Sterna dougallii -- Montagu, 1813

ANIMALIA -- CHORDATA -- AVES -- CHARADRIIFORMES -- LARIDAE

Common names: Roseate Tern; Sterne de Dougall

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.
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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 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 within both Europe and the EU27.

Occurrence

Countries/Territories of Occurrence

Native:

France; Ireland, Rep. of; Portugal; Spain; United Kingdom

Vagrant:

Austria; Belgium; Denmark; Germany; Malta; Netherlands; Norway; Poland; Sweden; Switzerland; Gibraltar (to UK)

Population

The European population is estimated at 2,300-2,900 pairs, which equates to 4,500-5,800 mature individuals. The entire population is found in the EU27. For details of national estimates, see Supplementary PDF.

Trend

In Europe the population size is estimated to be increasing. For details of national estimates, see Supplementary PDF.

Habitats and Ecology

The species nests on sand-dunes, sand-spits, shingle beaches, reefs (Snow and Perrins 1998), saltmarshes and rocky, sandy or coral islands, showing a preference for densely vegetated sites in temperate regions (Gochfeld and Burger 1996). It also shows a preference for nest sites close to clear, shallow, sandy fishing grounds in tidal bays and sheltered inshore waters (Snow and Perrins 1998). Throughout the year the species often rests and forages in sheltered estuaries, creeks (Urban et al. 1986), inshore waters and up to several kilometres offshore (Gochfeld and Burger 1996), moving to warm tropical coasts after breeding (Snow and Perrins 1998). The species breeds in large, dense single- or mixed-species colonies that may contain several thousands of pairs. The nest is a bare scrape in sand, shingle or coral rubble (Gochfeld and Burger 1996), preferably in sites surrounded by walls and rocks (Newton and Crowe 2000) or in the shelter of vegetation (in temperate regions) (Richards 1990, Snow and Perrins 1998), also in crevices between and under rocks, or in the entrances to rabbit or Puffin burrows (Snow and Perrins 1998). Clutches are normally two eggs but can be only one in poor food years (Gochfeld and Burger 1996). This species is a specialist forager, and takes a small prey spectrum compared to Common Tern at the same sites (Birdlife International 2000). Its diet consists

predominantly of small pelagic fish (Urban et al. 1986, Gochfeld and Burger 1996), particularly sand eel (Birdlife International 2000, Newton and Crowe 2000) and sprat (Birdlife International 2000) and sometimes clupeids (Birdlife International 2000, Newton and Crowe 2000) and gadoids (Newton and Crowe 2000), although it will also take insects and marine invertebrates (Gochfeld and Burger 1996). Sandeel are particularly important during chick rearing (Newton and Crowe 2000). The species is migratory and Palearctic birds winter in west Africa (Gochfeld and Burger 1996).

Habitats & Altitude

Habitat (level 1 - level 2)		Importance	Occurrence
Marine Intertidal - Salt Marshes (Emergent Grasses)		marginal	breeding
Marine Neritic - Estuaries		suitable	breeding
Marine Neritic - Macroalgal/Kelp		major	breeding
Marine Neritic - Pelagic		suitable	breeding
Marine Neritic - Seagrass (Submerged)		major	breeding
Marine Neritic - Subtidal Loose Rock/pebble/gravel		major	breeding
Marine Neritic - Subtidal Rock and Rocky Reefs		major	breeding
Marine Neritic - Subtidal Sandy		major	breeding
Marine Neritic - Subtidal Sandy-Mud		major	breeding
Marine Oceanic - Epipelagic (m)		suitable	breeding
Marine Oceanic - Epipelagic (m)		suitable	passage
Marine Oceanic - Mesopelagic (m)		suitable	breeding
Altitude	max. 18 m	Occasional altitudinal limits	

Threats

The species is threatened by a number of agents, of which hunting in the wintering quarters may be the most significant (Brown and Nettleship 1984, Buckley and Buckley 1984, Cooper et al. 1984, Avery et al. 1995). At the northern European breeding grounds, the most significant threats are human disturbance (e.g., from habitat development, off-road vehicles and recreation (Buckley and Buckley 1984, van Halewyn and Norton 1984)) and predation from both natural and introduced avian and ground predators (Brown and Nettleship 1984, Buckley and Buckley 1984, Cooper et al. 1984, van Halewyn and Norton 1984, Avery et al. 1995, Snow and Perrins 1998). Disturbance and egg-collecting have been stopped in most areas by the use of wardens, but disturbance still threatens some major colonies in the Azores (van Halewyn and Norton 1984, Gochfeld and Burger 1996). Predation by rats, ferrets, red foxes and Peregrine Falcon (Falco peregrinus) occurs locally, and can have significant effects, including complete breeding failure at some Azores colonies (Avery et al. 1995). Natural predators can often take a great toll on localised colonies, particularly when terns are disturbed from the nest by other birds and humans (Buckley and Buckley 1984, Cooper et al. 1984). Habitat loss in northern Europe is not a major problem but has caused the local extinction of some colonies, as have extreme weather events (Avery et al. 1995). Climate change may negatively affect the species but the exact mechanisms are not known (Newbery 1999). The species is also vulnerable to pollution and disease (Brown and Nettleship 1984, Avery et al. 1995).

