

Loxia scotica -- Hartert, 1904

ANIMALIA -- CHORDATA -- AVES -- PASSERIFORMES -- FRINGILLIDAE

Common names: Scottish Crossbill;

European Red List Assessment

European Red List Status

LC -- Least Concern, (IUCN version 3.1)

Assessment Information

Year published:	2015
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Assessment Rationale

European regional assessment: Least Concern (LC)

EU27 regional assessment: Least Concern (LC)

At both European and EU27 scales, although this species may have a small range it is not believed to approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence 10% in ten years or three generations, or with a specified population structure). The population trend is not known, but the population is not believed to be decreasing sufficiently rapidly to approach the thresholds under the population trend criterion (30% decline over ten years or three generations).

For these reasons the species is evaluated as Least Concern within both Europe and the EU27.

Occurrence

Countries/Territories of Occurrence

Native:

United Kingdom

Population

The European population is estimated at 4,100-11,400 pairs, which equates to 8,200-22,800 mature individuals. The entire population is found in the EU27. For details of national estimates, see [Supplementary PDF](#).

Trend

In Europe and the EU27 the population size trend is unknown. For details of national estimates, see [Supplementary PDF](#).

Habitats and Ecology

This species breeds in lowland forests and stands of Scots pine (*Pinus sylvestris*), including open mature plantations and ancient relict forest trees. During the winter it is mostly found in larches (*Larix*) and in established plantations of lodgepole pine (*Pinus contorta*) and sitka spruce (*Picea sitchensis*) as well as well-spaced pine woodland with heather (*Calluna*) understorey. Breeding occurs from January or February to June and the species is monogamous, although occasional polygamy is recorded. The nest is a large bulky cup of twigs (mostly pine, larch or birch), heather, grass, plant fibres, bark strips, moss, lichens, animal hair, leaves and feathers. It is sited six to eight metres above the ground in the upper level of old Scots pine, usually high in the crown or at the end of a spreading branch and very occasionally built in spruce, larch or Douglas-fir. Clutches are three to four eggs. The diet is mainly made up of seeds of Scots pine (bill shape thought to be better adapted for feeding on cones of this species) and when these are unavailable, it takes seeds, blossom, buds and shoots of larch (*Larix*), spruce (*Picea*), fir (*Abies*), Douglas-fir (*Pseudotsuga*) and beech (*Fagus*), and possibly small invertebrates. The species is resident and locally dispersive (Clement and de Juana 2013).

Habitats & Altitude			
Habitat (level 1 - level 2)		Importance	Occurrence
Artificial/Terrestrial - Plantations		major	resident
Forest - Temperate		major	resident
Altitude		Occasional altitudinal limits	

Threats

Suitable semi-natural habitat has declined from approximately 15,000 km² to fragments totalling 160 km² over the last 5,000 years. However, the amount of plantation woodland has increased substantially during the 20th century (Clement and de Juana 2013). Habitat may also be degraded through underplanting with exotic conifers and grazing pressure from high numbers of red deer, which prevents forest regeneration (Tucker and Heath 1994). Climate change may be a threat to the species, through driving changes in habitat, however the provision of habitat through commercial forestry may play a role in mitigating this (Summers and Buckland 2011).

Threats & Impacts					
Threat (level 1)	Threat (level 2)	Impact and Stresses			
Agriculture & aquaculture	Agro-industry plantations	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Unknown	Unknown
		Stresses			
Ecosystem conversion					
Climate change & severe weather	Habitat shifting & alteration	Timing	Scope	Severity	Impact
		Future	Whole (>90%)	Unknown	Unknown
		Stresses			
Ecosystem degradation; Indirect ecosystem effects					
Invasive and other problematic species, genes & diseases	Red Deer (<i>Cervus elaphus</i>)	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Negligible declines	Low Impact
		Stresses			
Ecosystem degradation					
Invasive and other problematic species, genes & diseases	Unspecified species	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Negligible declines	Low Impact
		Stresses			
Ecosystem degradation					

Conservation

Conservation Actions Underway

EU Birds Directive Annex I. Bern Convention Appendix II. A U.K. Biodiversity Action Plan is being implemented. A survey was conducted in 2008 to assess the current population size (Summers and Buckland 2011). The species is listed as 'amber' on the U.K. national Red List (Eaton et al. 2009).

