

one evening in November, either in 1901 or 1903, on Mercer swale in Crystal Lake Grounds, when there was a great flight of Mallards on, commencing about 3:00 P. M. They came in, in very large droves, and it was the exception to see a drake among them. I was out early the next morning and for the first few hours there were very few ducks, but about 10:00 or 11:00 o'clock there came a flight of Mallards similar in size to the flight of the evening before, and this flight was practically all drakes. I have noticed this on a number of different occasions, but never in a more pronounced way than on the day named.

"In the old days when the regular fall migration of Prairie Chickens came this way, I used to put in a good many mornings and evenings on the Mississippi bluffs shooting near Burlington and although at that time I was only a boy, I discovered that it was the exception to kill a cock chicken; the great majority of the migration was of hens. But in the winter, going into the upland corn fields in this locality, I would find a preponderance of cocks, which led me to believe that the hens travelled south and congregated somewhere in that territory, leaving the cocks behind."—ALDO LEOPOLD, *Abu-querque, New Mexico, March 26, 1920.*

Bird Fatalities Resulting from a Shipwreck.—During the night of October 25, 1918, the Canadian-Pacific Steamer *Princess Sophia* was wrecked, with total loss of life, on Vanderbilt Reef, Lynn Canal, Alaska, some forty miles north of Juneau. Quantities of heavy fuel oil escaping covered the water for miles about, finally settling on the beaches. It is the writer's theory that the great loss of life, some 343 persons, was largely occasioned by the escaping oil.

When patrolling the shores of Admiralty Island and adjacent waters in a small steamer on October 28, looking for bodies from the wreck, a Murre was seen swimming towards the vessel, occasionally assisting its feet with its wings. On coming close it was seen that its breast was heavily saturated with oil, and wings and other parts to only a lesser degree. The bird came to within a few feet of the boat, which was then drifting, all the while frequently raising itself on the water, shaking itself, and flapping its wings in efforts to get rid of the oil, and occasionally preening its feathers with its beak. The bird seemed not only devoid of fear but actually to wish companionship or a stable place to rest. Threatening movements only caused it to dive a few feet away, barely under the surface of the water, which gave excellent opportunity to observe the use of the wings in assisting the feet in the diving. It was finally killed with an oar, and on examination its plumage was found to be heavily saturated with crude oil, particularly on the breast and wings. No injuries were in evidence and its plight was apparently due entirely to the oil.

Numerous other Murres were noted at no great distances, all more or less covered with the oil, which covered the surface of the water from a mere film to a heavy scum. The men who were patrolling the beaches for bodies of the wreck victims reported that there were many of "the same kind of birds" (Murres) dead and dying on the beaches, and frequently the searchers were startled by a bird still alive suddenly struggling and flopping about at their feet.

Also many gulls were observed to have stained breasts, but none was seen to be helpless. On October 30, when about 120 miles south of the scene of the disaster (near Cape Fanshaw) on a passenger steamer, the writer observed one gull with oil-stained breast join the ship for a distance, and on January 1, 1919, at Wrangell, nearly two hundred miles south of the wreck, the writer observed a Glaucous-winged Gull walking about the streets, with a spot of discoloration about four inches in diameter on breast and sides that bore every evidence of being crude oil stain and quite possibly from the wreck to the north in the preceding October.

The extent of the losses among the bird population due to this accident can not even be approximated, but it must have been considerable, as the wreck occurred a short distance north of waters much frequented by Murres, and prevailing winds and tides drove the oil southward for many miles. The 23 miles under observation on October 28 were from 22 to 45 miles from the scene of the wreck, with considerable shoreline intervening, so there is good reason to believe that the fatalities to the birds that came under observation of the writer's party were but a small percentage of the total.—ERNEST P. WALKER, *Phoenix, Arizona, March 7, 1920.*