Abstract

The diploma thesis deals with the historical development of the flood plain forest, flood plain meadow and water areas in the Labe floodplain from the beginning of the 18th century to the present time. Given area, which is defined by the borders of the Labe bioregion and the former district of Nymburk, was in the past influenced by the variety of anthropogenic and nature factors.

For this research, historical maps of the 1st, 2nd and 3rd military mapping of this area (a period from the late 1700's until the 1800's) were used. Also used were topographic maps from 1952 and ortophotomaps together with field research of the area. Map processing, visualisation and quantification of the results were made by the GIS environment.

The largest area of floodplain forest coincided to the end of the 18th century. Due to industralization, the forest was depleated and in the 3rd military mapping, its area dropped by 35 % compared to previous period. The present state is influenced by afforestration, mainly on the area of Mydlovarský luh and Skupice. The most important locality with a relatively natural structure of species is the Libický luh- a protected nature reservation.

The floodplain meadows are characterized by their degradation during the observed period. The impact of agriculture and conversion to the field caused shrinkage of this area by 81 %.

The Labe River has been regulated since the beginning of the 19th century. The main changes were made in the 1st half of the 20th century. The natural flow with numerous meanders were drained and during the period of 150 years, straighten by 16,6 %.

The middle Labe floodplain was a part of the most watery area in Bohemia. Numerous ponds, mainly situated around Poděbrady, dominanted the landscape in the 1st military mapping. But at the end of the 18th century, many of these ponds were drained and converted to the fields.

Present scenery of the middle Labe floodplain is characterised by a mosaic of reintegrated fields. Though we can find the fragments of vegetation with high natural potencial which should be protected and, with graduated recultivation of landscape,should be restored to its former stavility.