

Bubo scandiacus -- (Linnaeus, 1758)

ANIMALIA -- CHORDATA -- AVES -- STRIGIFORMES -- STRIGIDAE

Common names: Snowy Owl;

European Red List Assessment

European Red List Status

LC -- Least Concern, (IUCN version 3.1)

Assessment Information

Year published:	2015
Date assessed:	2015-03-31
Assessor(s):	BirdLife International
Reviewer(s):	Symes, A.
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Assessment Rationale

European regional assessment: Least Concern (LC)

EU27 regional assessment: Critically Endangered (CR)

In Europe this species has an extremely large range, and hence does not approach the thresholds for Vulnerable under the range size criterion (Extent of Occurrence <20,000 km² combined with a declining or fluctuating range size, habitat extent/quality, or population size and a small number of locations or severe fragmentation). The population size may be small, but it is not believed to approach the thresholds for Vulnerable under the population size criterion (<10,000 mature individuals with a continuing decline estimated to be >10% in ten years or three generations, or with a specified population structure). The population trend appears to be fluctuating, and hence the species does not approach the thresholds for Vulnerable under the population trend criterion (>30% decline over ten years or three generations). For these reasons the species is evaluated as Least Concern in Europe.

In the EU27 the tiny declining population qualifies as Critically Endangered (D). Since the species is declining within the EU27 region there is not considered to be significant potential for rescue from outside the region and the final category is unchanged.

Occurrence

Countries/Territories of Occurrence

Native:

Faroe Islands (to DK); Greenland (to DK); Finland; Iceland; Latvia; Norway; Svalbard and Jan Mayen (to NO); Russian Federation; Sweden; United Kingdom

Vagrant:

Albania; Austria; Belarus; Belgium; Croatia; Czech Republic; Denmark; France; Germany; Hungary; Ireland, Rep. of; Luxembourg; Montenegro; Netherlands; Poland; Portugal; Serbia; Slovakia; Ukraine

Population

The European population is estimated at 700-2,300 pairs, which equates to 1,400-4,600 mature individuals. The population in the EU27 is estimated at 0-12 pairs, which equates to 0-24 mature individuals. For details of national estimates, see [Supplementary PDF](#).

Trend

In Europe and the EU27 the population size is estimated to be fluctuating. For details of national estimates, see [Supplementary PDF](#).

Habitats and Ecology

This species breeds in open tundra or quasi-tundra from sea level up to 1,500 m Asl (Hagemeyer and Blair 1997), with hummocks, rocks or other low prominences, and sparse low vegetation and dwarf shrubs and lichen. In winter it also occupies marshes, fields and dunes. It breeds between May and September and is monogamous, often pairing for life but occasional incidents of polygyny and polyandry occur. The male performs an undulating courtship flight; a series of flaps followed by glide with wings held in dihedral. The

nest is a shallow scrape on ground, usually in slightly elevated site providing a good view. Clutch size varies with food supply, generally 3–5 eggs when limited, 7–11 when plentiful (Holt et al. 2015). It feeds principally on small and medium-sized rodents such as lemmings (*Lemmus lemmus*) (Tucker and Heath 1994). Other prey taken according to availability and includes birds to the size of ptarmigans (*Lagopus*), ducks and medium-sized geese, occasionally fish, amphibians, crustaceans and beetles. The species is mostly migratory and nomadic (Holt et al. 2015). Juvenile wintering areas lie south of the adult areas and females winter further north than males. Some birds may sometimes move as far south as central Europe (Hagemeijer and Blair 1997).

Habitats & Altitude			
Habitat (level 1 - level 2)		Importance	Occurrence
Artificial/Terrestrial - Pastureland		suitable	breeding
Artificial/Terrestrial - Pastureland		suitable	non-breeding
Grassland - Tundra		major	breeding
Grassland - Tundra		major	non-breeding
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands		suitable	breeding
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands		suitable	non-breeding
Wetlands (inland) - Permanent Saline, Brackish or Alkaline Marshes/Pools		suitable	breeding
Wetlands (inland) - Permanent Saline, Brackish or Alkaline Marshes/Pools		suitable	non-breeding
Altitude	max. 1500 m	Occasional altitudinal limits	

Threats

Harvesting of species for food, feathers and claws by native peoples may have local impact on population, but unlikely to have any wider effect on total numbers. Electrocution and airplane strikes may also threaten this species (Holt et al. 2015). Climate change has a significant impact on the onset of spring and snowmelt in the breeding areas which may change the availability of prey for the species (International Snowy Owl Working Group 2010).

Threats & Impacts					
Threat (level 1)	Threat (level 2)	Impact and Stresses			
Biological resource use	Hunting & trapping terrestrial animals (intentional use - species is the target)	Timing	Scope	Severity	Impact
		Ongoing	Minority (<50%)	Negligible declines	Low Impact
		Stresses			
Climate change & severe weather	Habitat shifting & alteration	Timing	Scope	Severity	Impact
		Future	Whole (>90%)	Unknown	Unknown
		Stresses			
Transportation & service corridors	Flight paths	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Unknown	Unknown
		Stresses			
Transportation & service corridors	Utility & service lines	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Unknown	Unknown
		Stresses			
		Species mortality			

Conservation

Conservation Actions Underway

Bern Convention Appendix II. CITES Appendix II. EU Birds Directive Annex I. An International Working Group was set up in 2007 to collect and share information on the species and to initiate research on the ecology, movement patterns, habitat needs, population size and threats. Several satellite tracking studies have been undertaken (International Snowy Owl Working Group 2010). Protective measures currently prohibit the shooting and trapping of owls for any reason and policies enacted to protect large birds from electrocution and airplane strikes should benefit this species (Holt et al. 2015).

