Wilson Bull., 107(4), 1995, p. 766

An unusual record of Sandhill Crane philopatry.—Greater Sandhill Crane (*Grus canadensis tabida*) pairs are well known for their breeding territory fidelity (Walkinshaw, The Sandhill Cranes. Cranbook Institute of Sci., Bloomfield Hills, Michigan, 1949; Littlefield, Breeding biology of the Greater Sandhill Crane on Malheur National Wildlife Refuge, Oregon. M.Sc. thesis, Colorado State Univ., Fort Collins, Colorado, 1968; Drewien, Ecology of Rocky Mountain Greater Sandhill Cranes. Ph.D. Diss., Univ. of Idaho, Moscow, Idaho, 1973). An extreme incident of such fidelity occurred in both 1984 and 1985 along the north shore of Malheur Lake, Harney County, in southeast Oregon. After substantial precipitation associated with the 1982 El Nino Event, Malheur Lake joined with Mud and Harney lakes to create the largest Oregon inland water body, covering about 72,875 ha. During the flood, marsh and meadow habitats which adjoined the lake became totally inundated, resulting in the submergence of 17 *G. c. tabida* breeding territories.

By spring 1984, these territories were under a large expanse of open water, and other than a few ranch buildings and trees, the only exposed objects were several isolated haystacks. During an aerial waterfowl survey in early June 1984, an incubating Greater Sandhill Crane was observed flying from a nest on a haystack about 3.2 km from shore. Although it appeared the crane pair successfully hatched their 2 eggs, no young were known to have survived. Though young cranes are capable of swimming, it would have been highly improbable that these chicks would have been able to swim to the shoreline.

Lake levels continued high in 1985, but haystacks were beginning to disintegrate and several small uplands had appeared near the north shore; however, the crane pair again nested at the haystack site. In addition, other pairs were nesting on newly exposed or nearly exposed uplands. From an airboat we visited the haystack site as well as two upland sites on 25 June 1985. Following is a description of nests located at these sites.

Nest 1 was at the disintegrated haystack on a mat of floating smartweed (*Polygonum aquatilus*) over unmeasured deep water. Both eggs had hatched, but the nearest dry land was about 3.2 km northeast. As no islands were between the nest and the shore, it was most likely both chicks drowned before reaching a dry site. Nest 2 was located on a nearly submerged upland among black greasewood (*Sarcobatus vermiculatus*), about 1.6 km into the lake. The site was in newly established smartweed. Both eggs had hatched by 25 June, but no young were present; however, on a nearby island about 0.4 km north of the nest site a dead adult male crane was discovered, but it was not known if he was a member of the nesting pair. Nest 3 was a new nest with eggs having been laid between 15–20 June. The site was on a small island covered with water-killed greasewood about 0.4 km from shore. Interestingly, this was the latest crane nesting effort ever recorded in the Malheur-Harney Lakes Basin, Oregon, since studies were initiated in 1966.

To our knowledge, such a strong incident of Greater Sandhill Crane philopatry has not been previously reported, nor is there a record of sandhill cranes nesting on a haystack. Adequate unoccupied nesting habitat was available both north and northwest of the lake in both 1984 and 1985, but at least some pairs selected to remain at their traditional breeding territories even though these sites were submerged. It is believed that philopatry arose from the advantage which individuals gain from increasing familiarity with an area (Campbell and Lack, A dictionary of birds. Buteo Books, Vermillion, South Dakota, 1985), but in this event philopatry was certainly a disadvantage for successful reproduction.

CARROLL D. LITTLEFIELD, *HCR 4 Box 212, Muleshoe, Texas 79347,* AND GARY L. IVEY, *Malheur National Wildlife Refuge, HC 72 Box 245, Princeton, Oregon 97721.* *Received 9 March 1995, accepted 10 May 1995.*