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SOOTY TERN REACHES THE ALEUTIAN ISLANDS, ALASKA

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From 4 to 16 September 1997 two of us (Winker and Dickerman), representing the University of Alaska Museum and with the cooperation of the Alaska Maritime National Wildlife Refuge and the U.S. Coast Guard, conducted an intensive survey of the early-fall avifauna in the Massacre Bay area of Attu Island, the westernmost of the Aleutian Islands, Alaska. The Coast Guard operates a Long Range Navigation (LORAN) Station there (at 52° 50′ N, 173° 11′ E), which for decades has formed part of the primary source of marine navigational information for the North Pacific. Its 650-ft tower probably provides a biologically insignificant hazard to birds but does cause some mortality.

Supplementing our work on the local breeding landbird species, we searched nearly daily beneath the tower cables, where we found the feather remains (usually without bones) of birds that had hit the guy wires and that had been consumed or partly consumed by scavenging Arctic Foxes (*Alopex lagopus*) or Norway Rats (*Rattus norvegicus*), the former introduced long ago by Russian explorers and the latter introduced either by these same explorers or by later visiting ships, American or Japanese.

Tower casualties that we discovered during this period included two Short-tailed Shearwaters (*Puffinus tenuirostris*), 12–15 Fork-tailed Storm-Petrels (*Oceanodroma furcata*), one Black-legged Kittiwake (*Rissa tridactyla*), one Short-eared Owl (*Asio flammeus*), one Lapland Longspur (*Calcarius lapponicus*), and a headless "black and white" waterbird—a featherless trunk skeleton with both attached legs and feet and both attached wings. Only the proximal half of one wing was feathered, but we found some associated, unattached primary remiges and other feathers. We collected these

remains (RWD 24224), tentatively considering them to be those of an unidentified shearwater. Subsequently, at the University of Alaska Museum this specimen (UAM 7280) was provisionally identified by Gibson as an adult Sooty Tern (*Sterna fuscata*), an identification later confirmed at the U.S. National Museum by Roger B. Clapp, Carla J. Dove, and Richard C. Banks (in litt.). There is no previous Alaska record of this abundant pantropical species.

This bird likely reached Attu driven by one of several storms that originated as typhoons and spent themselves in Alaska waters in late summer 1997. Typhoons in the northwest Pacific originate in the area between 5° and 20°N and between 170°E and the Philippines (Gould 1974), deep within the range of the Sooty Tern. Initially these storms move west or west-northwest from the source region; those that reach higher latitudes tend to recurve and move northeast (ibid.). The Alaska Sooty Tern is thus probably an example of *S. f. nubilosa* Sparrman, which nests in the Indian Ocean, tropical Asian waters, and western Pacific islands north to the southern Ryukyu Islands (Peters 1934, Ornithological Society of Japan 1974), or, if separable, of *S. f. oahuensis* Bloxham, which breeds in the tropical North Pacific from Christmas Island and the Hawaiian Islands to Marcus Island (Peters 1934). Occurrences in the main Japanese islands, as far north as Hokkaido, have taken place "mainly after late summer and early autumn typhoons from July to October" (Brazil 1991:159). Although *nubilosa* is the only subspecies attributed to the main islands of Japan (Ornithological Society of Japan 1974, Brazil 1991), there have been at least nine recoveries there of typhoon-driven Sooty Terns that had been banded in the Hawaiian Islands or at Johnston Atoll (Gould 1974). The only well-supported characters used to differentiate subspecies of the Sooty Tern are bill shape and color of plumage of the lower belly and crissum. Since the Attu specimen lacks these parts, it is not possible to evaluate its subspecific identity directly.

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