

"RARE" SANDERLINGS VISIT MASSACHUSETTS

by Blair Nikula, Chatham

July 24, 1984, began like many other summer days on north Monomoy Island. A hazy sun had burned through the dawn's chill, and a docile sou'westerly breeze was riffing the restless waters as Denver Holt and I began to work the flats on the north end. Hordes of migrant shorebirds had begun to mass over the invertebrate-laden expanses, refueling for flights that would carry most of them nonstop for thousands of miles farther south.

Our purpose was to conduct another in a series of censuses I have been doing on Monomoy for the past several years as part of the International Shorebird Survey. However, any trip to Monomoy abounds with anticipation, and an early summer rife with avian waifs and oddities had unleashed our imaginations and heightened our expectations, perhaps unrealistically, for even Monomoy has its slow periods when its vagrant potential is temporarily exhausted.

Among the first birds we encountered were several small groups of roosting Sanderlings, most still wearing their breeding hoods of arctic umber. The image of a Curlew Sandpiper in the same spot just two days before was playing through my mind when Denver called out, "Here's a color-banded Sanderling." Banded, indeed! Bedizened would be a better description! The right leg bore a redband, and the left sported a green band above which was a yellow flag. Although I had been expecting to see a couple such birds during the course of the season, I was pleasantly stunned when, with the next hour, two additional color-marked "beach-birds" paraded their finery before us.

Sanderlings (*Calidris alba*) are one of the most widespread birds in the world, occurring along the coasts of every continent except Antarctica. Their circumpolar breeding range extends into the northernmost reaches of the Arctic, while during the winter season they can be found throughout the southern hemisphere south to the tips of South America, Africa, and Australia, and as far north as British Columbia, New England, the British Isles, and Japan (Cramp et al., 1983) - a wintering range that spans nearly 120 degrees of latitude and, in extent, is unsurpassed in the avian world.

It appears that different populations of Sanderlings have evolved widely varying migration patterns and wintering strategies. Some conduct migrations that are among the longest in the world and subject the birds to tremendous hazards and physiological demands en route but take them to wintering areas in southerly latitudes where there seems to be an abundance of food and chances for survival are good. Others, however, "choose" to migrate relatively short, safe distances but must, in turn, face harsh northern winters where food seems limited, the energy demands are great, and their survival is a day-to-day struggle. How is it that different groups or populations within the same species have evolved such radically differing strategies, and what are the advantages and disadvantages to the individuals involved?

At the forefront of those trying to answer such questions is Dr. J. P. Myers of The Academy of Natural Sciences in Philadelphia who, for the past several years, has been traversing the western hemisphere in an attempt to learn more about what Sanderlings are up to and why (Hawkins, 1983). Initially interested primarily in their territorial interactions on the feeding grounds, Dr. Myers and his colleagues have more recently begun to examine the broader issues of their migration patterns and wintering strategies.

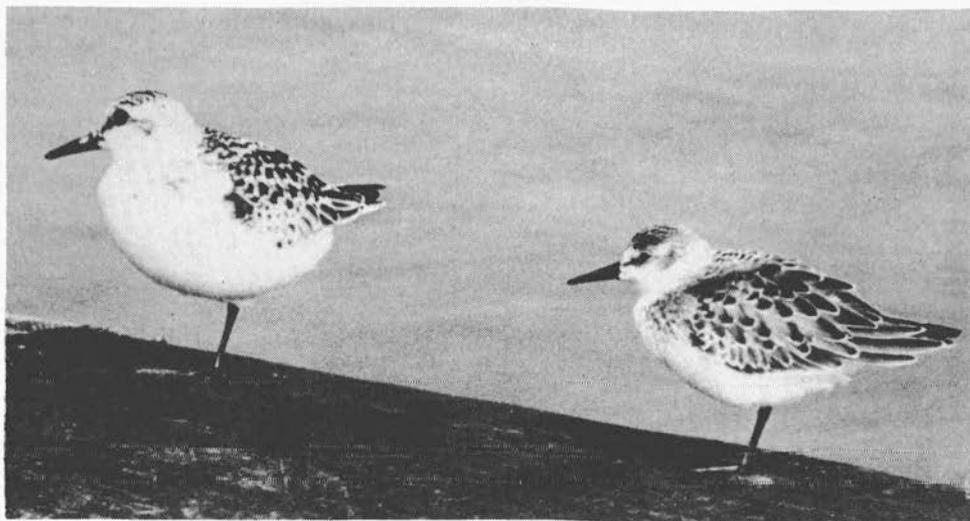
In 1982, Dr. Myers and several other scientists working on shorebirds in the Americas initiated the Pan American Shorebird Program (P.A.S.P.). This is a collaborative research project whose goals are to coordinate banding efforts among ornithologists studying shorebirds in the western hemisphere and, ultimately, to provide the information necessary for the conservation of shorebirds at their migratory stopovers and wintering grounds (Myers et al., in press). Environmental organizations on both continents are involved in the P.A.S.P.: the World Wildlife Fund - U.S., Manomet Bird Observatory, International Council for Bird Preservation, U.S. Fish and Wildlife Service, and the Canadian Wildlife Service, to name just a few.

