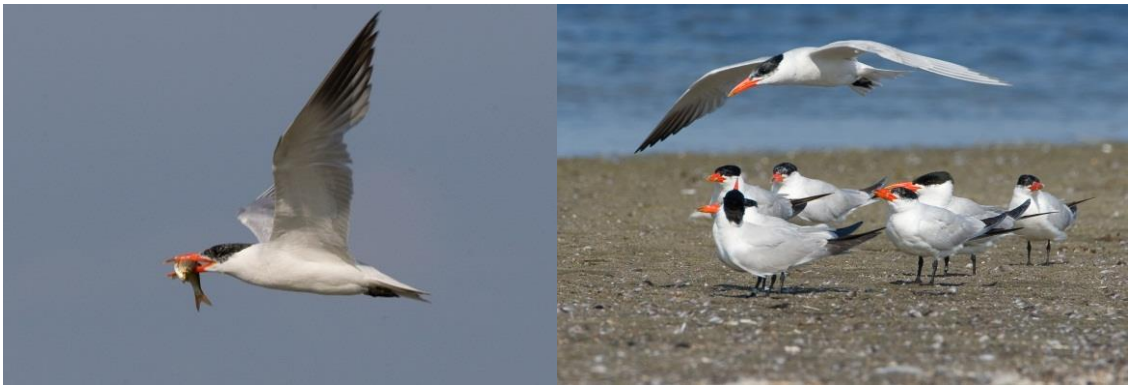
SPECIES INFORMATION SHEET *Hydroprogne caspia*

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

SPECIES INFORMATION SHEET *Hydroprogne caspia*

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).

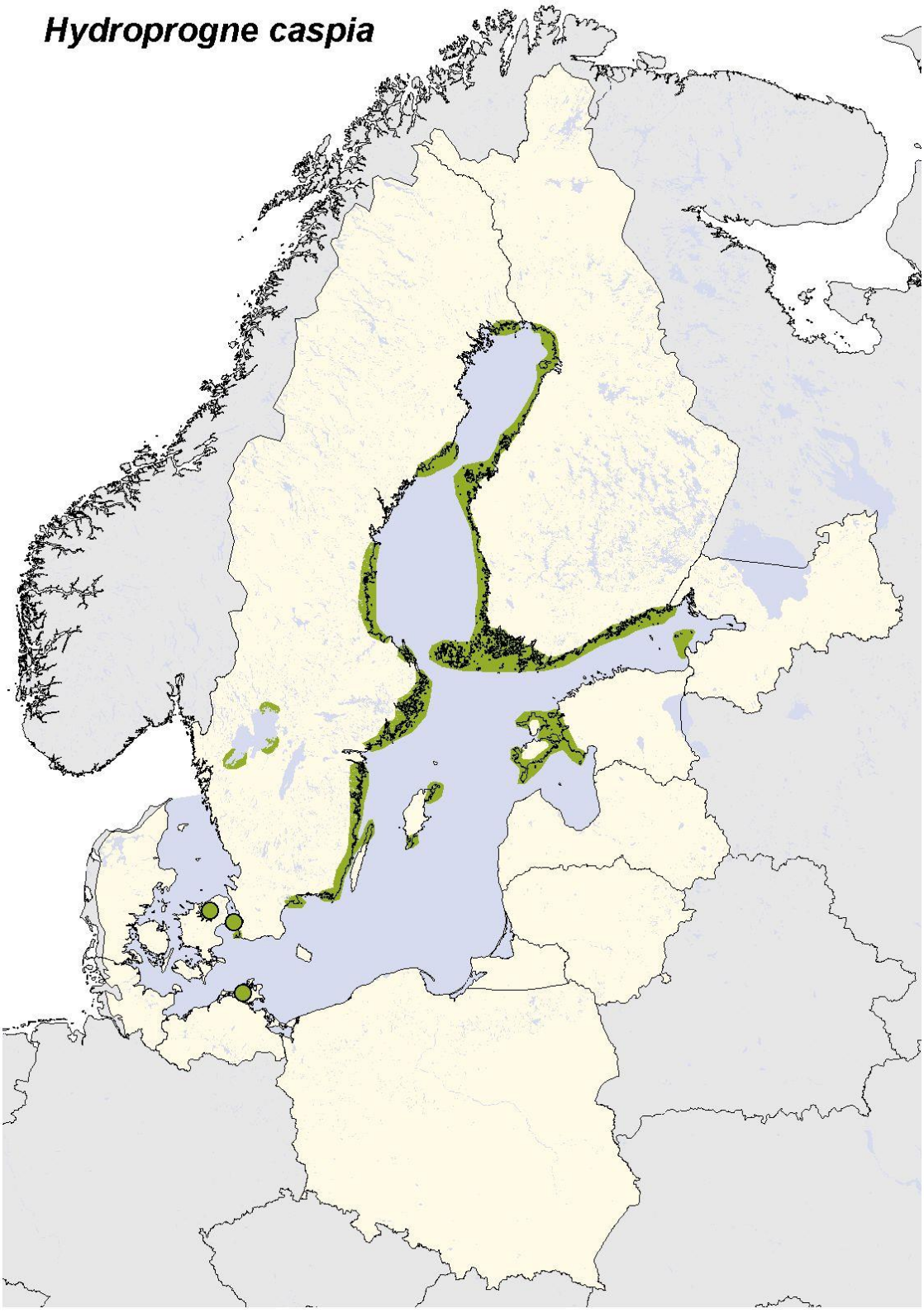
SPECIES INFORMATION SHEET *Hydroprogne caspia*

