Calonectris borealis -- (Cory, 1881)

ANIMALIA -- CHORDATA -- AVES -- PROCELLARIIFORMES -- PROCELLARIIDAE

Common names: Cory's Shearwater;

European Red List Assessment

European Red List Status

LC -- Least Concern, (IUCN version 3.1)

Assessment Information

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Assessor(s):	BirdLife International
Reviewer(s):	Symes, A.
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Assessment Rationale

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

At both European and EU27 scales the range size has not been quantified, but it is not believed to approach the thresholds for Vulnerable under the population size criterion (10% in ten years or three generations, or with a specified population structure). The population size is very large, and hence does not approach the thresholds for Vulnerable under the population size criterion (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.

Countries/Territories of Occurrence

Native:

France; Portugal; Spain; Canary Is. (to ES); Gibraltar (to UK)

Origin Uncertain:

Belgium; Denmark; Faroe Islands (to DK); Germany; Ireland, Rep. of; Netherlands; Norway; Poland; Serbia; Sweden; Switzerland

Population

Occurrence

The European population is estimated at 252,000-253,000 pairs, which equates to 504,000-507,000 mature individuals. The entire population is found in the EU27. For details of national estimates, see <u>Supplementary</u> PDF.

Trend

In Europe and the EU27 the population size trend is unknown. For details of national estimates, see <u>Supplementary PDF</u>.

Habitats and Ecology

This species is marine and pelagic, usually keeping well away from land, except at colonies (del Hoyo et al. 2014). It breeds on barren offshore islands, occupying cliffs, caves and boulder fields; sometimes inland on rocky slopes and also under Myrica faya trees in the Azores (Thibault et al. 1997). It returns to colonies at the start of February and breeding starts in April (del Hoyo et al. 2014). The species is colonial, often nesting near other tubenoses (Thibault et al. 1997). It nests in burrows, rock crevices, natural hollows or cracks, with or without some nesting material (Ramos et al. 1997). Clutch size a single egg. There are few if any known differences in diet and foraging behaviour from Calonectris diomedea (del Hoyo et al. 2014), with fish, squid, crustaceans and occasionally zooplankton taken (Monteiro et al. 1996). The species is migratory, regularly recorded mainly from July and October between the Bay of Biscay and south-west Ireland, with sometimes 1,000s reported in single year off British Isles (Fraser & Ryan 1992, White & Kehoe 2014). It winters off the

east coasts of North and South America (Olmos et al. 1995, Pacheco and Maciel 1995, Azevedo Júnior et al. 2001, Olmos 2002, Lima et al. 2004), south to Argentine waters (Flood et al. 2013), and in the south-west Indian Ocean, where the species is recorded in large numbers, December–March (mainly November– February off South Africa) (Howell 2012). Off the east coast of North America, the species mainly occurs May to November, with occasional records as early as April and as late as December (del Hoyo et al. 2014).

Habitats & Altitude						
Habitat (leve	Importance	Occurrence				
Caves and Subterranean Habitats (non-a	suitable	breeding				
Marine Coastal/Supratidal - Sea Cliffs and	d Rocky Offshore Islands	major	breeding			
Marine Intertidal - Rocky Shoreline		major	breeding			
Marine Neritic - Macroalgal/Kelp		suitable	non-breeding			
Marine Neritic - Macroalgal/Kelp		major	breeding			
Marine Neritic - Pelagic		major	breeding			
Marine Neritic - Pelagic		major	non-breeding			
Marine Neritic - Seagrass (Submerged)		suitable	non-breeding			
Marine Neritic - Seagrass (Submerged)		major	breeding			
Marine Neritic - Subtidal Loose Rock/pet	ble/gravel	suitable	non-breeding			
Marine Neritic - Subtidal Loose Rock/pet	ble/gravel	major	breeding			
Marine Neritic - Subtidal Rock and Rocky	Reefs	suitable	non-breeding			
Marine Neritic - Subtidal Rock and Rocky	major	breeding				
Marine Neritic - Subtidal Sandy	suitable	non-breeding				
Marine Neritic - Subtidal Sandy	major	breeding				
Marine Neritic - Subtidal Sandy-Mud	suitable	non-breeding				
Marine Neritic - Subtidal Sandy-Mud	major	breeding				
Marine Oceanic - Epipelagic (m)	major	breeding				
Marine Oceanic - Epipelagic (m)	major	non-breeding				
Rocky areas (eg. inland cliffs, mountain p	major	breeding				
Rocky areas (eg. inland cliffs, mountain peaks) major						
Altitude		Occasional altitudinal limit	ts			

