

## SPECIES INFORMATION SHEET

## *Salmo trutta*

|  |  |                      |
|--|--|----------------------|
| English name:<br><b>Trout</b>  | Scientific name:<br><b><i>Salmo trutta</i></b>   |                      |
| Taxonomical group:<br>Class: Actinopterygii<br>Order: Salmoniformes<br>Family: Salmonidae  | Species authority:<br>Linnaeus, 1758   |                      |
| Subspecies, Variations, Synonyms:  | Generation length:<br>8 years  |                      |
| Past and current threats (Habitats Directive article 17 codes):<br>Fishing (F02), Migration barriers (J03.02.01)   | Future threats (Habitats Directive article 17 codes):<br>Fishing (F02), Migration barriers (J03.02.01) |                      |
| IUCN Criteria:<br><b>A4b</b>   | <b>HELCOM Red List Category:</b>   | <b>VU Vulnerable</b> |
| Global / European IUCN Red List Category:<br>LC/LC but noted that anadromous part of populations (sea trout) and many lacustrine stocks have in many cases markedly declined   | Habitats Directive:<br>–   |                      |
| Previous HELCOM Red List Category (2007): VU   |  |                      |
| Protection and Red List status in HELCOM countries:<br>Denmark: –/LC<br>Estonia: <i>Regular stockings. Fishery regulations.</i> / NT<br>Finland: <i>Fishing is not allowed during spawning time in freshwater. Minimum legal landing size is 50 cm in the sea. Fishing restrictions areas outside some river mouths. Construction of fish passes in rivers. Restorations. Regular stockings.</i> / CR (sea migrating)<br>Germany: <i>A restocking program has been established since the 1990's. Each year approx. 500.000 juveniles are released in suitable rivers.</i> / * (Not threatened, Baltic Sea)<br>Latvia: <i>Under the Law on the Conservation of Species and Biotores; included in CM regulation Nr. 396 and 45. Protection by commercial fishing and angling rules (closed season, minimal landing size).</i> / –<br>Lithuania: <i>Restoration program in some rivers. Protected from fishing during spawning time in rivers 1 October - 31 December. Restricted fishery in migration routes.</i> / –<br>Poland: <i>Stocked annually in some Pomeranian rivers (in contact to the Baltic waters). Minimum landing size 50 cm. Closed season different in coastal and open waters. Minimum mesh size 70 mm (bar length) for fishery in the coastal area of Gdansk Bay, 80 mm for the rest of Polish Maritime Areas. Protected area (closed for fishery) in the river mouths.</i> / –<br>Russia: <i>Anadromous form is included in the Red Books of St Petersburg, Leningrad District and Russian Federation, which means it is illegal to fish for and land this species.</i> / EN<br>Sweden: <i>Protected from fishing during spawning time in some areas. Minimum legal landing size 45 cm in Kattegat, and 50cm in the rest of the Baltic Sea, except for 40 cm in Åland Sea.</i> / LC |  |                      |

### Distribution and status in the Baltic Sea region

Sea trout is an anadromous form of brown trout (*Salmo trutta* L.) and the species is naturally distributed in northern and western Europe from the White Sea to northern Spain, including the entire Baltic Sea area. It is a highly appreciated in commercial and recreational fishery and stocking is a common practice in large part of the distribution area. In total there are about 1000 trout rivers in the Baltic Sea area (ICES 2011a,b). Although still numerous, the sea trout populations have been affected by migration obstacles, habitat degradation and fishing. In three out of nine ICES subdivisions in the Baltic Sea the parr production is estimated to be below 50% compared to potential production capacity and only in three areas it is 100% (ICES 2011a,b). The populations in both the Bothnian Sea and Gulf of Finland are in poor state (ICES 2011b, HELCOM 2011). Globally this species is considered not threatened but it is

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noted that the anadromous part of populations (sea trout) and many lacustrine stocks have in many cases markedly declined because of pollution (and possibly from impacts from salmon farming) (Freyhof, J. 2011).



