plumage. In fact, I cannot remember ever seeing any such birds after about mid-June. Those later birds were almost certainly non-breeders, doubtless with plumages to match. And they could just as well be wandering about the Great Lakes as heading further north.

Which brings us back to our turnstones. They were in a 'gap', but their plumage implied breeding, and we can probably feel fairly confident they were still headed north. As for other species, some will also appear to be in breeding plumage, either fresh or worn. But some birds will appear with more ambiguous plumages, and it could well be that some at least of these will be like the later June Dunlin, younger birds, and headed nowhere in particular.

P.S. After I had written this article, on July 21, Ken Niles found another turnstone in Cobourg harbour. This one is 9 days into the fall period. And its plumage? Ken described it as "the battered remains of breeding plumage" the latter still visible, but "seriously tattered and worn". Which is exactly what we might expect.

[The second instalment of the global warming article will now appear – I hope - in October]