General Field Notes

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Common Loons Wintering in Offshore Waters

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Between 1975 and 1986 I have had the opportunity to observe Common Loons (*Gavia immer*) far at sea off the North Carolina coast. Many of my records are of spring migrants (N = 98), but some additional individuals (N = 35) found during the winter months were assumed to be winter residents. Although individuals were encountered regularly, at no time did the species appear to be common far offshore, except perhaps during spring migration. No Red-throated Loons (*G. stellata*) were seen offshore at any season during the 11-year study period. My sightings were made mostly at distances between 20 and 35 miles (32-56 km) from shore and in waters of 20 to 500 fathoms in depth. Regular occurrence far at sea was not expected. Cramp and Simmons (1977), for example, stated that Common Loons remain within a few kilometers of shore throughout most of their winter range. Clapp et al. (1982) noted: "Common Loons in winter are normally marine but remain within a few kilometers of shore. They regularly use enclosed harbors and inlets. Bent (1919) referred to groups of wintering loons sometimes far out at sea; but this does not seem to agree with most recent observations." Most researchers studying offshore faunas in the southeastern United States to date have not discussed loons. Rowlett (1980), however, does indicate 0.1 to 1.0 Common Loons per hour in deep waters (40-500 fathoms) of the Northern Chesapeake Bight in February, April, and May. Studies on wintering Common Loons are few (e.g. McIntyre 1978) and were conducted in sounds and along beach fronts.

Table 1 provides information on the number of Common Loons encountered at different depths off the North Carolina coast during my offshore studies. A rough calculation of density of birds seen in deep water is 0.341 per hour for 19 winter trips. This falls within the range found by Rowlett (1980) off the Maryland coast.

Off the coast of North Carolina, wintering and migrating Common Loons were solitary. Swimming birds avoid boats by diving, and pursued individuals never took flight. In avoidance dives birds would typically resurface 40 to 50 yards from the point where they were last seen, and on several timed instances remained submerged for 3.0 to 3.5 minutes. Because loons are poorly designed for flight and have high wing-loading ratios

TABLE 1: Dates of occurrence for Common Loons seen more than 15 miles off the northern North Carolina coast. No loons were seen at sea between 30 May and 4 December in 62 survey trips. Of the 126 survey trips made, 19 were in winter and 43 were in spring.

Date	Number	Activity	Water Depth in Fathoms
5 Dec. 1985	2	flying	400
20 Dec. 1984	2	swimming/diving	100
28 Dec. 1984	1	flying	20
30 Dec. 1978	1	swimming/diving	40
22 Jan. 1986	3	swimming/diving	600-700
27 Jan. 1983	1	swimming/diving	15
14 Feb. 1987	2	swimming	200-300
17 Feb. 1986	6	swimming (1 flying)	40-80
3 Mar. 1984	4	swimming	40-100
16 Mar. 1984	9	swimming	15-100
26 Mar. 1981	4	swimming	15-18
27 Mar. 1985	1	swimming	15
2 Apr. 1981	3	swimming/diving	40-500
2 Apr. 1984	3	swimming (1 flying)	15
4 Apr. 1980	2	not recorded	?
18 Apr. 1983	3	all flying north	15
18 Apr. 1980	11	flying/swimming	50-70
19 Apr. 1980	51+	flying north	15
28 Apr. 1983	1	swimming/diving	500
29 Apr. 1980	1	swimming/diving	28
8 May 1980	2	swimming/diving	20-500
10 May 1980	11	flying north	15-100
14 May 1981	3	flying north	15-20
18 May 1977	2	flying north	15-20
19 May 1982	2	flying north	15-35
22 May 1980	2	flying north	50-100
29 May 1980	1	not recorded	20

(Savile 1957), escape by flight is certainly more energetically costly than swimming and diving. In winter Common Loons were never observed in flight, and in fact, individuals exhibit a complete and simultaneous molt of primary feathers during the winter (late January through February) and are unable to fly (Woolfenden 1967, pers. observ.). This suggests that birds found far at sea during the winter probably remain there and are not simply making excursions out to sea for brief periods. Woolfenden (1967) discussed the significance of postmigratory simultaneous wing molt in Common Loons.

Normally North Carolina birds were not associated with current edges, schools of surface-feeding fishes, or other seabirds. During the loons' period of flightlessness such associations would normally not be possible. However, on 22 January 1986, three solitary Common Loons were found along a tide line in which large mats of sargassum had accumulated. This tide line was more than 9 miles (15 km) in length and followed a

contour of approximately 600 to 700 fathoms. Two were found feeding in water 200 to 300 fathoms deep on 14 February 1987. The birds were associated with various other seabirds foraging among schools of False Albacore (*Euthynnus allelleratus*) along a small current edge. Because of these associations with current edges, I suspect loons (like other marine birds) are attracted by potential prey associated with these marine fronts. Because of their flightlessness, it appears that loons must be transported passively to areas of current edges by the currents themselves, much like wood and other debris that accumulate along current lines. Haney and McGillivary (1985) provided evidence for the distribution of marine birds along these fronts and explained their potential for increased productivity near the ocean's surface. The Common Loons encountered on these lines would therefore appear to be foraging at some moderate depth in the water column rather than on the floor of the ocean. Dives by Common Loons to depths of 180 to 200 feet have been reported (Schoryer 1947), but it seems improbable that they are feeding on or near the bottom at water depths of 500 fathoms (3000 feet). The two specimens I collected had empty stomachs, but this is not significant because most marine birds regurgitate prey items during the process of collection. I do not believe Common Loons wintering far offshore are fasting because weights of those obtained at sea seemed normal (3588.0 $\pm$ 58.0 grams).

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