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

Country	Population size		Short-term population trend (10 years)	Long-term population trend (50 years)
	Breeding pairs	year		
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**			

SPECIES INFORMATION SHEET *Hydroprogne caspia*

Distribution Map



SPECIES INFORMATION SHEET *Hydroprogne caspia*

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: Plėėrioji žuvėdra, Plešrioji žuvedra, Plėšrioji žuvėdra, Poland: Rybitwa wielkodzioba, Russia: Черрава, Sweden: Skräntärna

References

Bergman, G. (1980): Single-breeding versus colonial breeding in the Caspian Tern *Hydroprogne caspia*, the common Tern Sterna hirundo and the Arctic Tern Sterna paradisaea. Ornis Fennica 57: 141–152.

BirdLife Finland (2007): [Action Plan for Conservation of the Caspian Tern.] (In Finnish).

BirdLife International (2004): Birds in Europe. Population estimates, trends and conservation status. BirdLife Conservation Series 12, Cambridge UK.

Dost, H. (1963): Zum Brutvorkommen der Raubseeschwalbe, *Hydroprogne caspia* (Pallas), an der deutschen Ostseeküste. Beitr. Vogelkde. 8: 361–365.

Elts, J., A. Kuresoo, E. Leibak, A. Leito V. Lilleleht, L. Luigujõe, A. Lõhmus, E. Mägi & M. Ots (2003): Status and Numbers of Estonian Birds, 1998–2002. Hirundo 16, 58–83.

Elts, J., A. Kuresoo, E. Leibak, A. Leito V. Lilleleht, L. Luigujõe, E. Mägi, R. Nellis, R. Nellis & M. Ots (2009): Status and Numbers of Estonian Birds, 2003–2008. Hirundo 22, 3–31.

Eskildsen, A. & T. Vikstrøm (2011): Truede og sjældne ynglefugle i Danmark 2010. Dansk Orn. Foren.

Estonian Red List of Threatened Species (2008): Available at http://elurikkus.ut.ee/prmt.php?lang=eng.

Hario, M., T. Kastepöld, M. Kilpi, R, Staav & T. Stjernberg (1987): Status of the Caspian Tern Sterna caspia in the Baltic. Ornis Fennica 64: 154–157.

