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The Pan-European Ecological Network

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News

A representative case from Poland

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PHOTO: SAKHIBAGA FOUNDATION

Carpathian Mountains Landscape

A top-down approach to developing the Pan-European Ecological Network is needed if full representation of regional biological and landscape diversity is to be ensured. The **Lublin-Chelm-Tarnobrzeg-Zamosc** region (GOF) in south-eastern Poland was chosen to show how much of the CORINE database could be used to identify core areas and ecological corridors in Poland. The GOF region is an upland area, its geology dominated by loess formations and sands overlying a chalk substratum. It is a typical agricultural region; its landscapes have been shaped by traditional small farms to form a patchwork of fields and natural and seminatural habitats. Forests have been reduced to tiny plots of woodland, but some larger complexes survive in the south and north-east.

The areas of highest natural value in the region are the numerous lakes (from oligotrophic and dystrophic to

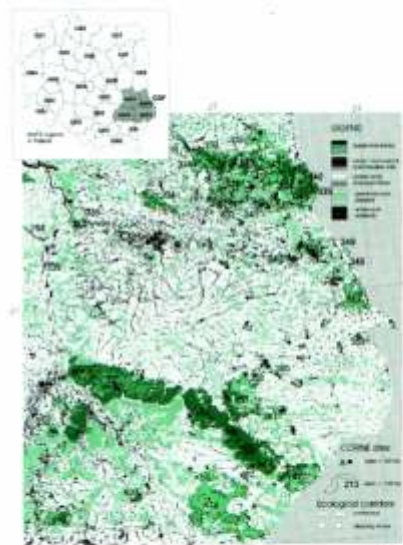
eutrophic) containing rare and endangered water communities, marshes and bogs, and some particularly valuable calcareous fens. The most interesting forest habitats are humid deciduous woods, while both xerothermic grasslands and wet meadows also contribute much to the biodiversity of the region. The most valuable nature sites are designated national parks (Roztocze NP and Polesie NP) and nature reserves (62). The region contains three core areas of international importance and two of regional importance that are recognized in ECONET Poland.

In the GOF region, 61 natural sites of European importance were identified using CORINE biotopes methodology (see illustration). Of these, 68% satisfy the criteria adopted in Natura 2000: they support at least one species or one habitat from the annexes to the Habitats Directive and the Birds Directive. The CORINE sites that meet the Natura 2000 criteria can become core areas in the Pan-European Ecological Network.

The next step in developing this network is to indicate linkages enabling the dispersal and migration of plant and animal species between the core areas. These ecological corridors may be of the linear or stepping stone types. In the GOF region, the first type of corridor is represented by the **Wisla, Bug, and Wieprz** river valleys (see illustration). These valleys, largely transformed and deprived of natural riparian forests, are corridors mainly for species associated with water and riverside habitats. Other species may occasionally disperse along these corridors, for example in times of flooding. Patches of dry habitats scattered in the agricultural landscape are examples of stepping stone type corri-

dors for numerous xerothermic plants and some animal species, such as the spotted suslik or certain groups of butterflies. A sequence of small, isolated woodland patches separated by arable fields and meadows may form links between larger forest areas (see illustration).

It should be stressed that the mosaic of habitats formed by traditional forms of husbandry in the GOF region ensures functioning of ecological linkages. Their existence and, generally, the biodiversity of agricultural landscapes as a whole is threatened by the anticipated further intensification of Polish agriculture as the country prepares for accession to the European Union. Farmers need to be convinced that the maintenance of varied agricultural landscapes and compatible farming methods (organic farming, for example) can be profitable. ■



Examples of ecological corridors in GOF region (CORINE biotopes/land cover integration)