

## FROM FIELD AND STUDY

**Remarks on the Courtship and Voice of the Black Scoter.**—On June 26, 1952, at Igiak Bay on the Yukon-Kuskokwim Delta, Alaska, I observed a pair of Black Scoters (*Melanitta nigra americana*) engaged in courtship activities. My notes on these birds were taken at about 3:30 on a warm, sunny afternoon. The scoters were on a shallow, fresh-water lake in a marshy lowland area; most of their display activities took place 50 yards or less from my location on the shore. The display sequence of the male was divisible into three parts: bowing, tail-snap, and forward rush.

**Bowing.** This stage consisted of forward movements of the head and neck, accompanied by plaintive whistling. When bowing was about to begin, the neck was elongated upward and the tail lifted to an angle of approximately 45 degrees from the horizontal (fig. 1b). The bowing movements were executed in a somewhat jerky fashion, with the bill always pointing forward and held horizontally (fig. 1c). This movement was very similar to that used by both sexes when disturbed or curious.

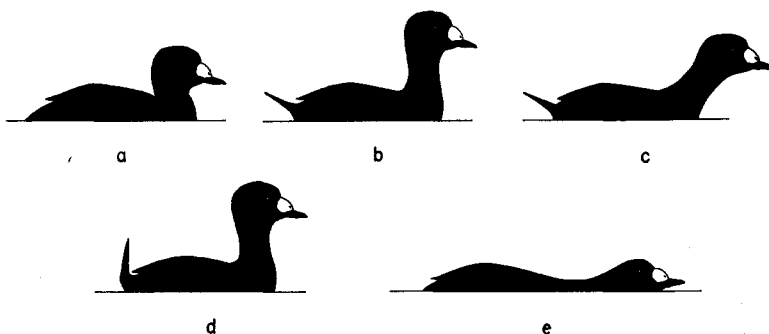


Fig. 1. Courtship attitudes of male Black Scoter.

**Tail-snap.** The tail was quickly snapped to the vertical and held there or angled slightly over the back. The neck, during this brief pose, was elongated and held stiffly upright (fig. 1d). This behavior was not accompanied by bowing but the plaintive whistling continued. At the completion of the tail-snap attitude, the male scoter usually resumed his bowing activities.

**Forward rush.** Occasionally head and neck were outstretched on the water and the bird rushed forward for two or three yards, propelling himself with such force that a sizable wake was left behind him. During this rush the tail was on the water and the bill was held horizontally just out of water (fig. 1e). Propulsion was supplied by the feet alone; the wings were not moved from their normal position on the back. On completion of the rush, the male scoter either rested, with neck and tail in normal position (fig. 1a), or recommenced his bowing activities.

Bowing and whistling occurred very frequently and were not necessarily followed by the tail-snap attitude. The bird sometimes rested, stretched his wings, and then began bowing anew. The tail-snap occurred much less frequently than bowing and always seemed to be preceded by bowing. I observed the forward rush only two or three times. On each occasion it was preceded by the tail-snap attitude.

The female was in general unresponsive, making only bowing movements with head and neck in the same jerky manner as the male and occasionally giving low, growling noises. While the male was displaying, the female exhibited the characteristic "excited" pose: tail cocked at a 45-degree angle, neck elongated, and bill horizontal. Copulation was not observed. When a second male appeared, the first male intensified his bowing and then chased the intruder once, with head and neck outstretched and half-spread wings beating against the water. The second bird stayed in the vicinity of the pair but always remained 10 to 30 feet or more distant from them; the paired birds stayed very close together.

Female Black Scoters, when alarmed, elevate the tail to an angle of 45 degrees and move head and neck back and forth, bill horizontal, in a motion similar to the courtship bowing. At such times they often utter gurgling, growling notes which are quite loud.

