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***Caprimulgus indicus*, *Eurynorhynchus pygmeus*, *Otus scops*, and
Limicola falcinellus in the Aleutian Islands, Alaska**

ROBERT H. DAY

Division of Life Sciences, University of Alaska, Fairbanks, Alaska 99701 USA

ERIC P. KNUDTSON

P.O. Box 81109, College, Alaska 99708 USA

DENNIS W. WOOLINGTON

*Wildlife Research Field Station, Humboldt State University,
Arcata, California 95521 USA*

AND

ROBERT P. SCHULMEISTER

*Aleutian Islands National Wildlife Refuge, P.O. Box 5251,
Adak, Alaska 99695 USA*

The remains of a Jungle Nightjar, *Caprimulgus indicus* (UAM 3585, female by plumage, wing flat 216 mm), were found above the high tide mark on the beach of Buldir Island (52°23'N 175°56'E) on 31 May 1977. The specimen was identified as *C. i. jotaka* by Daniel D. Gibson, University of Alaska Museum. The species breeds from Transbaicalia to China and Japan and south to India and Ceylon; this northern subspecies breeds from Transbaicalia as far east as Amurland and Hokkaido, Japan, and is the only migratory race. It has straggled to Sakhalin and the southern Kuriles (Vaurie 1965, The birds of the palearctic fauna. Non-Passeriformes. London, H.F. & G. Witherby, Ltd. pp. 637-638). This is the first North American record of the species.

An adult female Spoon-bill Sandpiper, *Eurynorhynchus pygmeus* (UAM 3584, 34 g, moderate to heavy fat, ova to 2.2 mm), feeding at the wrack line, was collected at North Bight Beach, Buldir Island, on 2 June 1977. It was feeding with a male Ruff (*Philomachus pugnax*), two Ruddy Turnstones (*Arenaria interpres*), and a Mongolian Plover (*Charadrius mongolus*). The species breeds from the tip of the Chukotka Peninsula to the base of the Kamchatka Peninsula and winters from southeastern China to the Indo-Chinese countries (Vaurie 1965, op. cit. p. 405). There is one previous Alaska and North American record: two specimens were collected from a flock of up to 10 birds on 15 August 1914 at Wainwright Inlet (Dixon 1918, Auk 35: 387-404).

The left wing of a Scops Owl, *Otus scops* (UAM 3618, wing flat 152 mm), was found behind North Bight Beach, Buldir Island, on 5 June 1977. It was identified as *O. s. japonicus* by Joe T. Marshall, National Museum of Natural History, who regards that subspecies as including *O. s. stictonotus*. The species has a wide range in Eurasia, from northwest Africa and Europe to Amurland and Japan. This subspecies is migratory and resident in Japan, breeding as far north as Hokkaido, and it has straggled to the southern Kuriles (Vaurie 1965, op. cit. p. 601). There is no previous North American record.

A female Broad-billed Sandpiper, *Limicola falcinellus* (UAM 3588, 30.5 g, little body fat, wing flat 104 mm, ovary identified), was collected on the beach at Clam Lagoon, Adak Island (51°55'N 176°35'W), on 19 August 1977, a first record for North America. It was feeding with a flock of Ruddy Turnstones

and a Sanderling (*Calidris alba*). The specimen was identified as *L. f. sibirica*, the eastern subspecies, by Lester L. Short, American Museum of Natural History. The species breeds in northern Norway, Finland, Sweden, northwestern Russia, and northeastern Siberia; this subspecies winters from southeastern Japan and China to Australia (Vaurie 1965, op. cit. pp. 406–407). There are also records from Sakhalin and the Kuriles (Yamashina 1974, Check-list of Japanese birds. Tokyo, Gakken Co., Ltd. p. 114).

These specimens were collected in connection with work for the Aleutian Islands National Wildlife Refuge, and they have been deposited at the University of Alaska Museum, Fairbanks. We thank Richard C. Banks, National Museum of Natural History, Joe T. Marshall, and Lester L. Short for their assistance with the identifications and Daniel D. Gibson for assistance with the identifications and help with the manuscript.

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Predators and Blackbirds: the "Uncertainty Principle" in Field Biology

SARAH LENINGTON

Allee Laboratory of Animal Behavior, University of Chicago, Chicago, Illinois 60637 USA

A persistent concern in field studies of birds is the possibility that the activities of the scientist may inadvertently influence the extent of predation on eggs and hatchlings. Data on this question are scanty as, in most cases, it is difficult if not impossible to determine predation rates on nests that have not been studied. The few studies that have dealt with this question have reached inconsistent conclusions. Gillett et al. (1975), for example, found that frequently disturbed sections of a colony of Glaucous-winged Gulls (*Larus glaucescens*) had a higher chick mortality and lower egg mortality than did undisturbed sections of the colony. Conversely, Robert and Ralph (1975) found egg mortality to be directly proportional to the amount of disturbance in a colony of Western Gulls (*L. occidentalis*), whereas chick mortality was inversely proportional to the amount of disturbance. In a third study, Willis (1973) investigated the effects of research activities on predation of Bicolored Antbirds (*Gymnopithys bicolor*) by noting that adults feeding at ant swarms had characteristic behavior patterns associated with each stage in the nesting cycle. By observing the behavior of banded adults, he determined which pairs were incubating eggs, feeding nestlings, or feeding fledged young, permitting estimation of survival rates of unvisited nests. The results of this study indicated no difference in predation rates between visited and unvisited nests.

In the course of a survey of the literature on Red-winged Blackbirds (*Agelaius phoeniceus*), I obtained indirect evidence that research activity on marshes may contribute to predation on Red-wing nests. In addition to data I obtained during a 2-yr study of a marsh-breeding population of Red-wings, I found data from 10 other marshes and 5 upland sites at which Red-wings were studied for 2 or more consecutive years and for which the proportion of successful nests (nests fledging at least one young) in each year was reported. As a predator normally removes the entire contents of a nest, the proportion of successful nests may be considered to be a rough estimate of the amount of predation (Lack 1954). As shown in Table 1, on 10 of the 11 marshes (data from the first year of the twelfth marsh were not available) the proportion of successful nests was lower in the second year of the study than in the first (binomial probability = 0.012). The average decline in the proportion of successful nests was 22.9% (range: 6–50%). Four marshes were studied for 3 or more consecutive years. The trend continues on these marshes; the amount of predation is again higher in subsequent years of the study than it was in the first year, but the increase is not as large as that between the first and second years of the study.

The impact of human activity on predation seems to be less for upland study sites than in marsh habitats. In three of five upland study sites the proportion of successful nests was slightly lower (mean = 7%) in the second year than in the first. On the remaining two study sites, however, the trend was reversed and a larger proportion of successful nests was found during the second year than in the first.

In 1975 and 1976 I studied Red-winged Blackbirds on a marsh in Princeton, New Jersey. During the second year signs of mammalian predation were abundant. Nests were frequently torn down, vegetation around nests was flattened, and in many instances bloody feathers lay floating on the water. During the first year of the study I rarely found such signs.

Research workers may influence a predator's ability to find nests in a number of different ways. Predators may learn to follow human scent from nest to nest (Snelling 1968), or repeated flushing of birds