

Vagrancy and associated mortality of Black Scoters in peninsular Florida.—

The Black Scoter (*Melanitta nigra*) is a vagrant south along peninsular Florida (Howell 1932, Bellrose 1976). An unusual influx of Black Scoters occurred during the winter of 1981-82, with numerous birds recorded as far south as Fort Lauderdale on the Atlantic Coast and Naples on the Gulf Coast. The bird collection of the University of South Florida (USF) received 15 Black Scoters, mostly immature birds, during the winter and spring of 1981-82. Here we document the recent occurrence of Black Scoters in Florida and the associated mortality during the 1981-82 influx.

All specimens examined were birds found sick on Florida beaches from November 1981 through May 1982. Fourteen specimens, all from Pinellas County beaches, were obtained from the Suncoast Seabird Sanctuary, a rehabilitation facility in Pinellas County. One specimen from Indian River County on the Atlantic Coast was delivered to USF by Herbert W. Kale, II. In addition, we obtained information, but unfortunately no specimens, on the occurrence of sick scoters at CROW (Care and Rehabilitation of Wildlife), a rehabilitation facility on Sanibel Island in Lee County.

Occurrence. Table 1 presents the number of Black Scoters found on coastal Christmas Bird Counts (CBC) from the winters of 1970-71 through 1982-83 (American Birds 1971-1983, Vol. 25-37). Only counts in which Black Scoters were found at least once are listed. In a given year, if no Black Scoters were recorded, but unidentified scoters were recorded, we list this number parenthetically. We suspect most of the unidentified scoters recorded on these CBCs are Black Scoters because based upon our analyses this species is recorded far more often and in greater numbers in peninsular Florida than are the other scoter species. Although total coverage of count areas in Florida may vary, accessible areas of coastline normally are covered intensively.

Black Scoters appear to winter regularly in small numbers on the upper Atlantic Coast of Florida (Table 1). Between the Jacksonville, St. Augustine, and three Brevard County CBCs, Black Scoters were recorded in 11 of the 13 winters. Unidentified scoters were recorded the other two years. During the same period Black Scoters appeared much less often on the Gulf Coast of Florida. There, Black Scoters were recorded in only 46% of the winters. A single unidentified scoter in Bay County may be a record for a seventh winter. Black Scoters may winter more often along the panhandle Gulf Coast of Florida than along the peninsula. At Panacea, for example, Black Scoters were recorded on many of the CBCs from 1960-61 through 1971-72, the last winter of counting.

Table 1 shows clearly that an incursion of Black Scoters occurred along the Gulf Coast of peninsular Florida in 1981-82. During that winter 50% of the eight counts we summarize recorded scoters. The high for the previous 11 years was two counts recording scoters. Another large influx occurred the next winter 1982-83, when 38 individuals were counted as compared to 60 individuals in 1981-82. The recording in winter 1981-82 of Black Scoters on all five CBCs on the northern Atlantic Coast of Florida and the large total numbers summarized shows that the incursion to the Gulf Coast was part of a larger movement.

TABLE 1. The occurrence of Black Scoters on selected Christmas Bird Counts in Florida.

Count location	Year													82-3
	70-1	71-2	72-3	73-4	74-5	75-6	76-7	77-8	78-9	79-80	80-1	81-2		
Jacksonville	(14) ¹	1	0	0	19	2	0	0	54	1	(4)	250	48	
St. Augustine	— ²	—	—	—	0	0	(1)	1	*	(3)	0	214	54	
Merritt Island	(2)	0	3	(1)	15	41	5	33	11	(1)	0	57	35	
Cocoa	(2)	0	0	4	0	1	3	(3)	3	0	0	19	19	
South Brevard	0	140+	(25)	1	0	0	5	(6)	0	0	0	1	0	
subtotal	(16)	141	28	6	34	44	14	43	68	5	(4)	541	156	
Ft. Pierce	0	0	0	0	0	0	0	(7)	0	0	0	0	0	
Stuart	(10)	0	0	0	0	0	0	0	0	0	0	0	70	
West Palm Beach	0	0	0	0	0	0	0	3	0	0	0	35	45	
Ft. Lauderdale	0	0	0	0	0	0	0	0	0	0	0	*3	(125)	
Dade County	0	0	0	0	0	0	0	1	—	0	0	0	0	
subtotal	10	0	0	0	0	0	0	11	0	0	0	35	240	
Pensacola	0	0	0	0	0	0	0	1	0	0	0	0	0	
Bay County	0	0	0	1	0	0	(1)	0	0	0	0	1	0	
North Pinellas	—	—	—	—	—	—	—	0	0	0	0	9	26	
St. Petersburg	0	0	0	0	0	9	0	0	2	0	0	50	0	
Venice-Englewood	—	—	—	0	0	0	0	0	0	0	0	0	3	
Sanibel-Captiva Isl.	0	0	0	0	0	0	0	4	0	0	0	0	8	
Naples	0	0	0	0	0	0	0	0	0	0	0	*	0	
Coot Bay	0	0	0	0	0	0	0	0	0	0	0	0	1	
subtotal	0	0	0	1	0	9	(1)	5	2	0	0	60	38	

¹Numbers in parentheses are the number of unidentified scoters seen.²Indicates no count was performed.³Asterisk indicates that Black Scoters were recorded during count period but not on count day.