<u>Threats</u>

The species is threatened by the impacts of introduced mammals and shows marked increases in breeding success following mammal control actions (Zino et al. 2008). Other threats on the Azores include the poaching of chicks on one island (500–1,500 chicks taken annually on Santa Maria island (J. Bairos per comm., Fontaine et al. 2011)) and mortality of fledglings caused by artificial lights (Fontaine et al. 2011). The population on Selvagem Grande is not thought to be suffering unsustainable mortality from fisheries bycatch, although it may not be representative of other Atlantic islands occupied by the species (Granadeiro et al. 2006). A study by Ramos et al. (2012) utilising long-term capture-recapture data and year-round tracking data for birds on Selvagem Grande suggests that incidental bycatch by long-line fisheries contributes to a decrease in adult survival probability during the breeding season. The species may also suffer the impacts of bycatch in its non-breeding range (e.g. Granadeiro et al. 2006).

Threats & Impacts								
Threat (level 1)	Threat (level 2)	Impact and Stresses						
Biological resource use	Fishing & harvesting aquatic resources (unintentional effects: (large scale) [harvest])	Timing	Scope	Severity	Impact			
		Ongoing	Majority (50-90%)	Slow, Significant Declines	Medium Impact			
		Stresses						
		Species mortality						
Biological resource use	Hunting & trapping terrestrial animals (intentional use - species is the target)	Timing	Scope	Severity	Impact			
		Past, Unlikely to Return	Minority (<50%)	Causing/Could cause fluctuations	Past Impact			
		Stresses						
		Species mortality						

Threats & Impacts							
Threat (level 1)	Threat (level 2)	Impact and Stresses					
Invasive and other problematic species, genes & diseases	Unspecified species	Timing	Scope	Severity	Impact		
		Ongoing	Majority (50-90%)	Slow, Significant Declines	Medium Impact		
		Stresses					
		Species mortality					
Pollution	Light pollution	Timing	Scope	Severity	Impact		
		Ongoing	Minority (<50%)	Negligible declines	Low Impact		
		Stresses					
		Species mortality					
					Conservation		

Conservation Actions Underway

In Europe most important breeding areas are in protected areas (Madroño et al 2004, Cabral et al. 2005). In Spain, sporadic counts of breeding populations occur in some colonies, mostly in the Balearic Islands but in the Columbretes, counts are more regular. Reproductive success is also monitored in the Chafarinas (Madroño et al 2004). A study of the incidental mortality of seabirds in waters around the Columbretes Islands (SEO/BirdLife, General Secretariat of Fisheries) found high numbers of this species were killed by longline fisheries, however mortality could be reduced by avoiding setting lines around sunrise and sunset (Belda and Sanchez 2001). Research projects and awareness campaigns, some of which were financed through the LIFE Programme have taken place in Portugal (Cabral et al. 2005).

Conservation Actions Proposed

Adequate protection (e.g. through SPAs) of all breeding areas both current and historical should be ensured. Actively managing the breeding colonies (eliminating predators, recreating the breeding habitat) and removing predators from the former breeding colonies to promote the natural return of the species, will also help secure the species. The proper use of corrective measures in longline fisheries to avoid accidental capture of birds should be promoted and specific corrective measures to prevent accidental capture of the species in longline fisheries should be developed, in collaboration with the fishing industry. Marine areas which are important for the conservation of the species should be designated SPAs and assessments of the environmental impact of new developments and activities that are planned need to be established. Conduct national censuses of this species and monitor breeding colonies to determine accurate populaton trends. Water sports in the vicinity of breeding colonies should be regulated, especially at night, in order to avoid disturbing the birds. The regulation of artificial lighting in the breeding areas and adjacent coastal areas, to minimize their impact particularly on young birds at the time of fledging, is also important (Madroño et al 2004).

Bibliography

Azevedo Júnior, S.M., Dias, M.M., Larrazábal, M.E., Telino Júnior, W.R., Lyra-Neves, R.M. and Galamba Fernandes, C.J. 2001. Recapturas e recuperações de aves migratórias no litoral de Pernambuco, Brasil. *Ararajuba* 9(1): 33–42.

Belda, E.J. and Sánchez, A. 2001. Seabird mortality on longline fisheries in the western Mediterranean: factors affecting bycatch and proposed mitigating measures. *Biological Conservation*, 98(3): 357-363.