Very little has been written on the courtship of the Black or American Scoter. Phillips (Natural History of the Ducks, 4, 1926:17) refers to accounts by Brewster (Bull. Mus. Comp. Zool., 66, 1924: 174-175) and Brooks (field notes) but the impression conveyed is sketchy at best. Gunn (Brit. Birds, 20, 1927:193-197) published an interesting account of the courtship of *Melanitta nigra nigra* in which he described low, high, and flight rushes. Gunn's "low rush" and the forward rush described here seem to be the same behaviorism. I did not observe any activities corresponding to the "high" and "flight" rushes.

Gunn (*op. cit.*:194) mentions a "constantly repeated metallic note which . . . sounds like 'crek'." He describes this note as being uttered by a group of males exhibiting a posture in which the neck is elongated upward and the head held horizontal. Although I observed in the male a posture (excited pose) similar to that described by Gunn, the posture was associated with bowing and I did not hear a "crek" note.

Brooks (*in* Phillips, *loc. cit.*) distinguished two notes uttered by the courting male American Scoters, one of them a "musical whistling note," and the other a "rattling tuka-tuka-tuka-tuk." The latter apparently was heard during the forward rush. I detected no such note from the male during courtship nor was I able to hear any but the plaintive whistling calls from male Black Scoters. Brooks also mentions a correlation between the roughness or calmness of the water's surface and the type of call uttered. I heard the whistling note given by birds whether in flight or on the water on both calm and rough days. Brooks wondered whether the "tuka-tuka-" note was made with the wings; none of my observations indicate that it was.

I have heard female Black Scoters give two calls in addition to the "low, growling noises" mentioned earlier. On July 18, a female circled past me two or three times uttering calls described in my notes as a "reedy tooooo-it, tooooo-it, or toooo-oo-oo-it." Later, on the same day, another female, having been flushed from her nest, sat on the water nearby giving the following cry: "Pe-e-e-e-e-e-ut," the first portion of it being higher and consisting of very rapidly repeated syllables, while the last part was a low croak.

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**The Vaux Swift in Western México.**—According to the Check-list of Mexican Birds (Pacific Coast Avif. No. 29, 1950:159) and earlier works, the only Vaux Swifts (*Chaetura vauxi*) in western México, north of Oaxaca, are transients of the nominate race. However, Phillips (Wilson Bull., 66, 1954:72-73) recorded a specimen of *C. v. tamaulipensis* taken in western Nayarit in late November, along with a specimen of the same race taken in southeastern Arizona in May.

On October 2, 1955, we encountered a large flock of two species of swifts flying low along the crest of a pine-covered ridge in southeastern Sinaloa. The spot was on the El Salto-Mazatlán highway, two road miles south of Santa Lucia and about two airline miles west of El Batel, at an altitude of 4300 feet. We collected five individuals of the small species, all of which proved to be *C. v. tamaulipensis*, four of them clearly differentiated examples of that race, the fifth somewhat equivocal. Webster compared his two specimens with a series of *C. v. vauxi* at the California Academy of Sciences. Later Phillips compared all five with seven Tamaulipas specimens of *C. v. tamaulipensis*, kindly loaned by Dr. George M. Sutton, as well as with a few of the nominate race, one of *C. v. richmondi* from Veracruz, an April series from the coast of Nayarit (La Peñita de Jaltemba), and the two specimens of *C. v. tamaulipensis* he had reported earlier (Phillips, *loc. cit.*). Two of the Nayarit specimens of April 6 in the collection of Lewis D. Yaeger are *vauxi*, but the other one taken the same day is nearer *tamaulipensis*. The other three, taken on April 21 and 22, are clearly-marked specimens of *tamaulipensis*, with the blacker, more metallic dorsal coloration and darker grayish abdomen of that race.

Phillips and Yaeger saw about 25 Vaux Swifts west of Tepic, Nayarit, on July 3, 1956. Later, in passing Las Varas, they found Vaux Swifts still present, a flock of at least 70 being seen there on July 15, and at least five on July 21, 1956. Two birds were also seen on July 16 by Phillips at Chacala, a lake between Las Varas and the beach.