The occurrence of sandhoppers (Talitrus saltator) was studied on a scale of meters, hundreds of meters, and kilometres along the 30 km long Hel Peninsula in Poland. The animals occurred in patches of several meters in diameter which were separated by kilometres of uninhabited sand. Seasonal movements occurred; animals were found in spring and early summer close to the water line and in late summer and autumn farther up on the shore. A few juveniles, apparently from the wintering population, were observed in April, although the main breeding took place in late July. Two generations a year are produced and the life span is 4-5 months for the spring generation and 8 months for the winter one. The juveniles tend to be more widely dispersed in comparison with the adults.

La présence de Talitrus saltator a été étudié sur une échelle en mètres, en centaines de mètres et en kilomètres sur 30 km le long de la péninsule de Hel en Pologne. Les animaux étaient disposés en groupes de plusieurs mètres de diamètre, séparés par des kilomètres de sable inhabité. Des mouvements saisonniers ont été observés; les animaux ont été trouvés au printemps et au début de l'été près de la ligne d'eau et à la fin de l'été et en automne, beaucoup plus haut sur la grève. Quelques juvéniles, apparemment de la population d'hiver, ont été trouvés en avril, cependant, la reproduction se situait principalement fin juillet. Deux générations sont produites par an et la durée de vie est de 4-5 mois pour la génération de printemps et de 8 mois pour la génération d'hiver. Les juvéniles tendent à être plus largement dispersés par rapport aux adultes.

The sandhopper, Talitrus saltator (Montagu, 1808), a terrestrial amphipod crustacean, used to be a common inhabitant of exposed sandy beaches along the Polish Baltic coast (Drzycimski & Nawodzińska, 1965), but recently this species has disappeared from a number of localities previously occupied (Węsławski et al.,...
Sandhopper behaviour and dispersal have been studied in the Mediterranean by Scapini (1995, 1997), in Ireland by Costello et al. (1999), and in Sweden by Persson (1997). This species has also been used as an environmental indicator (Rainbow et al., 1998). Environmental change, food limitation, and tourism are among the possible factors having a negative impact on sandhopper occurrence in Poland (Węsławski et al., 1999). The present paper aims to describe the small- and medium-scale seasonal patterns of sandhopper occurrence on a single beach.

**MATERIAL AND METHODS**

Monthly observations of small-scale sandhopper patchiness and distribution were conducted on the sandy beach, situated 3 km west of the tip of the Hel Peninsula in the Gulf of Gdańsk in the southern Baltic Sea in 1997 (fig. 1). No sandhoppers were found between November 1996 and March 1997. Five rows of holes (20 × 20 × 20 cm) were dug simultaneously at one meter intervals from

![Fig. 1. Situation of the sampling area.](image)