The Suncoast Seabird Sanctuary received 16 Black Scoters in the winter and spring of 1981-82, most of which were obtained within the CBC circles of St. Petersburg and North Pinellas. These birds represented 27% of the 59 Black Scoters recorded on these two counts. The two count circles include over half of the potential scoter habitat along the outer beaches of Pinellas County; according to the compilers, coverage of the beach areas was intensive on these two counts. In addition to the 14 specimens we received, two were released after treatment. Bird watching along Pinellas County beaches is intensive regardless of CBCs, and no larger counts of scoters were made, therefore we suspect that fewer than 100 scoters occurred in the county during winter 1981-82.

Black Scoters were not seen on the several Gulf Coast Christmas counts to the south of Pinellas County although an unknown number was present at Naples during the count week (Below 1982). The rehabilitation center (CROW) on Sanibel Island received 1 Black Scoter in December 1981 and 15 during January and February 1982. In addition, they received "many" reports of dead scoters on the beaches of Sanibel and Captiva Islands.

Mortality. Evidence suggests that Black Scoters wintering on the Gulf Coast of Florida in 1981-82 were under physiological stress and in poor condition. At death the females averaged 498 g (range 449-555 g, n=9) and the males 593 g (range 555-619 g, n=4). Scoters remaining in captivity for one or more days prior to death did not differ materially in weight from those that died on the day of capture. These mean weights are only slightly greater than half of presumed normal weight (females, 815 g, n=4 and males 1087 g, n=8, Nelson and Martin 1953; females 999 g, n=2 and males 1135 g, n=7, Bellrose 1976). All 14 juvenile scoters received at USF were in active molt and their molt appeared delayed and possibly protracted relative to that described by Palmer (1976) for the species (Hoffman and Bancroft 1984). In particular, most body molt was delayed until after 1 January, and birds in April still had considerable Juvenal plumage. Their plumage was highly worn suggesting molt was delayed. The additional stress of molt may have contributed to their death.

We suggest that a substantial proportion, and perhaps most, of the Black Scoters involved in the 1981-82 incursion to the Gulf Coast of peninsular Florida died there. The St. Petersburg and North Pinellas CBCs combined, recorded 59 Black Scoters and 2100 Lesser Scaup (*Aythya affinis*), but from November 1981 to May 1982 equal numbers (16) of each species were brought to the Suncoast Seabird Sanctuary (Dianna King, pers. comm.). Because rehabilitation centers received only birds found alive but too weak to escape capture, the ducks Suncoast Seabird Sanctuary received were probably but a fraction of the actual mortality in the area. Differences in habitat use may have resulted in a higher proportion of sick scoters retrieved than scaup, but even so, the conclusion seems sound that mortality of local scoters in the winter 1981-82 was much higher than mortality of a regular and abundant wintering duck, the Lesser Scaup. To the extent that birds' ranges are the product of stabilizing selection for conservative migratory and dispersive behavior, low survivorship and physiological abnormalities (in this case molt) might be expected in vagrants.

We thank Glen E. Woolfenden for critically reading the manuscript and offering numerous suggestions for improvement.

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Attacks on fawns, pigs, and other young or weakened mammals by American Crows.—The following observations were made by my wife and I while studying American Crows (*Corvus brachyrhynchos*) at Hendrie's cattle ranch, 24 km south of Lake Placid, Highlands County, Florida, between January 1981 and May 1983 (total observation time 1500 h). The crows and other animals there were relatively tame owing to years of protection and being fed corn. In April 1982, we watched attacks by crows on two spotted deer fawns (*Odocoileus virginianus*) in a pasture over 200 m wide that lay between swamps and contained the nest tree of a group of cooperatively breeding crows (Kilham in prep). On 18 April I observed a fawn 35 cm high and weak on its legs coming toward me. Although accompanied at varying distances by its mother, it was under constant attacks by five crows, two breeding adults and three yearlings. One crow usually clung to the back of the fawn as it ran, while others kept swooping and striking. After running 8-10 m, the fawn collapsed on the grass as if its legs could not hold up any longer. The crows then crowded around, striking the fawn heavily about the head, eyes and other parts. I could not tell whether their bills were closed or slightly open, as I have noted for crows attacking an otter's (*Lutra canadensis*) tail (Kilham 1982, Fla. Field Nat. 10:39-40). The doe seemed to me to be surprisingly unconcerned. She approached repeatedly, head and neck outstretched, to lick her fawn at one end while the crows attacked it at the other. The fawn's only moments of protection were when it nursed under its mother. After fifteen bouts of running, collapsing and being attacked, the fawn reached the edge of a swamp. Walking to within 3 m and using 8 x 40 binoculars, I could perceive no damage done to the fawn's eyes or other parts, in spite of what must have been hundreds of blows. My wife (pers. comm.), 9 days previously, witnessed similar attacks on a slightly larger fawn that, in one of its periodic collapses, struck at its assailants with its forefeet while sitting back on its haunches.