In order to learn more about the migration routes Sanderlings use, Dr. Myers and his colleagues initiated a color-marking project on the coasts of Peru and Chile, site of some of the largest known wintering concentrations of this species, with the hope that some of the marked birds would be sighted somewhere en route to or from their arctic breeding grounds. As a result of their efforts, over 2600 Sanderlings were trapped and marked during the 1982-83 and 1983-84 seasons (Myers et al., 1984).

The first sighting of one of these birds in North America occurred in May of 1983 in Delaware Bay and was followed by eight additional reports during the following fall: seven from the Atlantic coast and one inland in Michigan (Anon. 1984a). These initial reports were surprising, for here were birds from the Pacific coast of South America appearing on the Atlantic coast of North America!

During 1984, a larger number of marked birds in the pool as well as an increase in publicity and search efforts in key areas resulted in a dramatic rise in the number of sightings (Myers et al., 1984). In the spring several birds were seen along the Oregon/Washington coast, several in Texas, and one each in Delaware Bay, North Dakota, and Manitoba (Anon. 1984b). In contrast, during the fall there were over twenty individuals spotted on the Atlantic coast from Massachusetts south to North Carolina, only one in Texas, and none on the Pacific coast.

At this point, the geographical and seasonal distribution of sightings clearly indicates that the bulk of the Sanderlings wintering in Peru and Chile follow one of two large, clockwise migration routes. In the spring some of the birds follow the Pacific coast north to the breeding grounds, while others cross over Central America and take an overland route through central North America. In the fall, however, it appears that the great majority of the birds head southeast from the arctic to the Atlantic coast, thence southward, presumably across Central America, back to the Pacific wintering grounds. Although large numbers of Sanderlings occur on the Atlantic coast in spring, particularly in Delaware Bay



Sanderling (left) and Semipalmated Sandpiper (right)

*Photo by Robert Starkins
Courtesy of MAS*

(Dunne et al., 1982), these birds do not for the most part originate from Peru or Chile but are from other wintering areas, most likely coastal Brazil (Myers et al., 1984).

As in many shorebirds, it seems that Sanderling migration consists of long, nonstop flights of thirty-five to fifty or more hours, interspersed with layovers of ten to twenty days at key refueling areas where food is abundant and the birds are able to greatly increase their fat reserves prior to the next flight. Important known staging areas for migrant Sanderlings are found along the Pacific coast from the Columbia River mouth in Oregon north to Grays Harbor in Washington, the central coast of Texas, southern New England, and the mid-Atlantic coast from Delaware Bay south to North Carolina. Obviously the protection of these areas is vital to the survival of the species (Myers, 1983).

Massachusetts' entry into the P.A.S.P. Sanderling sweepstakes occurred on September 3, 1983, when Wayne Petersen found a Peruvian-marked bird on Monomoy. Two weeks later, the writer spotted a probable Chilean Sanderling in the same area. In 1984, following the late July episode already described, there was a rash of sightings from Monomoy, extending into mid-September and involving no less than ten individuals. Additionally, one bird was seen on New Island, Orleans and two on Duxbury Beach in early August.

Two of the local sightings, both involving individually-marked birds, proved to be particularly exciting. One bird, initially banded in Peru, was seen on North Padre Island, Texas, in April of 1984 and then twice on Monomoy in late August and early September. The bird seen on New Island

bore a green flag, indicating a U.S. banding location, and was initially presumed to be one of 150 birds captured in Delaware Bay during the preceding spring but in fact proved to be a bird marked on the coast of Oregon in May, 1984 (J. P. Myers, personal communication). Thus, the first conclusive evidence of both circular migration routes was provided by Sanderlings seen in Massachusetts! Imagine seeing a bird here that was known to have been in Oregon a mere two months earlier and in the interim, presumably, had bred somewhere near or beyond the Arctic Circle! Such peregrinations by almost any other species would be considered vagrancy in the extreme yet, for Sanderlings, are likely an annual and very routine event.

Shorebirds captured under the P.A.S.P. are marked with one or, in some cases, two colored flags. The flags are simply color-bands with a one-quarter inch extension. The color of the flag indicates the country in which the bird was banded. For example, yellow is used in Peru, red in Chile, and dark green in the United States. In addition, many birds receive one or more color-bands which variously identify the year of banding, the banding location within a country or, in many cases, allow for the identification of individual birds (Myers et al., 1983).

