

Spatial Pattern and Diversity of Small Mammal Assemblages in the Area of the Srebarna Managed Nature Reserve (NE Bulgaria)

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Abstract: The spatial distribution of small mammals and their assemblages in the area of the Srebarna Managed Nature Reserve were studied, using permanent pitfall traps. Classification and ordination analyses (TWINSPAN and PCA) reveal that the vegetation structure (development of the tree, shrub and herbaceous layers) and the substrate moisture are the most important factors, affecting the spatial distribution of the small mammal assemblages. Five assemblage types and 14 local assemblages were revealed, which were studied in respect to their structure and diversity. Four species groups were recognized and their environmental affiliations within the study region were described.

Key words: shrews, rodents, ordination, classification, small mammal assemblages, pitfall traps.