



NORTH AMERICAN SECTION No. 7

Editor

Dr. R.I.G. Morrison, Canadian Wildlife Service, 1725 Woodward Drive, Ottawa, Ontario, Canada. K1A 0E7. (613)-998-4693.

Western Region Editor

Dr. J.P. Myers, Museum of Vertebrate Zoology, 2593 Life Sciences Building, University of California, Berkeley, California 94720, U.S.A. (415)-642-2893.

ANNOUNCEMENTS

Shorebird Symposium

The North American Section of the Wader Study Group hopes to hold a 2-3 day Symposium on the biology and conservation of shorebirds in 1982 (spring or fall) in the Washington, D.C., area. The decision to proceed with arrangements will depend on a sufficiently strong expression of interest by biologists and other interested parties. If you are interested in such a meeting and would probably be able to participate or attend, please contact Marshall A. Howe, Migratory Bird and Habitat Research Laboratory, Laurel, Maryland 20811, U.S.A. (301)-776-4880, as soon as possible.

A.O.U. Brewster Memorial Award

At its meeting in Fort Collins, Colorado, in August 1980, the American Ornithologists' Union presented Frank A. Pitelka with the Brewster Memorial Award for 1980 for his work on arctic ecology and studies of shorebirds.

Colour-marking and surveys

Members are referred to the last Bulletin, No. 29, August 1980, for announcements concerning current colour-marking and survey schemes involving shorebirds. Anyone wishing to have announcements made for such projects should contact the Editor.

SANDERLINGS *Calidris alba* AT BODEGA BAY: FACTS, INFERENCES AND SHAMELESS SPECULATIONS

by J.P. Myers

In the winter around Bodega Bay, California, Sanderlings *Calidris alba* vary their spacing behaviour from persistent territorial defence to tight flocking. At times, the entire length of Salmon Creek Beach (Figure 1) is occupied by 100 or more territorial birds, each defending its own 40+ m of sandy beach. Yet at other times there is no sign of territoriality throughout the Bodega Bay area. Since 1974 our research group at the Bodega Marine Laboratory has studied the ecological and behavioural bases of this variability (see Myers et al. 1979a,b, 1980a, Connors et al. 1981). Our goal, ultimately, is to unravel the ecological factors promoting such remarkable behavioural diversity. At the same time, we are concerned with building a solid empirical appreciation for the ecology of waders on their wintering ground - both in relation to how this figures in population regulation and to the evolution of species' adaptations. Our focus has led us, necessarily, beyond the immediate territoriality/flocking issue to questions concerning Sanderling movements within and away from the Bodega Bay area, foraging tactics, and flock cohesiveness, as well as studies on prey availability and energetics.

I shall discuss these topics here in smorgasbord style, outlining for each question where our research is going and why it has taken that course. My intent is neither to present a final, definitive summary nor to duplicate material that we have already published. I hope instead to infuse the discussion with a considerable measure of speculation.

Background: annual cycle and survivorship

Sanderlings inhabit the Bodega Bay area from July to May, but are most common between September and April (Figure 2). Members of the local wintering population begin to reappear during the last two weeks of July. We know this because among the earliest arrivals are birds colour-ringed at Bodega Bay during prior years, individuals that remain in the area for the duration of the season.

The juvenile influx peaks during mid and late September, by which time much of the adult population has returned. Juveniles rarely appear before the end of August. As with the adults, among the first of the arriving juveniles are birds that will remain at Bodega Bay for the rest of the year (based on colour-ringing). In neither age class do we see an indication of a large fall transient population.

The combined forces of adults and juveniles push the local Sanderling population to between 500 and 700 birds by early October (Fig. 2). This total remains relatively stable through fall and early winter, but begins to decline by February. In midwinter this represents approximately 25% of the Sanderlings wintering on 55 km of beach

