# Hydroprogne caspia

English name:	Scientific name:			
Caspian tern	Hydroprogne caspia			
Taxonomical group:	Species authority:			
Class: Aves	Pallas, 1770			
Order: Charadriiformes				
Family: Sternidae				
Subspecies, Variations, Synonyms: –	Generation length: 10 years			
Past and current threats (Habitats Directive	Future threats (Habitats Directive article 17			
article 17 codes):	codes):			
Extra-regional threats (e.g. hunting; XE), Alien	Extra-regional threats (e.g. hunting; XE), Alien			
species (I01), Competition and predation (I02)	species (I01), Competition and predation (I02),			
	potentially Climage change (M)			
IUCN Criteria:	HELCOM Red List	VU		
C1	Category:	Vulnerable		
Global / European IUCN Red List Category	Annex I EU Birds Directive:yes			
(BirdLife International 2004)	Annex II EU Birds Directive:no			
LC / LC				
Protection and Red List status in HELCOM countries:				

Subject of special conservation measures in the EU Member states (Birds Directive, Annex I) and in Russia (Red Data Book of the Russian Federation)

Denmark: RE, Estonia: VU, Finland: NT, Germany: 1 (Critically endangered), Latvia: -, Lithuania: -, Poland: -, Russia: 3 (Rare), Sweden: VU

# Range description and general trends

The Caspian tern breeds patchily along the Baltic, Black Sea and Caspian Sea coasts. The European population is small, with about 1 700 bp in the Baltic, 800 in the Black, and 2 000 in the Caspian Sea (Tjernberg & Svensson 2007). It was breeding also at the German North Sea coast, but this population got extinct during World War I (Schulz 1947). The European population underwent a large decline between 1970-1990, but increased during 1990-2000 (BirdLife International 2004).



Hydroprogne caspia. Photos by Jürgen Reich.



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#### Distribution and status in the Baltic Sea region

The Baltic breeding population increased from 500 bp in the mid-1930s to 1 200 bp in 1953 and finally to 2,500 bp in 1971, an undisputed peak so far. Until 1984 the population declined to 1 900 bp (Hario et al. 1987), and further to 1 600-1 700 pairs currently.

The Swedish population has suffered a decline from 850-950 bp in 1971 (Väisänen 1973) to 532 bp in 2010 (Staav in Eskildsen & Vikstrøm 2011). However, the trend is characterised by certain fluctuations – there were 500 bp in 2000, but 660 in 2007. Most of the birds are breeding in colonies, but some (19% in 2010, 13% in the average) are also found as single breeding pairs from Scania to Norrbotten and inland at Lake Vänern (Tjernberg & Svensson 2007).

In Finland, the population peaked at 1,200 bp in 1971 (Hario et al. 1987). After a period of decline it has stabilized at around 800-900 bp in recent times. About 700 of them nest in colonies, the others as solitary pairs.

In the Russian part of the easternmost Gulf of Finland, 20–40 bp were encountered in the Bolshoi Fiskar archipelago during 1995-2006, but in 2010 none was discovered despite a complete survey and mapping of seabird colonies across the Gulf (A. Kondratiev, pers. com.). Another colony was found in 1992 on Moshny Island (Noskov et al. 1993). However, this colony has not been visited again. In 2007– 2010 Caspian terns have been seen at different points of the Russian part of the Gulf of Finland; breeding on some of the islands is not unlikely. In Lake Ladoga there were c. 10 bp, but on the territory of Karelia.

After a long time of stability, the Estonian breeding population recently has suffered some decline. In 1971, 356 bp have been counted (Väisänen 1973). For 1998–2002, Elts et al. (2003) give a population number of 250-400 bp, but only 150-250 bp were estimated for the period 2003-2008 (Elts et al. 2009).

In Latvia, one single breeding has been recorded in 1976 (Vīksne et al. 1980). The same is true for Poland, where the Caspian tern has been found breeding in 1969 near Łeba (Tomiałojć & Stawarczyk 2003).

