### Numenius arquata -- (Linnaeus, 1758)

ANIMALIA -- CHORDATA -- AVES -- CHARADRIIFORMES -- SCOLOPACIDAE

Common names: Eurasian Curlew; Courlis cendré; Curlew

#### **European Red List Assessment**

European Red List Status	
VU Vulnerable, (IUCN version 3.1)	

#### **Assessment Information**

Year published:	2015
Date assessed:	2015-03-31
Assessor(s):	BirdLife International
Reviewer(s):	Symes, A.
Compiler(s):	Ashpole, J., Burfield, I., Ieronymidou, C., Pople, R., Wheatley, H. & Wright, L.

#### **Assessment Rationale**

European regional assessment: Vulnerable (VU) EU27 regional assessment: Vulnerable (VU)

This widespread shorebird is undergoing rapid population declines across the European part of its extremely large global range. It is therefore classified as Vulnerable in both Europe and the EU27.

**Occurrence** 

#### **Countries/Territories of Occurrence**

#### **Native:**

Albania; Armenia; Austria; Azerbaijan; Belarus; Belgium; Bosnia and Herzegovina; Bulgaria; Croatia; Cyprus; Czech Republic; Denmark; Faroe Islands (to DK); Estonia; Finland; France; Georgia; Germany; Greece; Hungary; Iceland; Ireland, Rep. of; Italy; Latvia; Liechtenstein; Lithuania; Luxembourg; Macedonia, the former Yugoslav Republic of; Malta; Moldova; Montenegro; Netherlands; Norway; Poland; Portugal; Romania; Russian Federation; Serbia; Slovakia; Slovenia; Spain; Sweden; Switzerland; Turkey; Ukraine; United Kingdom; Gibraltar (to UK)

#### **Origin Uncertain:**

Andorra

#### Vagrant:

Greenland (to DK); Svalbard and Jan Mayen (to NO)

**Population** 

The European population is estimated at 212,000-292,000 pairs, which equates to 425,000-584,000 mature individuals. The population in the EU27 is estimated at 164,000-186,000 pairs, which equates to 328,000-371,000 mature individuals. For details of national estimates, see Supplementary PDF.

**Trend** 

In Europe and the EU27 the population size is estimated to be decreasing by 30-49% in 31.2 years (three generations). For details of national estimates, see Supplementary PDF.

#### **Habitats and Ecology**

This species frequents fens, peat bogs, heathland, coastal marshes, wet grasslands and large river valleys. In boreal Russia and Fennoscandia it prefers tundra and in areas such as France, the Netherlands and the U.K. it has successfully colonised pastures and other agricultural grasslands. European wintering birds mostly gather at large estuaries and other extensive muddy sites (Tucker and Heath 1994). It also utilises wet grassland and arable fields during migration (Van Gils and Wiersma 1996). Most populations breed from April to August (Hayman et al. 1986) in solitary, territorial pairs (Johnsgard 1981), occasionally also forming small colonies (Flint et al. 1984). The nest is a shallow depression on the ground or on a mound (Flint et al. 1984) in the open or in the cover of grass or sedge (Van Gils and Wiersma 1996) often far from water (Johnsgard 1981). Clutch size is typically four. Throughout the year the diet includes annelids, arthropods, crustaceans, molluscs, berries and seeds. Vertebrates, including small fish, amphibians, lizards, young birds and small

rodents as well as terrestrial insects and earthworms are also consumed, especially in summer (Van Gils and Wiersma 1996). This species is migratory and European populations overwinter in Western Europe, the Mediterranean and in many parts of Africa (Hagemeijer and Blair 1997). After breeding adults gather on coasts (from July onwards) (Hayman et al. 1986) for the post-breeding moult (Snow and Perrins 1998) before migrating south between July and November. Non-breeders may remain in the wintering areas all-year-round (Van Gils and Wiersma 1996).

Habitats & Altitude					
Habitat (lev	Importance	Occurrence			
Artificial/Aquatic - Seasonally Flooded Ag	gricultural Land	suitable	non-breeding		
Artificial/Terrestrial - Arable Land		suitable	breeding		
Artificial/Terrestrial - Pastureland		suitable	non-breeding		
Grassland - Temperate		suitable	non-breeding		
Marine Coastal/Supratidal - Coastal Brac	suitable	non-breeding			
Marine Coastal/Supratidal - Coastal Fres	suitable	non-breeding			
Marine Coastal/Supratidal - Coastal Sand Dunes		suitable	breeding		
Marine Intertidal - Mud Flats and Salt Flats		major	non-breeding		
Marine Intertidal - Salt Marshes (Emergent Grasses)		suitable	breeding		
Shrubland - Temperate		suitable	breeding		
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands		major	breeding		
Wetlands (inland) - Permanent Freshwater Lakes (over ha)		suitable	non-breeding		
Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)		suitable	non-breeding		
Wetlands (inland) - Seasonal/Intermittent Freshwater Lakes (over ha)		suitable	non-breeding		
Altitude		Occasional altitudinal limits			

