

Two nests of the Two-barred Crossbill *Loxia leucoptera* in Kuusamo in 1971.

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The Two-barred Crossbill has usually been observed in Finland only in years of large-scale invasions (HORTLING 1929, KIVIRIKKO 1947; cf. DEMENT'EV & GLADKOV 1970). The largest recent invasion in Fenno-Scandia seems to have occurred in 1959 at the same time as the invasion by the Crossbill *Loxia curvirostra* and smaller invasions were observed in 1956, 1962 and 1966 (HAFTORN 1971). The most recent observation from Finland was in the year 1969 (PULLIAINEN 1971).

In the west the species' normal breeding area in Siberia and northern U.S.S.R. (VOOUS 1960) nearly reaches the eastern border of Finland, where the invading birds first arrive. There are observations from invasion years which indicate possible nesting in various parts of northern Finland (HORTLING 1929), and three nests with eggs have been found (HAARTMAN 1969). No detailed descriptions of the nest sites of *Loxia leucoptera* in Finland have been published.

Two nests were found on Ampumavaara, Oulanka National Park on 6 and 12 May 1971. They were both in a *Hylocomium-Myrtillus* type spruce forest showing signs of paludification and with dead and mossy standing trunks of spruce. The trees were only about 30—40 % covered with foliage. Even the nesting trees had dead branches, and in some parts of the trees the needles had a yellowish colour. Data on the nests and

the eggs are given in Table 1 (p. 47). The eggs were of a very light emerald colour with dark brown and bluish grey dots. The minimum and maximum weights of full eggs were 2.37 and 2.55 g, shell weights 0.11—0.13 g.

Selostus: Kaksi kirjosiipikäpylinnun pesää Kuusamossa 1971.

Kaksi kirjosiipikäpylinnun pesää löytyi Kuusamon Ampumavaaralta toukokuussa 1971. Pesimäympäristönä oli *Hylocomium-Myrtillus*-tyypin soistunut kuusikko. Pesien ja munien yksityiskohtaiset tiedot on esitetty taulukossa 1.

References

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TABLE 1. The location and measurements of the nests found on 6 May (A) and 12 May (B) 1971, quantities of various building materials, and the measurements of the eggs.

	A		B	
Height from the ground (m)	9.0		10.3	
Distance from the treetop (m)	0.7		2.0	
Width of the nest (cm)	11.0		10.0	
Height of the nest (cm)	9.0		8.0	
Diameter of the nest bowl (cm)	6.0		6.0	
Depth of the nest bowl (cm)	3.0		2.0	
Percentages of building materials:	exterior	interior	exterior	interior
Dead spruce twigs	50	—	40	—
Lichen	50	40	40	30
Juniper bark	—	—	5	40
Hair	—	40	—	5
Feathers	—	15	—	25
Decomposed wood	—	—	5	—
Hay	—	5	—	—
Measurements of eggs (mm)	length	breadth	length	breadth
	21.2	14.9	20.5	14.8
	20.7	15.3		
	21.0	15.1		
	20.3	14.9		

Long-distance fishing flights of the breeding Caspian Tern *Hydroprogne caspia*

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It is known that the Caspian Tern may fly on fishing flights to places over 30 km from the breeding grounds (BERGMAN 1953). In 1971 and 1972, during a study of breeding Caspian Terns in south-western Finland, I found data suggesting that the Caspian Tern may perform fishing flights up to 70 km from the nest.

On 28 July, 1971, I found 10 fish tags in the same nest of a Caspian Tern. According to information from the Husö Biological Station, Åland, the tags were from eight salmon smolts (2-year-old salmon) and from two sea trout smolts. The salmon had been tagged and released only 7 days earlier and the trout 14 days earlier at Långnäs, Lumparland, eastern Åland, 70 km from the nest where the tags were found.

On 24 June, 1972, a tag was found in a Caspian Tern nest from a sea trout smolt tagged and released 18 days earlier at Marsund, Eckerö, south-western Åland. The place of release is 85 km from the place of recovery.

The Caspian Tern must have taken the tagged smolts at the place of release or some other place to which the fish might have moved. The salmon smolts recovered in 1971 were most likely captured at or near the place where they were released. First, there were as many as 10 tags in the nest showing that the tern (or terns) had made more than one, perhaps several, flights to catch the salmon. Second, the salmon were taken at or near the same spot, since it is doubtful whether a Caspian Tern could find the successive locations of a moving salmon school. Third, as the vomited bones from the salmon were in the nest as soon as 7 days after the release, at