# Phalacrocorax carbo -- (Linnaeus, 1758)

#### ANIMALIA -- CHORDATA -- AVES -- SULIFORMES -- PHALACROCORACIDAE

Common names: Great Cormorant; Black Shag; Cormorant; Grand Cormoran; White-breasted Cormorant

**European Red List Assessment** 

## **European Red List Status**

LC -- Least Concern, (IUCN version 3.1)

#### **Assessment Information**

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

#### Assessment Rationale

#### European regional assessment: Least Concern (LC) EU27 regional assessment: Least Concern (LC)

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 10% in ten years or three generations, or with a specified population structure). The population trend appears to be increasing, 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.

Within the EU27 this species has a very large range, and hence does not 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 appears to be increasing, 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 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); Greenland (to DK); Estonia; Finland; France; Georgia; Germany; Greece; Hungary; Iceland; Ireland, Rep. of; Italy; Latvia; 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)

## Vagrant:

Liechtenstein; Canary Is. (to ES)

#### **Population**

The European population is estimated at 401,000-512,000 pairs, which equates to 803,000-1,020,000 mature individuals. The population in the EU27 is estimated at 224,000-258,000 pairs, which equates to 448,000-516,000 mature individuals. For details of national estimates, see <u>Supplementary PDF</u>.

Trend

In Europe and the EU27 the population size is estimated to be increasing. For details of national estimates, see <u>Supplementary PDF</u>.

#### **Habitats and Ecology**

Throughout its range the species is sedentary or locally dispersive, with northerly populations also making strong migratory movements (Orta et al. 2014). The species frequents both coastal and inland habitats (Brown et al. 1982, Johnsgard 1993, Snow and Perrins 1998, Nelson 2005, Orta et al. 2014). In marine environments it occurs in sheltered coastal areas on estuaries (Orta et al. 2014), saltpans, coastal lagoons (Johnsgard 1993,

Orta et al. 2014), deltas (Johnsgard 1993) and coastal bays (Brown et al. 1982), requiring rocky shores, cliffs and islets for nesting (Orta et al. 2014) but generally avoiding deep water and rarely extending far offshore (Snow and Perrins 1998). It also inhabits fresh, brackish or saline inland wetlands (Nelson 2005) including lakes, reservoirs, wide rivers, flood waters (Orta et al. 2014), deep marshes with open water, swamps and oxbow lakes (Johnsgard 1993), requiring trees, bushes, reedbeds or bare ground for nesting (Orta et al. 2014) and avoiding overgrown, small, very shallow or very deep waters (Nelson 2005). The species's diet consists predominantly of fish, including sculpins, Capelin, gadids (Gremillet et al. 2004) and flatfish (Leopold et al. 1998) as well as crustaceans, amphibians (Orta et al. 2014), molluscs and nestling birds (Brown et al. 1982). At sea the species preys mostly on bottom-dwelling fish, occasionally also taking shoaling fish in deeper waters (Orta et al. 2014).

Habitats & Altitude						
Habitat (leve	el 1 - level 2)	Importance	Occurrence			
Marine Coastal/Supratidal - Coastal Brac	kish/Saline Lagoons/Marine Lakes	suitable	breeding			
Marine Coastal/Supratidal - Coastal Brac	kish/Saline Lagoons/Marine Lakes	suitable	non-breeding			
Marine Neritic - Estuaries		suitable	breeding			
Marine Neritic - Estuaries		suitable	non-breeding			
Marine Neritic - Macroalgal/Kelp		major	breeding			
Marine Neritic - Macroalgal/Kelp		major	non-breeding			
Marine Neritic - Pelagic		major	breeding			
Marine Neritic - Pelagic		major	non-breeding			
Marine Neritic - Seagrass (Submerged)	major	breeding				
Marine Neritic - Seagrass (Submerged)		major	non-breeding			
Marine Neritic - Subtidal Loose Rock/pet	bble/gravel	major	breeding			
Marine Neritic - Subtidal Loose Rock/pet	bble/gravel	major	non-breeding			
Marine Neritic - Subtidal Rock and Rocky	Reefs	major	breeding			
Marine Neritic - Subtidal Rock and Rocky	Reefs	major	non-breeding			
Marine Neritic - Subtidal Sandy		major	breeding			
Marine Neritic - Subtidal Sandy	major	non-breeding				
Marine Neritic - Subtidal Sandy-Mud	major	breeding				
Marine Neritic - Subtidal Sandy-Mud	major	non-breeding				
Wetlands (inland) - Bogs, Marshes, Swan	major	breeding				
Wetlands (inland) - Bogs, Marshes, Swan	major	non-breeding				
Wetlands (inland) - Permanent Freshwat	major	breeding				
Wetlands (inland) - Permanent Freshwater Lakes (over ha) major			non-breeding			
Wetlands (inland) - Permanent Saline, Brackish or Alkaline Lakes major			breeding			
Wetlands (inland) - Permanent Saline, Brackish or Alkaline Lakes major						
Altitude		Occasional altitudinal limits				

