

Review of the Status of the Black Swift in Alaska

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The breeding range of the black swift (*Cypseloides niger borealis*) extends from northwestern British Columbia, southeastern Alaska, and southwestern Alberta south along the Pacific coast to southern California and eastward through the mountainous portions of the western United States to New Mexico and Arizona. They also breed in the central highlands of Mexico and Central America, as far south as Costa Rica, and in the Greater and Lesser Antilles (American Ornithologists' Union 1998). Within this vast area, the black swift is often a local breeder and occurs in isolated colonies (Knorr 1961). Although the exact winter distribution of the swift is unknown (Stiles and Negret 1994), some individuals appear to winter in montane forests, usually along forest edges, in northern South America (DeGraaf and Rappole 1995, Stotz et al. 1996).

The localized distribution of the black swift and their use of inaccessible cliffs as breeding habitat stalled the first discovery of a nest in the United States or Canada until 1901 (Vrooman 1901). Since then, documentation of additional breeding sites in western North America has proceeded slowly, particularly in the northern part of the swift's range. In British Columbia, for example, only 2 nest sites (a total of 7 nests) have been found despite 1208 observations of black swifts made during June and July (Campbell et al. 1990). Gabrielson and Lincoln (1959) suggested that "there is little doubt that this bird breeds sparingly in the southern part of..." southeastern Alaska but lacked any positive breeding records. After twenty additional years of ornithological work in Alaska, Kessel and Gibson (1978) provided no additional information on the swift in their review of the status and distribution of Alaska birds.

Because of small population size, some regional population declines, and general lack of knowledge, Carter and others (*in press*) recently listed the black swift as a high priority species for conservation in the United States. This concern was supported by Partners in Flight working groups in the western United States where 7 states (out of 12) listed the black swift as a priority species for conservation (Rich and Beardmore 1997). Within British Columbia, Breeding Bird Survey data indicates a significant, long-term decline in the black swift population (Sauer et al. 1997). Because of the increased concern for the conservation of this species, and because most information on the Alaska population exists in unpublished notes and reports, we herein review the status of the black swift in Alaska.

Within southeastern Alaska, the black swift is considered an uncommon, probable breeder in the river valleys of the southern mainland, and adjacent islands, from the Stikine River south (B. Kessel and D. D. Gibson, Univ. Alaska Mus., unpubl. manuscript). Swifts occur in Alaska from late May to September (MacDonald and MacDonald 1975); the latest fall record is 12 September on Annette Island (M. E. Isleib (deceased), unpubl. data). Although there are no consistent,

annual observations north of the Stikine River, the black swift is a casual spring migrant and summer visitant as far north as Juneau (Armstrong and Gordon 1995) and is a rare spring, summer, and fall visitant to Haines (N. Bertsch, Haines, Alas., unpubl. data; B. T. Browne, U. S. Fish Wildl. Serv., Anchorage, Alas., pers. commun.). Farther north, a single swift was reported from eastern Prince William Sound on 22 August 1977 (Isleib and Kessel 1989).

Swarth (1911) reported the black swift as common in June 1909 where they occurred in large flocks from the head of Marten Arm of Boca de Quadra and at Portage Cove on Revillagigedo Island. Eleven years later, Swarth (1922) documented flocks of 75-100 birds at Sergief Island on the Stikine River from 17 August to 7 September. More than 50 birds were observed feeding over the tidal flats of southern Sergief Island, with tree and barn swallows, in June 1997 (Cotter, pers. obs.). Gibson and MacDonald (1975) observed flocks of black swifts on the Unuk (27 birds), Salmon (56 birds), and Stikine (26 birds) rivers. Because they can travel long distances (30-50 km) from the nest site to forage (C. T. Collins, Calif. State Univ., pers. comm.), the breeding location of flocks of swifts repeatedly observed at the Stikine River mouth is unknown. MacDonald and MacDonald (1975) observed flocks of 20 to 40 birds 11 miles upstream from the mouth of the Chickamin River and observed a flock of 100 swifts on the Chickamin River in August. During June 1997, 6 black swifts were seen flying over lowlands 11 miles upriver on the Chickamin River, 8 birds were observed upriver on both the Marten River and Walker Creek, and 7 birds were observed in the south arm of Rudyerd Bay (Canterbury, pers. obs.). These smaller groups may represent locally breeding individuals (see Knorr 1961). Black Swifts are reported annually at Hyder, but nest sites there have not been located there (D. D. Gibson, pers. commun.; T. G. Tobish, Audubon Field Notes ed., Anchorage, Alas., pers. commun.)

At most sites outside of Alaska, black swifts breed in small aggregations (<10 pairs). Knorr (1961) described five physical factors that were present at black swift nest sites in the Colorado Rockies: presence of running water at the nesting site, high relief, completely shaded nest sites, inaccessibility to terrestrial predators, and an unobstructed flyway to the nest site. Marin (1997), however, suggested that the proximity of water was the only requirement for nest selection and other factors, except darkness, were a result of nesting near waterfalls. Indeed, in mountainous areas away from the coast, waterfalls and shading were the best predictors of black swift nesting (e.g., Knorr 1962; Campbell et al. 1990; Foerster and Collins 1990). Foerster and Collins (1990) and Knorr (1993) further suggested that the presence of a ledge or shelf suitable for nest placement was a crucial component of swift breeding habitat. Besides mountainous areas, black swifts also nest on moist sea cliffs and in caves along the California coast (e.g., Vrooman 1901; Legg 1956). To date, no black swift nests have been documented in Alaska.

During the breeding season in southeastern Alaska, small groups of swifts have only been observed in river valleys with steep, unvegetated cliffs. An abundance of moist, steep cliffs throughout southeastern Alaska suggests that adequate nesting habitat exists. Swifts were seen in small river systems such as the south arm of Rudyerd Bay and Walker Creek and in larger river systems such as the Marten and Chickamin rivers (Canterbury, pers. obs.). All river systems where black swifts were observed had steep unvegetated cliffs with flowing water. The size of the river system did not appear to be important.

Canterbury observed swifts foraging, at forest canopy level up to about 200 m, over freshwater marshes along mainland river systems; these marshes, often formed by beaver (*Castor canadensis*) dams, might provide important foraging habitat for black swifts on the mainland of southeastern Alaska. Estuarine habitats also provide foraging habitat for swifts. A flock of swifts was observed foraging above vegetated and unvegetated tidal flats at Sergief Island in June 1997 (Cotter, pers. obs.), and black swifts were observed foraging over estuarine meadows at the mouth of the Chickamin River in May 1973 (MacDonald and MacDonald 1975).

Clearly, knowledge of the population size, habitat use, and productivity of black swifts in Alaska remains limited. Identification of potential nesting sites and follow-up field surveys to should be undertaken to determine the importance of southeastern Alaska to the North American breeding population of black swifts. Canterbury's finding of three small flocks in June 1997 in areas where swifts were undocumented, with minimal effort, suggests that the number of breeding black swifts in Alaska might represent a greater proportion of the total population than previously thought.

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