

**Annual distribution of the brown shrimp
Crangon crangon and the baltic shrimp *Palaemon adspersus*
in a shallow bay in the Baltic sea**

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The occurrence, size, abundance, separation of sexes, reproduction and catch of the brown shrimp *Crangon crangon* (L.) and the Baltic shrimp *Palaemon adspersus* (Rtk.) in the Western Baltic are discussed. The material used for the studies of the adults is based on 9,129 specimens (7,655 brown shrimps, 1,474 baltic shrimps), collected by push-net, prawn-pot or trap and dredge.

Crangon crangon (L.) and *Palaemon adspersus* (Rtk.) occur in the Wismar-Bight and are present in the Western Baltic. *Palaemon adspersus* may be caught in the Wismar-Bight from June to October near the beach at a depth of 0.2-0.7 m with a push-net and from April to November at a depth of 3 to 4 m with a dredge (like a beam trawl) within the shallow bay. *Crangon crangon* may be caught close to the shore from April to December in greater numbers with the push-net. Only unique specimens of *Crangon* are present between January and March. The length measurements of 7,461 brown shrimps and of 1,474 baltic shrimps determined a mean-length of 38.5 mm (max: 76 mm) for *Crangon* and 48.9 mm (max: 75 mm) for *Palaemon*. The majority of brown shrimps are caught at sandy beds, while the baltic shrimps are caught best at or between the sea grass.

The separation of sexes is possible using the length of the endopodite of the first pleopod above a length of 35 mm (only *Crangon crangon*). All the other specimens are separated with the formation of the *Appendix masculina* on the endopodites of the second pleopod (*Crangon* and *Palaemon*). The sex ratio of females to males is, on the year's average of 158 examined baltic prawns, about 2.3 : 1. For *Crangon crangon* the sex ratio of females to males is, on the year's average of 772 analysed specimens, about 4.4 : 1. Egg-bearing *Palaemon* females may be caught between June and August. The smallest female with eggs had a total length of 36 mm. Female *Crangon crangon* can be found with eggs between April and November, while the smallest female with eggs caught in the Wismar-Bight had a length of 29 mm.

Commercial-fishery of the baltic shrimp takes place in the Western Baltic as a regional speciality. The mean yearly catches of the baltic shrimp vary between 2-10 t, depending on the water and weather conditions during the early summer. It is a seasonal fishery from May to August. A large part of this fishery is taken with a prawn-pot.