

Landscape and biodiversity protection in the Chornohora (Carpathian National Park and Carpathian Biosphere Reserve, Ukraine)

Point Of Contact:

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Rationale:

Ukrainian protected areas are probably not known in EU countries. This case study illustrates the most popular and most interesting part of the Ukrainian Eastern Carpathian Mts, where two large protection areas are located: Carpathian National Park and Carpathian Biosphere Reserve. The most characteristic elements of the Eastern Carpathian landscape are semi-natural meadows called *poloninas*, located in the alpine, subalpine and upper montane zones. Seasonal grazing of the poloninas is a traditional activity of people from neighboring villages and an important source of their income. Cattle and sheep herds stay in summer settlements located near upper forest limit. Grazing is an important form of the management of poloninas because it prevents forest succession and maintains the present level of biodiversity.

Aims:

Example of the important role of pasture use in the protection of landscape and biodiversity in high mountains.

Addressed users:

Public authorities responsible for protection of semi natural areas, geographers, biologists.

Geographic Area:

Chornohora Mts. – highest range in the Ukrainian Carpathian Mts. (Hoverla 2061 m a.s.l.); longitude extent: 24.15-24.7E, latitude extent: 48-48.35N

Data, Feature Types and web services:

geotif file - Satellite image from 28th of October 2001, registered by the ASTER VNIR sensor installed on Terra satellite. L1B ASTER dataset was used to false color composition (RGB bands = 3N, 2, 1 ASTER channels). Spatial resolution is 17 meters. Image illustrates land use/cover in Chornohora, especially upper forest limit which is lower boundary of the semi natural pastures.

shp file – seasonal settlements used by the shepherds; point features

shp file – boundaries of protected areas; line features

shp file – chosen mountain peaks; point features

Screenshots:

Chornohora_1.gif – boundaries of protected areas

Chornohora_2.gif – summer settlements used for stock-raising

Functions:

Comparison of the spatial distribution of settlements and the course of the anthropogenic upper forest limit in two protected areas; identification of different types of forests which create forest boundary – deciduous (gray and green color and coniferous forests (red color).

Web services:

Project description available in English, Polish and Ukrainian language on/in *Czarnohora Online* service: <http://www.gis.geo.uj.edu.pl/Czarnohora/index.html>