**Threats** 

The species is threatened by the loss and fragmentation of moorland habitats as a result of afforestation (Johnsgard 1981, Van Gils and Wiersma 1996) and of marginal grassland habitats as a result of agricultural intensification and improvement (Johnsgard 1981, Baines 1988, Van Gils and Wiersma 1996) (e.g. drainage, inorganic fertilisation and reseeding) (Baines 1988). The species also suffers from high egg and chick mortalities (due to mechanical mowing) and higher predation rates if nesting on improved grasslands (Van Gils and Wiersma 1996). It is also susceptible to avian influenza so may be threatened by future outbreaks of the virus (Melville and Shortridge 2006). Wintering populations are threatened by disturbance on intertidal mudflats (Van Gils and Wiersma 1996, Burton et al. 2002a, 2002b) (e.g. from construction work (Burton et al. 2002a) and foot-traffic (Burton et al. 2002b)), development on high-tide roosting sites, pollution (Van Gils and Wiersma 1996) and the flooding of estuarine mudflats and saltmarshes as a result of tidal barrage construction (Burton 2006). The species is also threatened by the degradation of migrational staging areas owing to land reclamation, pollution, human disturbance and reduced river flows (Kelin and Qiang 2006). Local populations of this species have also declined owing to hunting pressures (Van Gils and Wiersma 1996).

Threats & Impacts					
Threat (level 1)	Threat (level 2)	Impact and Stresses			
Agriculture & aquaculture	Agro-industry grazing, ranching or farming	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Slow, Significant Declines	Medium Impact
		Stresses			
		Ecosystem conversion; Ecosystem degradation			
Agriculture & aquaculture	Small-holder grazing, ranching or farming	Timing	Scope	Severity	Impact
		Ongoing	Minority (<50%)	Slow, Significant Declines	Low Impact
		Stresses			
		Reduced reproductive success			
Agriculture & aquaculture	Wood & pulp plantations (scale unknown/ unrecorded)	Timing	Scope	Severity	Impact
		Ongoing	Majority (50-90%)	Slow, Significant Declines	Medium Impact
		Stresses			
		Ecosystem conversion; Ecosystem degradation			

Threats & Impa	<u>cts</u>					
Threat (level 1)	Threat (level 2)	Impact and Stresses				
Biological resource	Hunting & trapping	Timing	Scope	Severity	Impact	
use	terrestrial animals (intentional use -	Ongoing	Minority (<50%)	Slow, Significant Declines	Low Impact	
		Stresses				
		Species mortality				
Human intrusions &	Work & other activities	Timing	Scope	Severity	Impact	
disturbance		Ongoing	Minority (<50%)	Negligible declines	Low Impact	
		Stresses				
		Species disturband	ce			
Invasive and other	Avian Influenza	Timing	Scope	Severity	Impact	
problematic species, genes &	Virus (H subtype)	Ongoing	Minority (<50%)	Negligible declines	Low Impact	
diseases		Stresses				
		Species mortality				
Natural system modifications	Abstraction of surface water (domestic use)	Timing	Scope	Severity	Impact	
		Ongoing	Minority (<50%)	Unknown	Unknown	
		Stresses				
		Ecosystem degradation				
Natural system	Large dams	Timing	Scope	Severity	Impact	
modifications		Ongoing	Minority (<50%)	Slow, Significant Declines	Low Impact	
		Stresses				
		Ecosystem conversion; Ecosystem degradation				
Pollution	Industrial & military effluents (type unknown/ unrecorded)	Timing	Scope	Severity	Impact	
		Ongoing	Minority (<50%)	Slow, Significant Declines	Low Impact	
		Stresses				
		Ecosystem degradation				
Residential & commercial development	Housing & urban areas	Timing	Scope	Severity	Impact	
		Ongoing	Minority (<50%)	Rapid Declines	Medium Impact	
		Stresses				
		Ecosystem conversion; Ecosystem degradation				

Conservation

#### **Conservation Actions Underway**

Annex I and II of the EU Birds Directive. A management plan for the species, updated for 2007-2009, was published in 2007, covering the EU portion of the species's range (Jensen and Lutz 2007). A five year moratorium on hunting the species was implemented in France in July 2008 (A. Duncan in litt. 2008). The species occurs in a large number of protected areas throughout its range and features in several national monitoring schemes.

#### **Conservation Actions Proposed**

The Management Plan for Curlew outlines key conservation targets: Protect key wintering sites (Jensen and Lutz 2007) and work to maintain the non-hunting status in France when the hunting (Brown et al. 2014) moratorium ends. Determine the key parameters driving declines in breeding areas and integrate agrienvironment measures to counter these. Continue monitoring trends. Minimise disturbance on the wintering grounds (Jensen and Lutz 2007).

