Richard F. Johnston provided several useful insights into House Sparrow biology and reviewed the manuscript. William Klitz accompanied me on several occasions in the field and helped net many specimens. Field work and specimen preparation were funded by the National Science Foundation, Grant GB 8781, to Johnston.

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CLIFF SWALLOW COLONY IN ARCTIC ALASKA

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With one exception there appear to be no previous records of the breeding of the Cliff Swallow (Petrochelidon pyrrhonota) north of the timber line in the Brooks Range. Gabrielson and Lincoln (The Birds of Alaska, Stackpole Co., Harrisburg, Pa., p. 603, 1959) give no instances of breeding to the north of these mountains. However, Irving (U.S. Natl. Mus. Bull. 217:90, 1960) mentions that in the winter of 1908 or 1909 near the head of the west fork of the Kuparuk River at 68°35′ N, 149°20′ W over a hundred nests, containing frozen young birds, were found built against rock cliffs. A study of the relevant literature reveals no other mention of breeding by this species north of the Brooks Range.

On the evening of 23 June 1970, I saw eight Cliff Swallows hawking over a small lake above the south side of the Atigun Canvon at an elevation of about 2900 ft. This canyon lies to the east of Galbraith Lake in the Brooks Range. The following morning at least 7-10 pairs of these swallows were located at a nearly vertical cliff face overlooking a tributary of the Atigun River near the eastern end of the canyon at an elevation of about 2800 ft (fig. 1). A number of mud-built nests, some of which were apparently unoccupied, were seen under slight projections on the cliff face. The majority of these nests were gourdshaped, but three were of open cup construction and at least one of these was occupied. This locality is approximately 5 miles SE of the Kuparuk River site mentioned by Irving.

It is quite possible that other breeding colonies of this species are present in canyons and valleys on the north side of the Brooks Range, where they could



FIGURE 1. Site of a breeding colony of Cliff Swallows above a tributary of the Atigun River on the north side of the Brooks Range in the Atigun Canyon.

easily be overlooked. Even with the present relatively high level of activity in these mountains and on the Arctic Slope of Alaska generally, there are large areas that remain unvisited by ornithologists.

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