Mikkola-Roos, M., Tiainen, J., Below, A., Hario, M., Lehikoinen, A., Lehikoinen, E., Lehtiniemi, T., Rajasärkkä, A., Valkama, J. & Väisänen, R. A. (2010): Linnut, Birds. Aves. In Rassi, P., Hyvärinen, E., Juslén, A. & Mannerkoski, I. (eds.). Suomen lajien uhanalaisuus – Punainen kirja 2010. Ministry of the Environment & Finnish Environment Institute, Helsinki. P. 183–203.

Noskov G.A., V.A. Fedorov, A.R. Gaginskaya, R.A. Sagitov, V.A. Buzun (1993): About the avifauna of the islands in the eastern part of the Gulf of Finland. Russian J. Ornithol. 2: 163–173 (in Russian).

Numers, M. v. (1995): Distribution, numbers and ecological gradients of birds breeding on small islands in the Archipelago Sea, SW Finland. Acta Zoologica Fennica 197: 127 pp.

Nyegaard, T. & M. Willemoes (2010): Truede og sjældne ynglefugle i Danmark 2009. Report nr. 12 for the DOF Working Group Truede og Sjældne Ynglefugle (DATSY): 1–24.

Otto, L.C. (1776): Verzeichniß von Vögeln, die im Schwedischen Pommern beobachtet, geschossen und nach dem Linneischen System beschrieben sind. Neue Mannigfaltigkeiten 4: 443–452; 459–468.

Red Data Book of the Russian Federation (RDBRF) (2000): Available at http://biodat.ru/db/rb/.

Schulz, H. (1947): Die Welt der Seevögel. Anton Lettenbauer, Hamburg.

Soikkeli, M. (1973): Long-distance fishing flights of the Caspian Tern *Hydroprogne caspia*. Ornis Fennica 50: 47–48.

Staav, R. (1979): Dispersal of the Caspian Tern Sterna caspia in the Baltic. Ornis Fennica 56: 13–17.

Südbeck, P., Bauer, H.-G., Boschert, M., Boye, P. & W. Knief (2007): Rote Liste der Brutvögel Deutschlands, 4. Fassung. Ber. Vogelschutz 44: 23–81.

Tjernberg, M. & M. Svensson (eds.) (2007): Artfakta – Rödlistade ryggradsdjur i Sverige [Swedish Red Data Book of Vertebrates]. ArtDatabanken, SLU, Uppsala.

Tjernberg, M., Ahlén, I., Andersson, Å., Eriksson, M. O. G., Nilsson, S. G. & Svensson, S. (2010): Fåglar – Birds. Aves. In Gärdenfors, U. (ed.) Rödlistade arter i Sverige 2010 – The 2010 Red List of Swedish Species. ArtDatabanken, SLU, Uppsala. P. 201–221. Red List categories available also at http://www.artfakta.se/GetSpecies.aspx?SearchType=Advanced

Tomiałojć, L. & T. Stawarczyk (2003): Awifauna Polski. Rozmieszczenie, liczebność i zmiany. The Avifauna of Poland. Distribution, Numbers and Trends. Vol. I & II, Wroclaw.

Väisänen, R.A. (1973): Establishment of Colonies of Caspian Tern *Hydroprogne caspia* by Deserting Flights in the Northern Gulf of Bothnia. Ornis Scandinavica 4: 47–53.

Vīksne, J., M. Janaus & J Kazubiernis (1980): Lielā zīriņa – *Hydroprogne caspia* (Pall.) – pirmais ligzdošanas gadījums Latvijā. – Retie augu un dzīvnieki: 36–38.

Wind, P. & Pihl, S. (eds.). (2004–2010): The Danish Red List. - The National Environmental Research Institute, Aarhus University [2004]-. http://redlist.dmu.dk (updated April 2010). Species information available at http://bios.au.dk/videnudveksling/til-myndigheder-og-saerligt-interesserede/redlistframe/soegart/

Zwarts, L., R.G. Bijlsma, J. van der Kamp & E. Wymenga (2009): Living on the edge: Wetlands and birds in a changing Sahel. KNNV Publishing, Zeist, The Netherlands.