Threats & Impacts

Threat (level 1)	Threat (level 2)	Impact and Stresses			
Agriculture & aquaculture	Marine & freshwater aquaculture (scale unknown/ unrecorded)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Unknown	Causing/Could cause fluctuations	Unknown
		Stresses			
		Indirect ecosystem effects			
Biological resource use	Fishing & harvesting aquatic resources (unintentional effects: (large scale) [harvest])	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Unknown	Causing/Could cause fluctuations	Unknown
		Stresses			
		Species mortality			
Biological resource use	Hunting & trapping terrestrial animals (intentional use - species is the target)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Minority (<50%)	Slow, Significant Declines	Low Impact
		Stresses			
		Species mortality			

Threats & Impacts

Threat (level 1)	Threat (level 2)	Impact and Stresses			
Climate change & severe weather	Habitat shifting & alteration	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Unknown	Unknown	Unknown
		Stresses			
		Indirect ecosystem effects			
Energy production & mining	Renewable energy	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Human intrusions & disturbance	Recreational activities	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species disturbance; Reduced reproductive success			
Human intrusions & disturbance	Work & other activities	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Unknown	Unknown	Unknown
		Stresses			
		Species disturbance			
Invasive and other problematic species, genes & diseases	Common Starling (Sturnus vulgaris)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Invasive and other problematic species, genes & diseases	Eurasian Buzzard (Buteo buteo)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Invasive and other problematic species, genes & diseases	Ferret (Mustela furo)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Invasive and other problematic species, genes & diseases	Peregrine Falcon (Falco peregrinus)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Invasive and other problematic species, genes & diseases	Red Fox (Vulpes vulpes)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Invasive and other problematic species, genes & diseases	Unspecified rats (Rattus spp.)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Majority (50-90%)	Causing/Could cause fluctuations	Medium Impact
		Stresses			
		Species mortality; Reduced reproductive success			
Natural system modifications	Other ecosystem modifications	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Unknown	Unknown	Unknown
		Stresses			
		Indirect ecosystem effects			
Pollution	Industrial & military effluents (type unknown/ unrecorded)	**Timing**	**Scope**	**Severity**	**Impact**
		Ongoing	Unknown	Unknown	Unknown
		Stresses			
		Ecosystem degradation			

Conservation Actions Underway

Breeding birds are fully protected by national and international law but at sea outside of European territorial waters or in the coastal waters of other countries protection is limited (Tucker and Heath 1994). An action plan for the recovery of the European population was launched in 1987 (Avery 1987) and most of its recommendations have been implemented (Avery et al. 1995). An International Species Action Plan was published in 1999 (Newbery 1999).

Conservation Actions Proposed

Legislative protection and enforcement should be introduced for the entire range of this species (Tucker and Heath 1994). Breeding pairs are known to be attracted to coastal locations where artificial nesting sites have been constructed (e.g. beaches of bare shingle and islands or rafts covered with sparse vegetation) (Burgess and Hirons 1992) and nesting-boxes provided (chicks may also use nest-boxes as shelters if adults do not nest in them directly) (Avery et al. 1995, Casey et al. 1995, Newton and Crowe 2000). Increased breeding successes can also be gained through nest-site vegetation management (Casey et al. 1995, Newton and Crowe 2000), landscaping (e.g. creating terraces or infilling flooded hollows), flood prevention (Newton and Crowe 2000), and continuous wardening to minimise unauthorised disturbance (Casey et al. 1995, Newton and Crowe 2000). Non-lethal predator control (e.g. destroying eggs and nests of gull species attempting to nest on islands) can also be successful in increasing the overall breeding success of the species (Casey et al. 1995, Leonard et al. 2004). Colonies which seem abandoned should still be protected and maintained to allow recolonization. At selected sites population and productivity monitoring should continue (Tucker and Heath 1994).