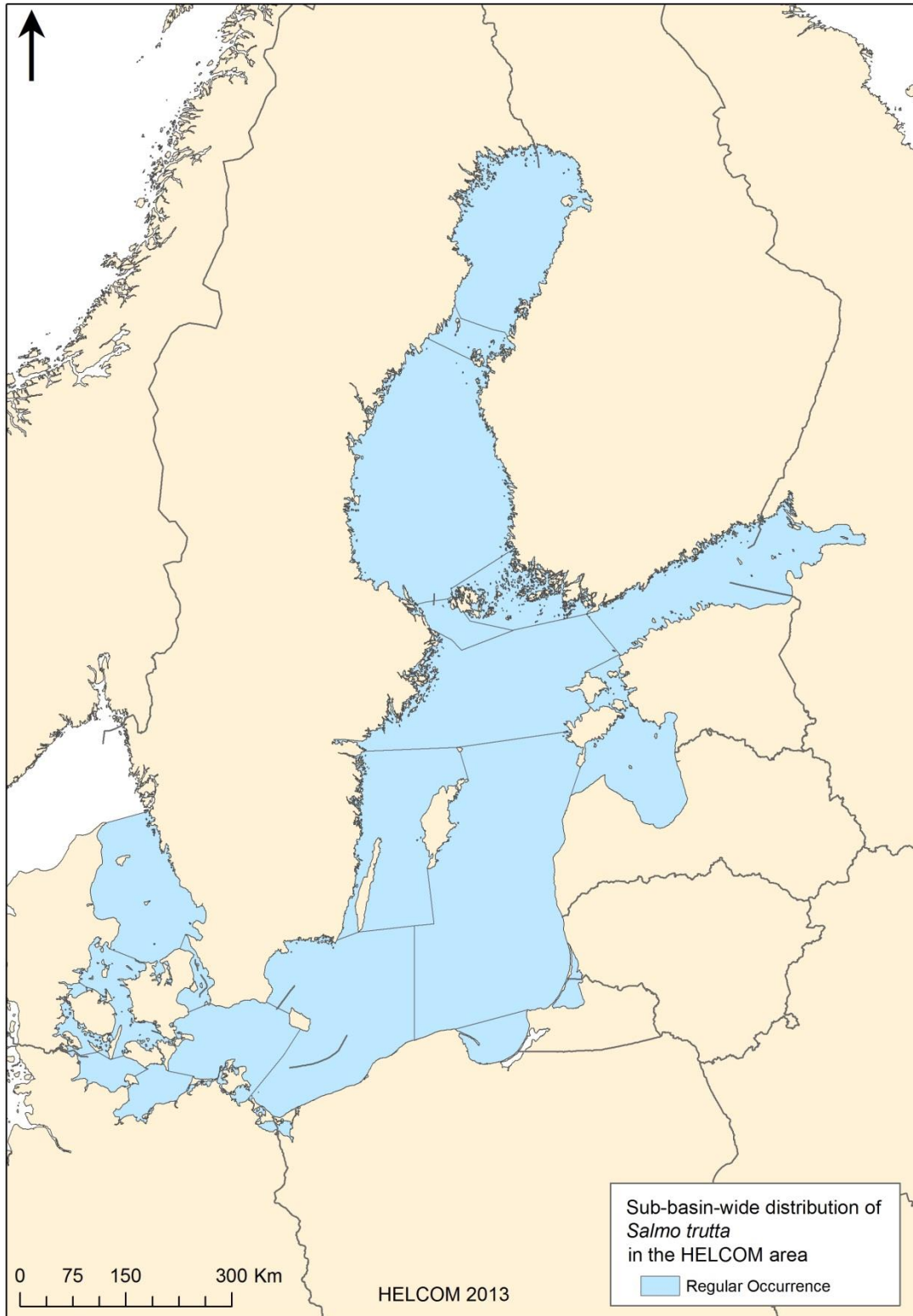
Trout. Photo by Vivica von Vietinghoff, Deutsches Meeresmuseum.

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### Distribution map

The map shows the sub-basins in the HELCOM area where the species is known to occur regularly (HELCOM 2012). Reproduction takes place in rivers.



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### Habitat and ecology

Sea trout usually lives in the same water system with resident brown trout, and they can be genetically isolated from each other or breed together and genetically belong to the same population (Freyhof 2011). Populations are often partially migratory, i.e. one part of the population leaves the river for feeding in the sea (predominantly females migrate), while another part stays in the river as residents. Sea trout spawn in rivers and smaller streams, often in the upper reaches or in smaller tributaries, where the nursery areas of trout are also found. They live their first (1–5) year(s) as parr in the stream, leaving the stream as smolts for a feeding migration in the sea that lasts for ½–5 years. After the sea migration they return to their natal stream for spawning. Spawning may be repeated several times. Adults feed on small fish and large crustaceans.

### Description of major threats

Commercial and recreational fishing and blocking of migration routes are the major threats for anadromous trout.

### Assessment justification

In three out of nine ICES assessment area the parr production is estimated to be below 50% and only in 3 areas it is 100% (ICES 2011b). Assuming that all ICES SD represents equal parts of the stock would result in an overall reduction of 25%. However there are no trend data and the reduced parr production are probably to a large part caused by constructions in rivers which were made before the start of the assessment period. There are indications of a continuing decline in the Gulf of Bothnia where landings have declined and older individuals are missing (ICES 2011b). Otherwise there are no data to follow trends in stocks of sea trout. Although there is no question that the Gulf of Bothnia and Gulf of Finland are in an adverse state the decrease in total HELCOM area in the past 3 generations is most probably below 30%. However, there are indications of a decline in the recent past. Furthermore, trout is care dependent in such a way that if habitat restoration would cease it would decline even more in the future. This leads to the expert judgment that trout probably experiences a population decrease of more than 30% within the HELCOM area including both past and future time, fulfilling the A4b criteria of being Vulnerable. Immigration from outside the HELCOM area is unlikely to have any rescue effect due to the species strong natal homing behaviour.

### Recommendations for actions to conserve the species

According to the meeting of sea trout specialists and managers around the Baltic in Helsinki, Finland, 2011 (Pedersen et al. 2012) the species would benefit by a range of measures including conservation and protection of unobstructed trout and salmon rivers, fisheries management, reduction of eutrophication in the spawning rivers, ecological flows downstream past dams and power plants, reduced sediment load through adequate riparian zones, when necessary, ban of gravel extraction in such rivers, construction of fish passes across barriers along the spawning migration route. Illegal fishery also needs to be stopped.

### Common names

D: Meerforelle; DK: Ørred; ES: meriforell; FI: Taimen; GB: Trout; LA: Taimiņš; LI: Šlakis; PL: Troć; RUS: Kumzha, forel'; SE: Öring

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