## DIPPERS IN MARINE HABITATS IN WASHINGTON

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At about 0930 on 19 June 1977 we observed a Dipper (Cinclus mexicanus) on the north side of Castle Rock, located near the south end of Lopez Island, Puget Sound, San Juan County, Washington. The bird was hopping and flying along the rocks just above the water level. We were able to observe this bird for about 2 minutes before losing sight of it. We did not observe feeding behavior by this bird. However, on 28 July 1977, we observed a Dipper feeding on beach hoppers (Orchestia traskiana) stirred up by construction activity along Rosario Beach, Fidalgo Island, in Skagit County. This bird appeared quite tame and approached human activity within a few meters

Miller et al. (1935) did not include this species in their listing of the birds of the San Juan Islands. Dawson (1909) noted that the Dipper "retires to lower levels, even rarely, to sea coast in winter," and Jewett (1953) wrote that this bird is a resident in Washington "from near sea level to timber line." However, we can find no record of Dippers frequenting coastal areas during the summer months, or of shoreline feeding activities such as we observed (e.g. see also Kitchen 1934, Larrison 1942, Wahl and Paulson 1974). Gabrielson and Lincoln (1959) indicated that Dippers are found regularly from Unimak Island to Unalaska Island in the Aleutians, and on all the major islands of southeastern Alaska. But again no mention is made of the presence of these birds in a marine habitat.

Vader (1971), however, observed European Dippers (Cinclus cinclus) feeding on marine invertebrates in the brackish waters of a fjord in western Norway in October. Also, Bannerman noted that European Dippers frequent tidal estuaries in the winter and that during severe frosts they can be found along the seashore. Our observations suggest that North American Dippers, like their European counterparts, are opportunists capable of exploiting the marine habitat for feeding purposes. Additional observations along the Northwest coast should be made to determine better the nature and extent of this exploitation.

These observations were made while we were on the summer faculty of the Walla Walla College Marine Station, Anacortes, Washington.

## LITERATURE CITED

Bannerman, D.A. 1954. The birds of the British Isles. Vol. 3. Oliver and Boyd, Edinburg.

Dawson, W.L. 1909. The birds of Washington. Vol. 1. Occidental Publ. Co., Seattle. Gabrielson, I.N. and F.C. Lincoln. 1959. The birds of Alaska. Wildl. Manage. Inst., Washington, D.C.

Jewett, S.G. 1953. Birds of Washington State. Univ. Washington Press, Seattle.

Kitchen, E.A. 1934. Distributional check-list of the birds of the state of Washington. Pac. Northwest Bird and Mammal Soc., Northwest Fauna Ser. No. 1.

Larrison, E.L. 1942. A field guide to the birds of the Seattle area. Seattle Audubon Soc., Seattle.

Miller, R.C., E.D. Lumley and F.S. Hall. 1935. Birds of the San Juan Islands, Washington. Murrelet 16:51-64.

Vader, W. 1971. Dippers feeding on marine invertebrates. Brit. Birds 64:456-458.Wahl, T.R. and D.R. Paulson. 1974. A guide to bird finding in Washington. Whatcom Mus., Bellingham, WA.