

## SPECIES INFORMATION SHEET

*Arenaria interpres*

English name: <b>Ruddy turnstone</b>	Scientific name: <b><i>Arenaria interpres</i></b>	
Taxonomical group: Class: Aves Order: Charadriiformes Family: Scolopacidae	Species authority: Linnaeus, 1758	
Subspecies, Variations, Synonyms: –	Generation length: 5 years	
Past and current threats (Habitats Directive article 17 codes): Overgrowth of open areas (A04.03, K02), Alien species (I01), Competition and predation (I02), potentially Extra-regional threats (XE)	Future threats (Habitats Directive article 17 codes): Overgrowth of open areas (A04.03, K02), Alien species (I01), Competition and predation (I02), potentially Extra-regional threats (XE)	
IUCN Criteria: <b>A2abce + 3ce + 4abce</b>	<b>HELCOM Red List Category:</b>	<b>VU Vulnerable</b>
Global / European IUCN Red List Category (BirdLife International 2004) LC / LC	EU Birds Directive-no	
Red List status in HELCOM countries: Denmark: EN, Estonia: VU, Finland: VU, Germany: 2 (Endangered), Latvia: –, Lithuania: –, Poland: –, Russia: –, Sweden: VU		

## Range description and general trends

The ruddy turnstone breeds in coastal areas of northern Europe. The European population is estimated at 34 000–81 000 bp, of which the Baltic Sea area hosts only a small proportion of 4 450–5 200 bp. The highest numbers of breeding pairs in the Baltic are found in Sweden and Finland.



*Arenaria interpres*. Photo by Lutz Ritzel.

## Distribution and status in the Baltic Sea region

In **Sweden**, the ruddy turnstone has disappeared from the west coast in 1995. Currently it breeds on the east coast between Blekinge and Norrbotten, but also at lake Vänern, although the lake-dwelling population has always been small (0–12 pairs during the last 20 years). The overall population trend is strongly negative, although the main strongholds in the Västerbotten county slightly increased during

## SPECIES INFORMATION SHEET

## *Arenaria interpres*

the past 20 years, harboring now 600 pairs. There are still 150–250 pairs on Gotland. A remarkable decline took place in the Stockholm–Uppsala archipelago, from 1 600 bp in mid-1970s to less than 500 currently. The total Swedish population numbers 1 500–2 200 bp, which is only 50% of amount from 20 years ago.

In **Finland**, the ruddy turnstone breeds along the entire coast. Since the 1980s, a decline of 47% has been observed, and in the last 15 years the decline has been estimated at 30%. The current population size is assessed at 2 800 bp (Hario & Rintala 2011).

In the **Russian** Baltic Sea area the species only breeds in St. Petersburg region with few (5–10) pairs. The short-term trend seems to be negative, the long-term trend is unknown.

The **Estonian** population amounted 100–150 bp during the period 2003–2008. It has suffered a strong decrease (>50%) during the period 1971–1990 and a moderate decline (10–50%) in 1991–2008 (Elts *et al.* 2009).

At the **German** Baltic coast, the ruddy turnstone disappeared as a breeding bird from Schleswig-Holstein already before 1900 (Berndt *et al.* 2002). In Mecklenburg-Western Pomerania, it was a breeding bird during the 19th century and at the beginning of the 20th century in small numbers in the Wismar Bight and on the islands west of Rügen (Hiddensee, Heuwiese). The last breeding record dates from 1918 from the southern parts of Hiddensee (Schulz 1947).

In **Denmark**, the main breeding site is the island Læsø in the northern Kattegat. However, occasionally the ruddy turnstone may also breed on other locations, as for instance on Saltholm in 2009. Until the mid-1990s, turnstones also bred regularly on small islands around Fyn (Møller 1975, Sørensen 1995, Rasmussen 2010). The Danish breeding pair numbers were 38–39 in 1974, 40 in 1990, 36 in 1996, 37–41 in 2000, 51 in 2006, 48–49 in 2007, and 36–38 in 2009 (Grell 2001; Nyegaard & Grell 2007, 2008; Nyegaard & Willemoes 2010).

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

Country	Population size		Short-term population trend (10 years)	Long-term population trend (50 years)
	Breeding pairs	Year		
Sweden	1 500–2 200	2010	-	-
Finland	2 800	2010	-	+
Russia - PET	5–10	2009	-	?
Estonia	100–150	2003–2008	-	-
Germany - SH	0	extinct		
Germany - MV	0	extinct		
Denmark	36–38	2009	0	0
<b>Baltic Sea</b>	<b>4 450–5 200</b>			

## SPECIES INFORMATION SHEET

*Arenaria interpres*

## Distribution Map

*Arenaria interpres*

## SPECIES INFORMATION SHEET

## *Arenaria interpres*

### Habitat and Ecology

The turnstone used to be the most numerous wader species in the northern Baltic archipelagos, but has recently lost this position to the oystercatcher in many places. With an arctic overall distribution, the turnstone inhabits the barren, treeless parts of the outer archipelago and is completely lacking at the mainland shores. It associates with terns and smaller gulls at the breeding sites, reaching highest densities in their colonies, at best 10–20 pairs on small islets of less than 5 hectares (Vuolanto 1968). The species breeds also solitarily.