In the south-western Baltic, the species is rare and has not been a permanent breeder. It was obviously breeding at the end of the 18th century on the island Großer Stubber in the Greifswald Lagoon (Germany, Western Pomerania; Otto 1776), but then disappeared for about 150 years. It possibly bred around the island Hiddensee during the 1930s (Schulz 1947), but the first doubtless breeding record of recent times dates from 1956, when a clutch was found on the small bird island Heuwiese (Dost 1963). Since then, the species has bred regularly, though not in all years, with 1-3 bp on small islands around Rügen (mainly Heuwiese and Beuchel). There was no breeding record from 2005-2009, but in 2010 one pair bred successfully on the island Beuchel.

In **Denmark**, breeding of the Caspian tern is exceptional. There was one breeding record on Saltholm in 2009 - the first record after 1944 (Nyegaard & Willemoes 2010). In 2010, 2 breeding pairs have been recorded on Saltholm and Øksneholm in the Roskilde Fjord (Eskildsen & Vikstrøm 2011).



Table 1: Population numbers of the Caspian tern in the Baltic Sea area. For population trends 0=stable, ==decreasing, +=increasing, f=fluctuating, ?=unknown.

	Population size		Short-term	Long-term
Country	Breeding pairs	year	population trend (10 years)	population trend (50 years)
Sweden	532	2010	f	-
Finland	880	2010	0	+
Russia PET	0–20	2010	f	?
Estonia	150-250	2008	-	0
Latvia	Exceptional	1976		
Poland	Exceptional	1969		
Germany MV	1–3	Since 1956		
Denmark	Sporadic, 1–2	1944; 2009/10		
Baltic Sea	1 600–1 700			



# **Distribution Map**





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## Habitat and ecology

The cosmopolitan Caspian tern inhabits a wide range of aquatic habitats. Within the Baltic range, it breeds in the outer archipelago and has recently colonized a few inland lakes in small numbers (Lake Ladoga in Russia, Vänern in Sweden12, Vanaja in Finland). Foraging flights venture inland up to 30–100 km distances from the coast (Soikkeli 1973). The Baltic population is a distinct unit, with no apparent interchange with its nearest neighbouring population in the Black Sea despite these two populations sharing the same wintering areas in the inundation zone of the river Niger in Mali (Staav 1979). Within the Baltic archipelago, it is highly maritime occurring colonially on exposed outer skerries or solitarily on small rocks, always together with other larids (Numers 1995).

About 90% of the population breeds in colonies (of up to 300 pairs), the remainders being solitary. Small groups of less than 10 pairs always result from splitting of larger colonies, and such groups seldom breed in two consecutive seasons before merging again (Bergman 1980).

## **Description of major threats**

Predation on Caspian tern eggs and chicks by herring gulls and white-tailed eagles has recently devastated colonies in Sweden, and red Foxes have caused colony shifts in Estonia. Egg collection by local people still occurs in Estonia and Russia (BirdLife Finland 2007). Mortality of first-winter birds in the Sahel zone has increased during the post-1960s draught years, as revealed by Finnish ring recoveries (Hario et al. 1987, Zwarts et al. 2009). This is the most obvious single reason for the long-term decline of the Baltic population although there are also indications of elevated adult mortality in recent years. This, together with breeding failures due to predation, leads to a currently critical situation of the Caspian tern in the Baltic Sea area.

# **Assessment justification**

The Baltic breeding population counted about 2 500 bp at the beginning of the 1970s, but declined to 1900 bp in 1984, and 1 600-1 700 currently. Considering the population size, the period of 3 generation lengths (i.e. 30 years) and the observed continued decline the species classifies as Vulnerable (VU) according to criterion C1.

# Recommendations for actions to conserve the species

The main conservation measure is the control of predatory mammals on breeding islands of the Caspian tern.

#### Common names

Denmark: Rovterne, Estonia: Räusk, Finland: Räyskä, Germany: Raubseeschwalbe, Latvia: Lielais zīriņš, Lithuania: Plėérioji žuvėdra, Plešrioji žuvedra, Plėšrioji žuvėdra, Poland: Rybitwa wielkodzioba, Russia: Чеграва, Sweden: Skräntärna



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RE CR EN VU NT DD LC

#### **SPECIES INFORMATION SHEET**

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