

# Crossbills *Loxia curvirostra* feeding on cypress seeds

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*Common Crossbills Loxia curvirostra typically feed on conifer seeds, but there is no record of the species feeding on cypress Cupressus spp. Here we report two instances, one in autumn 1989, and the other in spring 1994. This is related to the crash, in these two years, in the production of Black Pine Pinus nigra seeds.*

**Key words:** Common Crossbill, *Loxia curvirostra*, diet, *Cupressus sempervirens*

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Rebut: 20.06.96; Acceptat: 22.08.96

Common Crossbills *Loxia curvirostra* typically feed on conifer seeds, generally from spruce *Picea* and pine *Pinus*, and less commonly larch *Larix* (Newton 1972, Nethersole-Thompson 1975). The species has also been observed occasionally to feed on other plant species, but there is no record of Crossbills using cypress trees *Cupressus* spp. (Cramp & Perrins 1994). Here we report two such instances.

A group of about 30 Crossbills was observed on November 1989 to feed on Italian Cypress *Cupressus sempervirens* in a garden in Sant Pongç (Solsonés, NE Spain). The birds remained in the area for a week, until they exhausted the cone supply (10 full-grown trees). In this year the Crossbills were also seen to feed on cypress cones in

Serrateix (Berguedà, NE Spain) in a churchyard.

In March 1994 Crossbills were again recorded feeding on cypress cones in the same garden in Sant Pongç and in an area nearby where there were about 40 additional full-grown trees. This time the group was formed of about 15 birds, and remained in the area for about a month. Birds were also recorded using this coniferous tree in Rajadell and Sallent (Bages, NE Spain) for about a fortnight. In this year the birds were also seen feeding on small green cones of the Aleppo Pine *Pinus halepensis*, but observations were very occasional.

In all the described cases the cypress cones were green and closed, and, as with

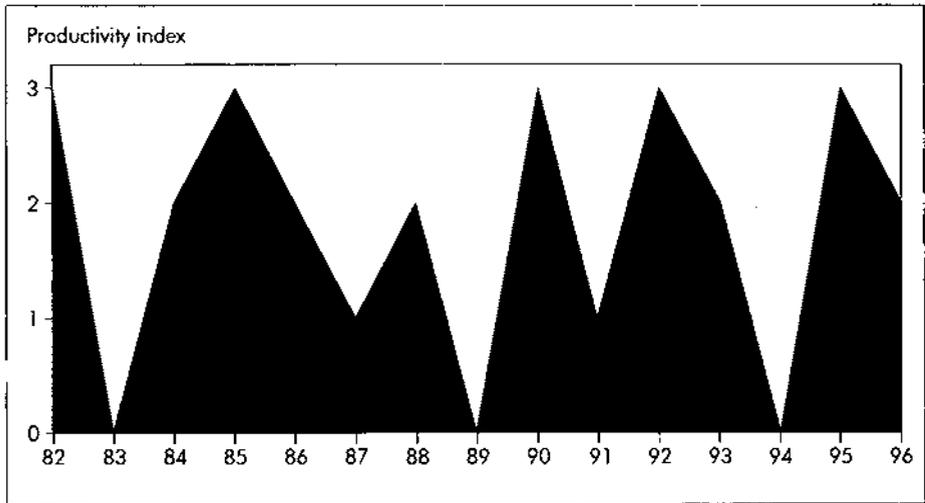


Fig. 1. Productivity index of the Black Pine in the study area, from 1982 to 1996. 0: no cones, anywhere (i.e.: productivity crash); 1: some cones, in just a few areas; 2: high fructification, but just locally abundant; 3: general high fructification.

Fig. 1. Índex de productivitat de la Pinassa a l'àrea d'estudi des de 1982 a 1996. 0: sense pinyes enlloc (ie: productivitat nul·la); 1: algunes pinyes, tan sols en unes poques àrees; 2: important fructificació, però només és localment abundant; 3: important fructificació generalitzada.

other conifer species in the area (Senar et al. 1995), the birds removed them from the tree before eating the seeds.

Although Crossbills have been seen to feed on similar trees such as junipers (*Juniperus* or *Thuja*) (Pizzari 1993, Cramp & Perrins 1994), this is the first report of the species feeding on cypress seeds. The Crossbill is a highly opportunistic species, and shifts in diet, sometimes unexpected, have been commonly described as a response to crashes in the productivity of their more typical coniferous sources (Benkman 1987, Jardine 1992, Cramp & Perrins 1994, Marquiss & Rae 1994). This could be the case for the observations reported here: the two instances of Crossbills feeding on cypress seeds (1989 and 1994) coincided with years of a crash in the productivity of Black Pine *Pinus nigra*

(every 3-4 years, Ceballos & Ruiz de la Torre 1979) (Fig. 1), which in normal years is its main food source in this area.\*

## RESUM

*Trencapinyes* *Loxia curvirostra* alimentant-se de llavors de xiprer

El *Trencapinyes* *Loxia curvirostra* s'alimenta habitualment de llavors de coníferes però no existia cap observació menjant-ne de xiprer *Cupressus* sp. En aquesta nota es presenten dues observacions, una a la tardor de 1989 i l'altra a la primavera de 1994. Aquestes observacions es relacionen amb la davallada, que en aquests dos anys hi va haver en la producció de llavors de pinassa *Pinus nigra*, la qual és una de les seves

principals fonts d'alimentació en aquesta àrea .

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