### Description of major threats

The decline of the turnstone in the Baltic Sea area is most obvious in the southern part of its breeding range and in the inner zones of the archipelagos. These are areas of the highest rate of overgrowth and also of the highest rate of mammalian predation. Also land uplift is lowest in the south, giving less compensation for the overgrowth of breeding sites and creating less new breeding habitats. Possibly also the predation by crows (including the Raven) is heavier in the south. These can be factors that have produced the pronounced dichotomy according to zonation in its current distribution. The turnstone is a cosmopolitan migrant in tropical and subtropical coasts where it spends 3–6 years before becoming sexually mature (Vuolanto 1968). Yet, nothing is known about subadult and adult mortality and overwintering success.

### Assessment justification

The species is classified, according to the observed decline during the last 3 generations and the expected continuation of this trend, as Vulnerable (VU) according to the criteria A2abce + 3ce + 4abce.

### Recommendations for actions to conserve the species

Control of predatory mammals in the breeding areas of turnstones should be done in order to enhance the reproduction rate. Also, cutting perching trees of skulking Crows and Ravens is beneficial. Clearing juniper cover can restore old breeding sites, although preference for rocky habitats instead of sandy ones makes the species less vulnerable to the effects of overgrowth. Providing semi-artificial sheltered nest sites under flat stones and in debris/ driftwood reduces egg losses. A pan-Baltic ring recovery analysis should be done in order to reveal the main migration and wintering areas.

### Common names

Denmark: Stenvender, Estonia: Kivirullija, Finland: Karikukko, Germany: Steinwalzer, Latvia: Akmenstartns, Akmeņtartns, Lithuania: Akmene, Akmenė, Poland: Kamusznik, Russia: Камнешарка, Sweden: Roskarl

### References

- Berndt, R.K., B. Koop & B. Struwe-Juhl (2002): Vogelwelt Schleswig-Holsteins, Volume 5, Brutvogelatlas. Wachholtz Verlag, Neumünster.
- Elts, J., A. Kuresoo, E. Leibak, A. Leito V. Lilleleht, L. Luigujõe, E. Magi, R. Nellis, R. Nellis & M. Ots (2009): Status and Numbers of Estonian Birds, 2003–2008. Hirundo 22, 3–31.
- Estonian Red List of Threatened Species (2008): Available at <http://elurikkus.ut.ee/prmt.php?lang=eng>.
- Grell, M.B. (2001): Truede og sjeldne ynglefugle i Danmark 2000. Dansk Orn. Foren. Tidsskr. 95: 51–68.
- Hario, M. & J. Rintala (2011): Population trends of the archipelago birds along Finnish coasts during 1986–2010. Linnut yearbook 2010: 40–51.

## SPECIES INFORMATION SHEET

## *Arenaria interpres*

- Mikkola-Roos, M., Tiainen, J., Below, A., Hario, M., Lehtikoinen, A., Lehtikoinen, 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.
- Nyegaard, T. & M.B. Grell (2007): Truede og sjældne ynglefugle i Danmark 2006. Report nr. 9 for the DOF Working Group Truede og Sjældne Ynglefugle (DATSY): 1–19.
- Nyegaard, T. & M.B. Grell (2008): Truede og sjældne ynglefugle i Danmark 2007. Report nr. 10 for the DOF Working Group Truede og Sjældne Ynglefugle (DATSY): 1–26.
- 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.
- Møller, A.P. (1975): Ynglefugleoptælling af vadefugle Charadrii på Læsø, Nordjylland, i årene 1971–74. – Dansk Orn. Foren. Tidsskr. 69: 31–40.
- Rasmussen, P.A.F. (2010): Stenvender *Arenaria interpres*. In: Nyegaard, T. & M. Willemoes: Truede og sjældne ynglefugle i Danmark 2009. Fugleåret, Dansk Ornitologisk Forening: 175–176.
- Schulz, H. (1947): Die Welt der Seevögel. Anton Lettenbauer, Hamburg.
- Sørensen, U.G. (1995): Truede og sjældne danske ynglefugle 1976–1991. Dansk Orn. Foren. Tidsskr. 89: 1–48.
- 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., 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>
- Vuolanto, S. (1968): On the breeding biology of the Turnstone (*Arenaria interpres*) at Norrkär, Gulf of Bothnia. Ornis Fennica 45:19–24.
- 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/>