## Gammarus tigrinus



Photo © Johan Lindholm, Åbo Akademi University

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| Common name(s) in English                    | _  |
| and in other languages                       | Finnish: Leväkatka. German: Gefleckter Flußflohkrebs. Getigerter<br>Bachflohkrebs. Polish: Kielz tygrys. Russian: Bokoplav.<br>Swedish: Tigermärla.  |
| Scientific name                              | Gammarus tigrinus  |
| Organism group                               | Crustaceans. Amphipods.  |
| Size and appearance                          | This amphipod can be anything from about 4 mm to 10–11 mm in length. In general, the males are somewhat larger than the females. Specimens found in the Gulf of Finland were 7–11 mm long. The body colour is whitish to yellow, with black patches or black transverse stripes/bands.   |
|  | Different colour variants of <i>Gammarus tigrinus</i> .  Left: © Jonne Kotta, Eesti Mereinstituut.  Right: © Hugh MacIsaac, University of Windsor.   |
| May be confused with                         | Native amphipods of the genus <i>Gammarus</i> (of which there are several species throughout the Baltic Sea).  |
| Geographical origin                          | North America.   |
| First observed in Swedish waters             | Has not yet been observed in Swedish waters.   |
| Occurrence in Swedish seas and coastal areas | Has not yet been observed in Swedish waters.   |
| Occurrence in other sea areas                | This species was first recorded in Europe in 1931 (in Britain and Ireland). It found its way to Britain in ballast water, but has also been actively introduced into German rivers as fish food. It is now to be found along the south, south-east and east coasts of the Baltic, from Germany north to Finland. In 2003 it was observed in the Gulf of Riga and the Gulf of Finland. The first discovery of the |

|                                    | species in the Baltic Sea region in a broad sense was in a German river in 1975.  |
|------------------------------------|---|
| Probable means of introduction     | Shipping, in ballast water. Deliberate introduction as fish food.   |
| Habitat(s) in which species occurs | Gammarus tigrinus is a benthic species. It thrives in various environments, among benthic vegetation, on sand and on coarse stone substrates. It often inhabits rivers and can cope with a broad spectrum of salinities, from fresh water to 25 psu. The species also has a wide temperature tolerance, with an ability to live in waters ranging from around 0°C probably to roughly 35°C. It has become very widespread in rivers in Germany, the Netherlands and other countries, where it is breeding and spreading rapidly.  |
| Ecological effects                 | successful in Polish waters. In certain areas (Puck Bay) it coexists with other species, but the commonest scenario is that this species gradually displaces other amphipods. It is highly tolerant of changes in its environment, including pollution.  In German rivers <i>G. tigrinus</i> was the commonest amphipod up to the end of the 1990s, but has now begun to be outcompeted by the Ponto-Caspian killer shrimp ( <i>Dikerogammarus villosus</i> ), another amphipod present in the southern Baltic. There are indications that the highly aggressive <i>D. villosus</i> could become dominant over <i>G. tigrinus</i> and hence also over other, native amphipod species. |
| Other effects                      | Gammarus tigrinus is an omnivore and outcompetes native species of amphipods. It has been very  |

## FIND OUT MORE

- *Memoranda Soc. Fauna Flora Fennica*: First findings of the North American amphipod *Gammarus tigrinus* Sexton, 1939 along the Finnish coast (Pienimäki, Helavuori, Leppaäkoski). 80,2004
- North European and Baltic Network on Invasive Alien Species: *Gammarus tigrinus* http://www.nobanis.org/speciesInfo.asp?taxaID=964
- Baltic Sea Alien Species Database: *Gammarus tigrinus* http://www.ku.lt/nemo/directory\_details.php?sp\_name=Gammarus+tigrinus
- Eesti Mereinstituut: The North-American amphipod Gammarus tigrinus arrived in the Gulf of Riga in July 2003 http://www.sea.ee/Sektorid/merebioloogia/inglise/Uudis1.htm
- Alien species in Poland: Gammarus tigrinus http://www.iop.krakow.pl/ias/species.asp?8
- 297 kB: *Diversity and Distributions*: Recent drastic changes in the gammarid fauna of the Vistula River deltaic system in Poland caused by alien invaders <a href="http://www.biol.uni.lodz.pl/~kzbih/publikacje/publikac
- 108 kB: *Oceanologia* 45(3), 2003: The invasive amphipod *Gammarus tigrinus* Sexton, 1939, in Puck Bay
  - http://www.iopan.gda.pl/oceanologia/453norma.pdf
- NIK-Wissenschaftler: Die Werra ist noch immer schwer krank http://idw-online.de/pages/de/news119016
- **3**8,7 MB: Bundesanstalt für Gewässerkunde: Neozoa (Makrozoobenthos) an der deutschen Nordseeküste: Eine Übersicht <a href="http://www.stefannehring.de/downloads/083">http://www.stefannehring.de/downloads/083</a> Nehring+Leuchs-1999 BfG-Bericht-1200 neozoa-nordsee.pdf
- 3,4 MB: Nationaal Natuurhistorisch Museum: Non-indigenous marine and estuarine species in The Netherlands: *Gammarus tigrinus* http://www.marbee.fmns.rug.nl/pdf/marbee/2005-Wolf-ZoolMed.pdf
- Marine and estaurine macroinvertebrates, macroalgae and fish introduced to the Netherlands: Gammarus tigrinus

- http://home.hetnet.nl/~faassema/introduced%20Crustacea.html
- European Nature Information System Database (EUNIS): Gammarus tigrinus http://eunis.eea.europa.eu/species-factsheet.jsp?idSpecies=22296&idSpeciesLink=22296
- 1 924 kB: ICAIS lecture (Dirk Platvoet) If they can't meet you, they can't eat you http://www.icais.org/pdf/21Tuesday/B/tues\_b\_l\_pm/Dirk\_Platvoet.pdf
- University of Windsor: *Gammarus tigrinus*: a new invasive amphipod in the Great Lakes <a href="http://web2.uwindsor.ca/courses/biology/macisaac/pages/amphipod.htm">http://web2.uwindsor.ca/courses/biology/macisaac/pages/amphipod.htm</a>

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- © Jonne Kotta, Eesti Mereinstituut http://www.sea.ee/Sektorid/merebioloogia/inglise/Uudis1.htm
- © Hugh MacIsaac, Great Lakes Institute for Environmental Research, University of Windsor: Gammarus tigrinus: a new invasive amphipod in the Great Lakes http://web2.uwindsor.ca/courses/biology/macisaac/pages/amphipod.htm
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