Conservation Actions Proposed

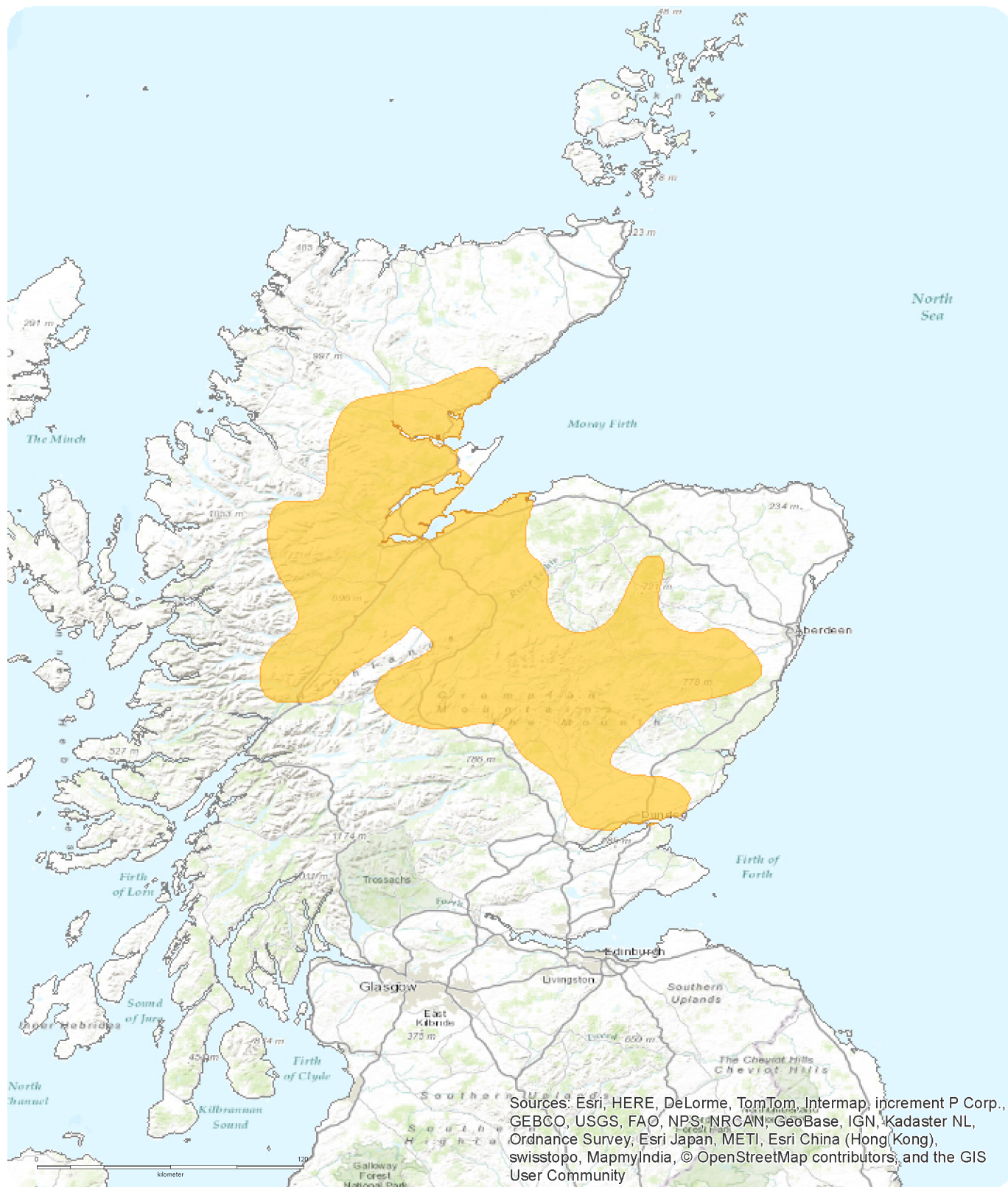
Carry out further studies to establish whether the species is best adapted to native Scots pine or to plantations of non-native species (and therefore establish the degree of threat it faces). Monitoring of the species needs to be in place in order to determine population trends (Summers and Buckland 2011). Further loss of habitat, from felling and underplanting, needs to be prevented. Red deer numbers should be controlled and excluded with fences to allow the spread of native pinewood (Tucker and Heath 1994).

Bibliography

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- Summers R.W. and Buckland, S.T. 2011. A first survey of the global population size and distribution of the Scottish Crossbill *Loxia scotica*. *Bird Conservation International* 21(2): 186-198.

Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. BirdLife International, Cambridge, U.K.

European Regional Assessment



Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Loxia scotica

Range

■ Extant (resident)

Citation:
BirdLife International (2015)
European Red List of Birds

NE DD LC > NT VU EN CR EW EX
LEAST CONCERN

Map created 05/12/2015



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