

TABLE I  
MEASUREMENT RANGES FOR COMMON LOON EGGS

Location	N	Range		Reference
		Length (mm)	Width (mm)	
Minnesota	3 <sup>a</sup>	87.7–88.8	53.8–56.1	This report
Minnesota	30	80.5–94.2	52.0–58.5	Olson and Marshall (1952)
Alberta	40	74.3–93.8	47.0–56.6	Vermeer (1973)
Various	41	82.0–96.5	52.0–61.0	Bent (1919)

<sup>a</sup> Four eggs were in the nest but the length of one egg could not be measured.

only one- and two-egg clutches from 47 Minnesota nests although they reported “hearing” of a three-egg clutch.

More recently, McIntyre (Ph.D. diss., Univ. Minnesota, Minneapolis, Minnesota, 1975) reported one, three-egg clutch in 51 Minnesota nests. We know of only two reported four-egg loon nests. Peck (pers. comm.) recorded one from Ontario and believed the clutch was laid by two females. Since 1979, information concerning loons has been solicited from the public by the Minnesota Department of Natural Resources (MDNR). Of 76 nests for which clutch-size was reported, one contained three eggs and one contained four (MDNR files).—MICHAEL C. ZICUS, ROSS H. HIER, AND STEPHEN J. MAXSON, *Minnesota Dept. Natural Resources, Wetland Wildlife Research Group, 102 23rd St., Bemidji, Minnesota 56601. Accepted 30 Mar. 1983.*

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**A Common Loon nest from New Hampshire containing four eggs.**—The Common Loon (*Gavia immer*) is a determinate layer with a clutch-size of two (Yonge, M.Sc. thesis, Univ. Manitoba, Winnipeg, Manitoba, 1981). Of 252 clutches examined, Yonge reported that only one contained three eggs. Although a few other three-egg clutches have been documented (Vermeer, *Can. Field Nat.* 87:403–408, 1973), they are unusual (Sutcliffe, M.Sc. thesis, Univ. New Hampshire, Durham, New Hampshire, 1975). I report here the observation of a four-egg clutch in New Hampshire.

While monitoring approximately 15 loon pairs as part of an intensive nesting survey, I discovered a Common Loon incubating a four-egg clutch on 10 June 1980 on a 22-ha pond inhabited by only one pair of loons. Observations of the pair on open water on 31 May and 7 June indicated incubation had not yet begun. Therefore, the onset of incubation likely occurred between 7 and 10 June. I observed only three eggs on 16 June and one egg on 27 June. The egg remaining on 27 June was cold, indicating the nest had been abandoned.

Several explanations are suggested by these findings. One is that the eggs were laid by different females. This is improbable, however, since the territoriality exhibited by Common Loons would likely prevent another loon from participating in nesting activities. A four-egg clutch could have resulted from a second pair laying eggs in the abandoned nest of another pair. While I never observed more than two loons on the pond during the nesting period, identification of individuals was not possible. Another possibility is that one female laid all four eggs in one breeding cycle. Assuming a laying interval of at least two days (Yonge 1981), this would place the laying of the first egg on or before 4 June, well before the observed

onset of incubation. A final possibility is that an original two-egg nest was abandoned by the loons, and another set of two eggs was laid in the same nest by the same female. The observed onset of incubation is neither early nor late in the season for loons in this area. It is possible, therefore, that the second set of eggs represents a re-nest attempt. If approximately 14 days elapsed between nest failure and re-nesting (Sutcliffe 1975), laying of the first clutch probably occurred sometime in late May.

These observations were made while conducting field work for the Loon Preservation Committee of New Hampshire. Appreciation is expressed to Scott Sutcliffe, who reviewed the paper and gave helpful suggestions.—DAVID H. NELSON, *Dept. Natural Resources, Cornell Univ., Ithaca, New York 14853*. (Present address: *Dept. Forestry and Wildlife Management, Univ. Massachusetts, Amherst, Massachusetts 01003*.) Accepted 19 Apr. 1983.

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**Observations suggesting parental division of labor by American Redstarts.**—Smith (Can. J. Zool. 56:187–191, 1978) and Nolan (Ornithol. Monogr. No. 26, 1978) have observed parental division of labor during the fledgling period in Song Sparrows (*Melospiza melodia*) and Prairie Warblers (*Dendroica discolor*), respectively. However, the generality of parental division of labor is unknown because of the virtual lack of information on the fledgling period in most species. This report describes observations on an American Redstart (*Setophaga ruticilla*) pair which suggest another example of parental division of labor during the fledgling period.

On 1 August 1981, at the south shore of Bridge Lake (51°29'N, 120°42'W; approx. 80 km N of Kamloops), British Columbia, an adult female redstart was observed feeding one fledged young. About 5 m from the female a male redstart, in first-year plumage, was feeding a second fledgling. A third fledgling was observed sitting quietly on a branch about 1 m from the male. All of the young birds were in complete juvenal plumage as described by Bent (U.S. Natl. Mus. Bull. No. 203, 1953), and their tails appeared to be similar in length to those of the adults. At 17:50 I followed the female for 50 min keeping her and the young she was feeding (YG1) under simultaneous observation. During this time, YG1 followed the female and was fed 15 times by her. The male did not approach or feed YG1, although on three occasions YG1 flew towards the male and begged unsuccessfully.

After observing the female, I followed the male for 20 min and saw it feeding the second fledgling (YG2) once and the third young bird (YG3) twice. While making these observations, the female and YG1 were often seen and their calls were audible. Thus, of the three young birds involved, two associated with one parent and the third with the second parent.

On 2 August, in the same general area, I located what I assume was the same family. The male was observed for 63 min during which it fed two fledglings. During this observation period, the female, who was perched about 8 m up in a tree, remained still; the third young was perched about 2 m below it. I did not observe any begging by this young bird. Once, however, one of the male's young moved to the same branch as the female and begged directly from the female. The female made no observable response. After the observation period ended, I followed the female for 10 min and saw it feeding the young bird perched below it.

During these observations the male's two young appeared to take turns being fed. For about 15 min one young actively solicited food while the other perched quietly in shrubbery near the lakeshore. The behavior of the young then reversed. This switching occurred several times during the observation period.

These observations, although anecdotal, suggest a number of interesting things. First,