Conservation Actions Proposed

Continue research into movements of the species and its ecology and habitat requirements. An International

Species Action plan should be developed and implemented. Monitoring should be developed to ensure that subsistence harvesting is sustainable.

Bibliography

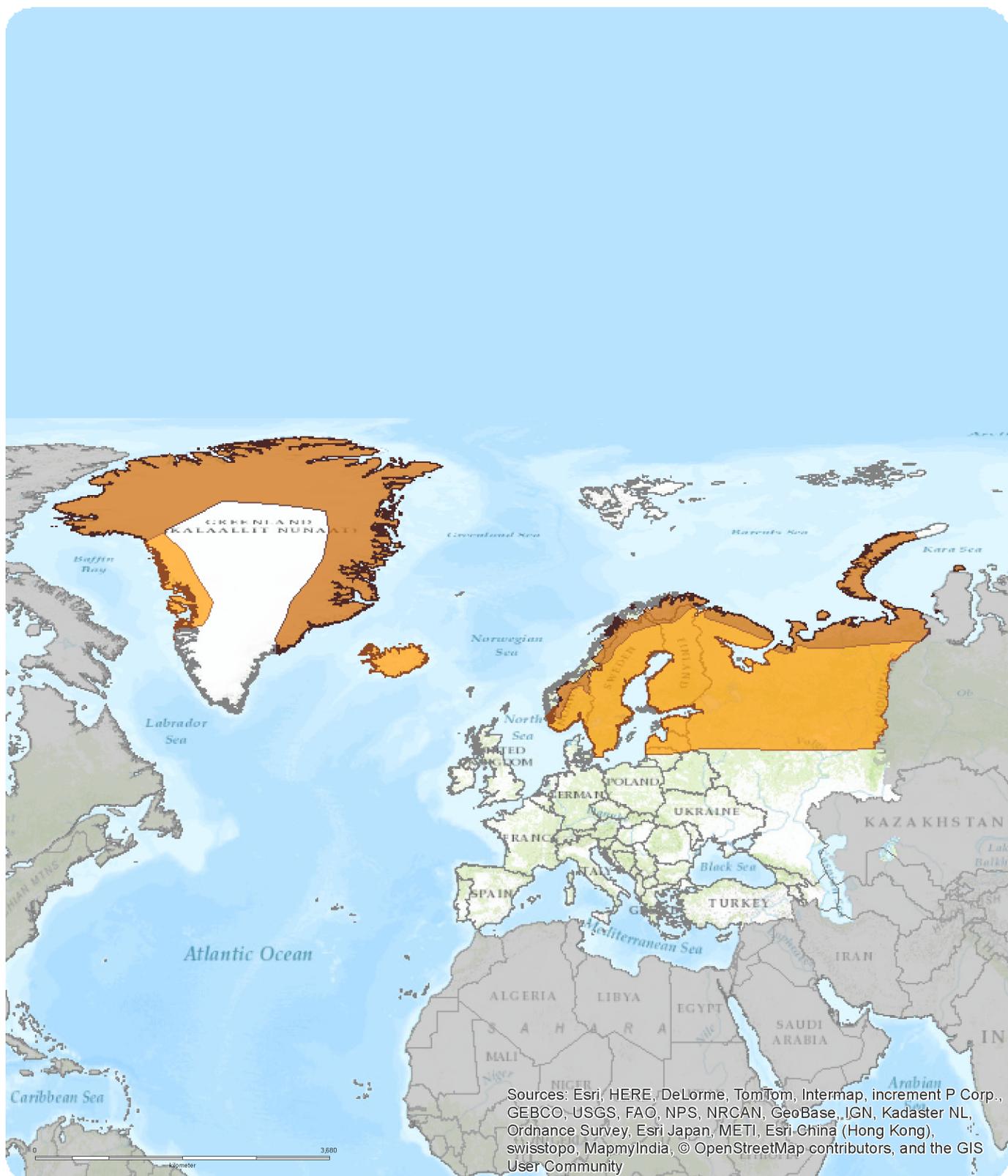
Hagemeijer, W.J.M. and Blair, M.J. 1997. *The EBCC Atlas of European Breeding Birds: Their Distribution and Abundance*. T and A D Poyser, London.

Holt, W., Berkley, R., Deppe, C., Enríquez Rocha, P., Petersen, J.L., Rangel Salazar, J.L., Segars, K.P., Wood, K.L. and Garcia, E.F.J. 2015. Snowy Owl (*Bubo scandiacus*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.) 2015. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/55027> on 27 January 2015).

International Snowy Owl Working Group 2010. International Snowy Owl Working Group, Resolution Document, Second meeting, Saskatoon February 2010.

Tucker, G.M. and Heath, M.F. 1994. *Birds in Europe: their conservation status*. BirdLife Conservation Series no. 3, BirdLife International, Cambridge.

Map (see overleaf)



Bubo scandiacus

Range

- Extant (breeding)
- Extant (non breeding)

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

