

SUMMARY

Ożgo M., Hetmański T. Tree frog *Hyla arborea* L. in the protected landscape area „Pas Pobrzeża na wschód od Ustki” (N Poland).

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This paper describes populations of the tree frog in the agricultural part of the protected landscape area “Pas pobrzeża na wschód od Ustki” (Coastal belt east of Ustka). It is the first record of this species in the middle part of Pomerania. We determined the presence of the tree frog in 9 out of 16 surveyed water bodies. All water bodies in which the species was present were permanent infield ponds, sunny and warm; all of them were surrounded by fallow land or extensively used fields. We did not observe the tree frog in shallow seasonally drying-up water bodies completely or almost completely covered with vegetation, and in a cool one shaded by trees. The tree frog was also absent from a strongly eutrophicated water body surrounded by an intensive arable field. Most of the tree frog choruses observed in this study were very numerous, possibly consisting of a few tens of individuals. The distance among the ponds usually did not exceed 1 km. As the tree frog is capable of relatively long-distance migrations, these populations are possibly linked through dispersal and gene flow, and show a metapopulation structure.

The current state of the habitats in the study area is favourable for the tree frog as well as for other amphibians occurring in agricultural landscape. However, land reclamation for intensive agriculture and building up of the area pose serious threats to the populations of those animals. The tree frog may be used as a flagship species in their protection. Setting aside a belt of at least 20 m of unused land around the water bodies is recommended as a measure to protect the tree frog, other amphibians and also many less spectacular plant and animal species associated with small aquatic habitats in agricultural landscape.