Cabral M.J, Almeida, J., Almeida, P.R., Dellinger, T., Ferrand de Almeida, N., Oliveira, M.E., Palmeirim, J.M., Queiroz, A.L., Rogado, L. and Santos Reis, M. (eds) 2005. *Livro Vermelho dos Vertebrados de Portugal. Peixes Dulciaquícolas e Migradores, Anfibios, Répteis, Aves e Mamíferos*. Instituto da Conservação da Natureza, Lisboa. 660pp.

del Hoyo, J., Collar, N. and Kirwan, G.M. 2014. Cory's Shearwater (*Calonectris borealis*). 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/467275 on 23 December 2014).

Flood, B., Taylor, M. and Zufelt, K. 2013. Tubenoses in the southwest Atlantic in April 2012. *Birding World* 26(7): 304-308.

Fontaine, R., Gimenez, O. and Bried, J. 2011. The impact of introduced predators, light-induced mortality of fledglings and poaching on the dynamics of the Cory's shearwater (*Calonectris diomedea*) population from the Azores, northeastern subtropical Atlantic. *Biological Conservation* 144: 1998-2011.

Fraser, P.A. and Ryan, J.F. 1992. Scarce migrants in Britain and Ireland. Part 1. Numbers during 1986-90: seabirds to waders. *British Birds* 85(12): 631-635.

Granadeiro, J.P., Dias, M.P., Rebelo, R., Santos, C.D. and Catry, P. 2006. Numbers and population trends of Cory's Shearwater *Calonectris diomedea* at Selvagem Grande, Northeast Atlantic. *Waterbirds* 29: 56-60.

Howell, S.N.G. 2012. *Petrels, Albatrosses, and Storm-Petrels of North America: A Photographic Guide.* Princeton University Press, Princeton, New Jersey.

Lima, P.C., Grantsau, R., Rocha Lima, R.C.F. and Santos, S.S. 2004. Occurrence and Mortality of Seabirds along the Northern Coast of Bahia, and the Identification Key of the Procellariiformes Order and the Stercorariidae Family. *Atualidades Ornitológicas* 121: 1-63.

Madroño, A., González, C. and Atienza, J.C. (eds.) 2004. *Libro Rojo de las aves de España*. Madrid, Spain: Dirección General para la Biodiversidad and SEO/BirdLife

Monteiro, L.R., Ramos, J.A. and Furness, R.W. 1996. Past and present status and conservation of the seabirds breeding in the Azores archipelago. *Biological Conservation* 78: 319–328.

Olmos, F. 2002. Non-breeding seabirds in Brazil: a review of band recoveries. Ararajuba 10(1): 31-42.

Olmos, F., Martuscelli, P., Silva, R. and Neves, T.S. 1995. The sea-birds of São Paulo, southeastern Brazil. *Bulletin of the British Ornithologists' Club* 115(2): 117-128.

Pacheco, J.F. and Maciel, N.C. 1995. Segundo registro de Calonectris diomedea no Estado do Rio de Janeiro e um sumário de suas aparições na costa brasileira (Procellariiformes: Procellariidae). *Ararajuba* 3: 82-83.

Ramos, J.A., Monteiro, L.R., Sola, E. and Moniz, Z. (1997) Characteristics and competition for nest cavities in burrowing Procellariiformes. Condor 99(3): 634–641.

Ramos, R., Granadeiro, J.P., Nevoux, M., Mougin, J.-L., Dias, M.P. and Catry, P. 2012. Combined Spatio-Temporal Impacts of Climate and Longline Fisheries on the Survival of a Trans-Equatorial Marine Migrant. *PLoS ONE* 7(7): e40822.

Thibault, J.-C., Bretagnolle, V. and Rabouam, C. 1997. *Calonectris diomedea* Cory's Shearwater. *BWP Update* 1(2): 75–98.

White, S. and Kehoe, C. 2014. Report on scarce migrant birds in Britain in 2008–10. Part 1: non-passerines. *British Birds* 107(3): 142-176.

Zino, F., Hounsome, M.V., Buckle, A.P. and Biscoito, M. 2008. Was the removal of rabbits and house mice from Selvagem Grande beneficial to the breeding of Cory's shearwaters *Calonectris diomedea borealis? Oryx* 42: 151-154.

Map (see overleaf)

European Regional Assessment



Commission

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