

HABITAT MANAGEMENT IN THE "MIRE" LIFE PROJECT SITES IN LATVIA

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From 2004 - 2008 the LIFE project "Implementation of the Mire Habitats Management Plan" is carried out financed by the European Commission LIFE-Nature programme. The project includes 4 sites – Cena Mire, Stikli Mire, Klani Mire and Veseta Floodplain Mire with the total area of 10808 ha. The sites are nationally and internationally important and include diverse vegetation types and habitats as well as protected plant and animal species.

The project sites include raised bog and fen vegetation of Oxycocco-Sphagneteta, Scheuchzerio-Caricetea fuscae, as well as forest Vaccinio-Picetea, Alnetea glutinosae, lake vegetation of the Littorelletea uniflorae. The raised bogs in the project sites have both: a typical hummock - hollow complex and includes labyrinths of bog pools and ridges, as well as have areas damaged by drainage, peat extraction and fires. Drainage ditches in certain areas still causes damage the mire hydrological regime and has resulted in the degradation of the raised bog vegetation.

The project includes management actions, like rising of the water level, removing of shrubs and management of boreal forest habitats. The management actions will be carried out in the raised bogs, transition mires as well as spring fens and forests. Monitoring of the habitat and site hydrology as well as of the management actions has been started.

In the project sites vegetation, hydrological, paleobotanical and geological studies are carried out, as well as management plans are being elaborated that are the basis for all the management actions.

More research was carried out in Cena Mire that included mire vegetation studies and evaluation of correlation with environmental factors as well as paleobotanical studies. Research of Cena Mire testifies that mire has originated in the depression of the Baltic Ice Lake by land paludification about 5000 ago. To characterise mire vegetation of Cena Mire 114 relevés were made from which 19 were compared with 19 water sample chemical analysis. As Cena Mire receives nutrients only from the precipitation, the level of the concentration of the chemical elements (Na, Ca, K, and Mg) was low but was different in various mire habitat types.