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Abstracts

FEATURE ARTICLES

RESIDENCY AND MOVEMENT PATTERNS OF WINTERING DUNLIN IN THE WILLAMETTE VALLEY OF OREGON

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Abstract. In the winters of 1998–99 and 1999–2000, we tracked 67 radio-marked Dunlin (*Calidris alpina*) throughout the complex agricultural landscape of the Willamette Valley of Oregon. Individual birds were tracked across 8-week sampling periods and indicated a high degree of regional fidelity throughout the three winter sampling periods. Birds exhibited varied degrees of fidelity to specific wetland sites and were detected at an average of nine different sites. Distances traveled within the region were extensive and greatest during late winter. Females ranged farther from capture sites than males, and movement from capture sites for all birds was greatest during late winter. Mean home-range size (95% minimum convex polygons) of birds was $258.2 \pm 44.8 \text{ km}^2$ (SE) and was greatest during late winter. Diurnal roosts were identified as centers of activities and daily movements were most pronounced during crepuscular periods. These data represent the most extensive documentation of winter movements for a shorebird at an inland site. Findings indicate Dunlin were winter residents, and extensive local movements suggest a high degree of functional connectivity of habitats.

Key words: *Calidris alpina*, *connectivity*, *Dunlin*, *home range*, *movements*, *nonbreeding*, *Willamette Valley*.