#### Threats

The species is often persecuted by the aquaculture industry and may be shot, drowned or poisoned in attempts to control numbers (Carss 1994, ICN 2006) or for hunting (Bzoma et al. 2011). It may also suffer from disturbance and displacement from coastal wind farms (wind turbines) (Bradbury et al. 2014), and is susceptible to avian influenza (Melville and Shortridge 2006) and Newcastle disease (Kuiken 1999) so may be threatened by future outbreaks of these viruses (Kuiken 1999, Melville and Shortridge 2006). Recreational activities taking place at sea may also cause displacement from critical habitat. The species is susceptible to oil spills across its range. It is also highly vulnerable to bycatch in gillnets (Žydelis et al. 2013), and the species is also caught in longlines (Bellebaum et al. 2009) and purse seines (Oliveira et al. 2015).

Threats & Impacts							
Threat (level 1)	Threat (level 2)	Impact and Stresses					
Agriculture & aquaculture	Marine & freshwater aquaculture (scale unknown/ unrecorded)	Timing	Scope	Severity	Impact		
		Ongoing	Majority (50-90%)	Unknown	Unknown		
		Stresses					
		Indirect ecosystem ef	ffects				

Threats & Impa	<u>cts</u>					
Threat (level 1)	Threat (level 2)	Impact and Stresses				
Biological resource use	Hunting & trapping	Timing	Scope	Severity	Impact	
	terrestrial animals (intentional use -	Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact	
	species is the target		Str	esses		
		Species mortality				
Biological resource use	Hunting & trapping terrestrial animals (persecution/ control)	Timing	Scope	Severity	Impact	
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact	
		Stresses				
		Species mortality	_	-		
Climate change &	Droughts	Timing	Scope	Severity	Impact	
severe weather		Ongoing	Unknown	Unknown	Unknown	
		Stresses				
		Ecosystem degrada	tion; Indirect ecosyste	m effects		
Energy production	Renewable energy	Timing	Scope	Severity	Impact	
		Ongoing	Minority (<50%)	Unknown	Unknown	
			Str	esses		
		Species mortality; S	pecies disturbance			
Human intrusions &	Recreational	Timing	Scope	Severity	Impact	
		Ongoing	Unknown	Unknown	Unknown	
			Str	esses		
		Species disturbance	2			
Invasive and other	Avian Influenza Virus (H subtype)	Timing	Scope	Severity	Impact	
species, genes &		Ongoing	Majority (50-90%)	Unknown	Unknown	
diseases		Stresses				
Laura bus and address		Species mortality	Carrie	Causaitas	lucus and	
problematic	Virus (NDV)	Timing	Scope	Severity	Impact	
species, genes &		Ungoing	Ch.			
diseases		Stresses				
Natural system	Other ecosystem modifications	Timing	Scope	Severity	Impact	
modifications		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact	
		Stresses				
		Ecosystem conversi	on; Ecosystem degrad	ation		
Pollution	Herbicides and pesticides	Timing	Scope	Severity	Impact	
		Ongoing	Unknown	Unknown	Unknown	
		Stresses				
		Indirect ecosystem effects				
Pollution	Industrial & military effluents (type unknown/ unrecorded)	Timing	Scope	Severity	Impact	
		Ongoing	Majority (50-90%)	Unknown	Unknown	
		Stresses				
		Ecosystem degradation				
Pollution	Oil spills	Timing	Scope	Severity	Impact	
		Past, Likely to Return	Unknown	Unknown	No/Negligible Impact	
			Str	esses		
		Ecosystem degradation; Species mortality				

**Conservation Actions Underway** The species is listed under the African Eurasian Waterbird Agreement. The species occurs in 242 Important Bird Areas. Within the EU it is listed in 245 Special Protection Areas.

Conservation

# **Conservation Actions Proposed**

Bellebaum, J., Rörhbein, V., Grieger, C., Erdmann, F., Schulz, N. and Pusch, C. 2009. *Bycatch of Seabirds in Gillnet and Longline Fisheries in the German Baltic Sea*. A report FKZ 3507 85 090 to Federal Agency for Nature Conservation (BfN).

Bradbury, G., Trinder, M., Furness, B., Banks, A.N., Caldow, R.W.G. and Hume, D. 2014. Mapping Seabird Sensitivity to Offshore Wind Farms. PLoS ONE, 9 (9): e106366.

Bzoma S. 2011. Strategia zarządzania populacją kormorana w Polsce. SGGW Warszawa.

ICN 2006. Plano Sectorial da Rede Natura 2000. *Fichas de caracterização ecológica e de gestão dos valores naturais: Grupo das aves*. http://www.icnf.pt/portal/naturaclas/rn2000/p-set/psrn-aves

Orta, J., Garcia, E.F.J., Jutglar, F., Kirwan, G.M. and Boesman, P. 2014. Great Cormorant (*Phalacrocorax carbo*). 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/52629 on 16 April 2015).

Žydelis, R., Small, C. and French, G., 2013. The incidental catch of seabirds in gillnet fisheries: A global review. *Biological Conservation* 162: 76–88.

Map (see overleaf)



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.