**Bibliography** 

Baines, D. 1988. The effects of improvement of upland grassland on the distribution and density of breeding wading birds (Charadriiformes) in northern England. *Biological Conservation* 45: 221-236.

Brown, D., Crockford, N. and Sheldon, R. (2014). Drivers of population change and conservation priorities for the Numeniini populations of the world. *UNEP/CMS/COP11/Inf.33*. Birdlife International, International Wader Study Group

Burton, N.H.K., Armitage, M.J.S., Musgrove, A.J. and Rehfisch, M.M. 2002. Impacts of Man-Made landscape Features on Numbers of Estuarine Waterbirds at Low Tide. *Environmental Management* 30(6): 857-864.

Burton, N.H.K., Rehfisch, M.M. and Clark, N.A. 2002. Impacts of Disturbance from Construction Work on the Densities and Feeding Behavior of Waterbirds using the Intertidal Mudflats of Cardiff Bay, UK. *Environmental Management* 30(6): 865-871.

Burton, N.H.K. 2006. The impact of the Cardiff Bay barrage on wintering waterbirds. In: Boere, G., Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 805. The Stationary Office, Edinburgh, UK.

Flint, V.E., Boehme, R.L., Kostin, Y.V. and Kuznetsov, A. A. 1984. *A field guide to birds of the USSR*. Princeton University Press, Princeton, New Jersey.

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

Hayman, P., Marchant, J. and Prater, A. J. 1986. Shorebirds. Croom Helm, London.

Jensen, F.P. and Lutz, M. 2007. *Management plan for Curlew (Numenius arquata) 2007-2009*. Office for Official Publications of the European Communities, Luxembourg.

Johnsgard, P.A. 1981. *The plovers, sandpipers and snipes of the world*. University of Nebraska Press, Lincoln, U.S.A. and London.

Kelin, C. and Qiang, X. 2006. Conserving migratory shorebirds in the Yellow Sea region. In: Boere, G., Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 319. The Stationery Office, Edinburgh, UK.

Melville, D.S. and Shortridge, K.F. 2006. Migratory waterbirds and avian influenza in the East Asian-Australasian Flyway with particular reference to the 2003-2004 H5N1 outbreak. In: Boere, G., Galbraith, C. and Stroud, D. (ed.), *Waterbirds around the world*, pp. 432-438. The Stationary Office, Edinburgh, UK.

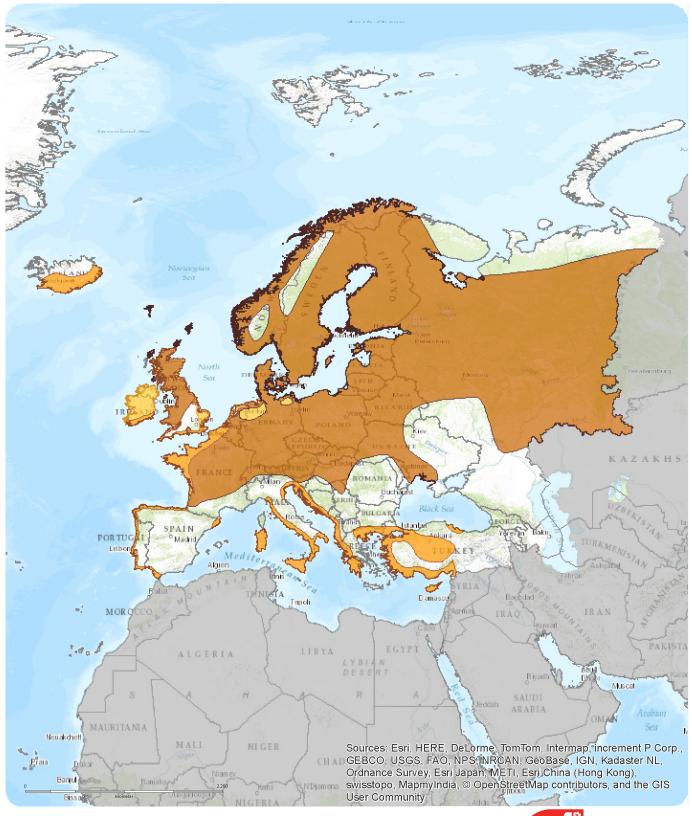
Snow, D.W. and Perrins, C.M. 1998. *The Birds of the Western Palearctic vol. 1: Non-Passerines*. Oxford University Press, Oxford.

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

Van Gils, J. and Wiersma, P. 1996. Eurasian Curlew (*Numenius arquata*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. and de Juana, E. (eds.) 2014. *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from http://www.hbw.com/node/53897 on 19 January 2015).

Map (see overleaf)

## European Regional Assessment



# Numenius arquata

## Range

Extant (breeding)

Extant (non breeding)













Map created 05/12/2015