Banding efforts are continuing in both North and South America and the pool of marked birds is growing, providing observers with a good chance of finding these individuals in future seasons. Anyone spotting a color-marked bird should first carefully determine the color and location of the flag. Although marked birds can usually be detected at considerable distances, the flag extension can be difficult to discern if it is pointing away from or toward the observer, and it is often necessary to shift the viewing angle to make an accurate determination. After locating the flag, the color and position (i.e., left or right leg, above or below the joint - see figure 1) of other bands, if present, should be noted. Reports of color-marked shorebirds, even if incomplete, should be sent to the Pan American Shorebird Program, The Academy of Natural Sciences, 19th and The Parkway, Philadelphia, PA 19103. They would also like to know if you see flocks of Sanderlings that have no banded birds. Negative data is equally valuable. The observer is advised of the banding date and location of the bird(s) reported.

Although Sanderlings have been the focus of most P.A.S.P. activity and constitute the bulk of birds captured to date, no less than twenty additional species of Nearctic shorebirds have been marked, and observers should watch for bands on any species seen in this area. Last summer on Monomoy, a Peruvian-marked Semipalmated Sandpiper was seen within a few feet of two Peruvian Sanderlings! Red Knots, marked by Brian Harrington and his colleagues at the Manomet Bird Observatory, can be found quite easily in locations where the species congregates in Massachusetts, such as Third Cliff in Scituate, Plymouth Beach, Monomoy and New Island. Most of these are birds that were rocket-netted in Scituate and carry dark green flags, but some were marked in Brazil (dark blue flags), and a few individuals have even been handled on both continents! Banded Red Knots should be reported directly to the Manomet Bird Observatory, Manomet, MA 02345.

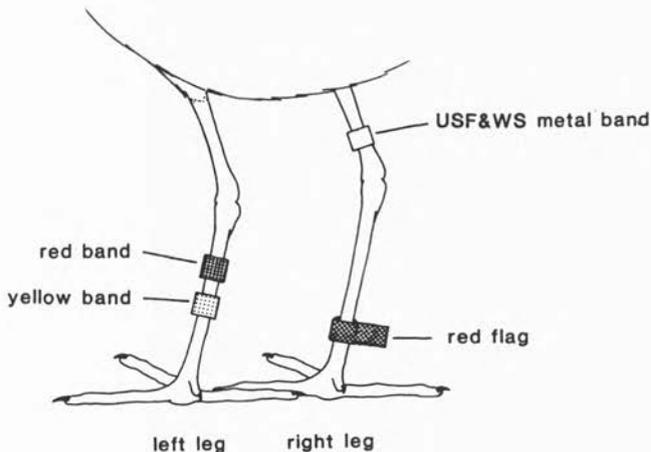


Figure 1. An example of a color-marked bird seen from the rear. Reprinted from Wader Study Group Bulletin, No. 38: 31

Also in Massachusetts, a number of Piping Plovers have been color-marked on Sandy Neck during the past two summers in connection with a long-term research project on that species' breeding ecology. Some of these birds, which have color-bands but no flags, are showing up at other localities and if seen, should be reported to Eric Strauss, Biology Department, Tufts University, Medford, MA 02155.

The Pan American Shorebird Program is a first-rate example of how amateurs and professionals can work together to advance our ornithological knowledge. Indeed, the success of the program is closely tied to the contributions of nonprofessionals throughout the Americas, and we in southern New England are particularly well-situated to assist. While the "lure of the list" dominates the activities of many birders, eventually many of us reach the point where our avian interests transcend a mere listing of species, a point where we yearn to know something more about a bird than simply its name and numbers. These heightened interests - Birding with a Purpose as Frances Hamerstrom has so aptly put it in the title of her recent book - and the listing game are by no means mutually exclusive, however. Indeed, I now have a new list: color-marked Sanderlings, and the prospects of adding to this list and of perhaps even seeing some of my old birds back again in the future have provided me with an anticipation and fascination equivalent to any I have previously experienced.

The year past on Monomoy was remarkable in many ways, providing an abundance of invigorating memories. Yet, when I reflect upon 1984, it is not the misguided vagrants, the Eurasian and Long-billed curlews, the

Bar-tailed Godwit, or the Scissor-tailed Flycatcher that first come to mind. Nor is it the pioneering Black-headed Gulls or Black Skimmers, the gaudy black Ruff, or even the magnificent gray Gyrfalcon that provide the most lasting memories. Rather, I most remember a small sandpiper that is among the most common and widespread birds on our coast and one that I have always taken for granted, a bird barely larger than a sparrow that annually traverses the hemisphere and performs remarkable physiological feats, a species that promises, through the efforts of Peter Myers and others, to answer some of the many ornithological riddles that continue to tantalize us.

Though they have passed before me by the tens of thousands in my lifetime, only recently have I begun to see Sanderlings. I invite you to see with me next summer. The game plan is simple - just hit the beaches and check out some legs!

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