GEOSPATIAL TECHNIQUES IN THE CARTOGRAPHY AND MANAGEMENT OF HABITATS IN PIATRA CRAIULUI NATIONAL PARK

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Abstract

An efficient management of habitats and species sheltered by a protected area is difficult to achieve without accurate habitats maps. The distribution, extent and evolution of habitats must be known in order to optimize the results of management interventions. Based on the data obtained from satellite imagery, using the NDVI, correlated with higher-resolution orthophotoplans and field verifications a 1:2,000 habitats map was obtained for Piatra Craiului National Park. Each of the 19 mapping units, assimilated with the habitat types, was analyzed taking into account the surface, the distribution on altitude and the fragmentation. For each of the mapping unit the correspondence with the main Habitats Classification systems was established and the characteristic vegetation associations were listed. A new formula was proposed to highlight the level of habitats fragmentation which could provide valuable information regarding the conservation status of habitats. The fragmentation index could provide valuable information regarding the conservation status of the habitat, useful for management. Further researches with regard to the applicability of this index should be conducted.

Key words: habitats fragmentation, habitats map, management, NDVI, Piatra Craiului National Park

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