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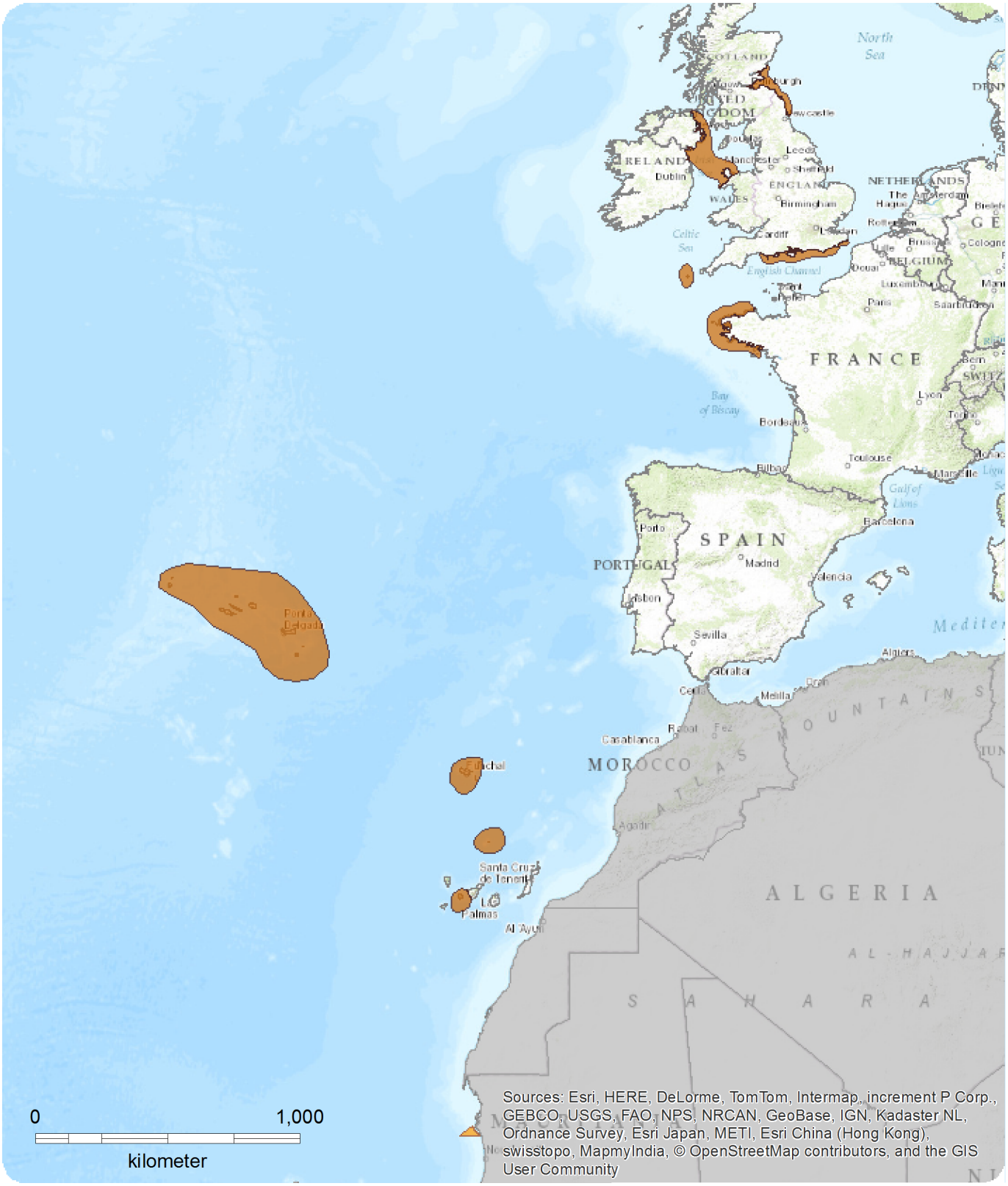
Map (see overleaf)



Sterna dougallii

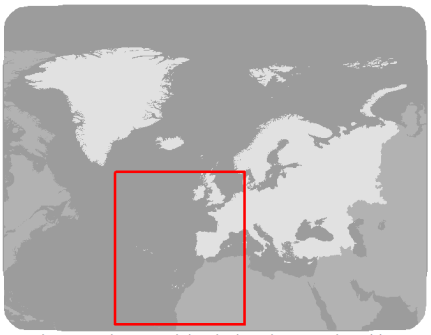
NE | DD | LC LEAST CONCERN | NT | VU | EN | CR | EW | EX

Range

- Extant (breeding)
- Extant (non breeding)

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

Map created 05/13/2015



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