

CONDITION OF QUASI NATURAL AREA AND ITS ENVIRONMENT IN LONG TERM CHANGES - REMOTE SENSING AND GIS ASSESSMENT IN GREAT PLAIN, HUNGARY

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ABSTRACT:

As a consequence of the increasing aridity experienced in Hungary in the past decades, any future decision in spatial planning should consider the threat of an arid environment. For identifying sensitive and endangered areas, suitable methods should be found and developed. These could help then responsible and preventive decision making in providing quick and suitable actions in planning. On local scale the strictly protected wetlands are good indicators to assess the degree of changes in the complex system. Our wetland study area is very changeable seasonal, therefore is why, answer the question above we have done a long-term study (more than 150 years) with maps, aerial photos and satellite images (CORONA, LANDSAT TM and ETM+). The tendencies of disadvantageous years it is to be feared than in the next 40–80 years the wetland surfaces will completely disappear, and they will recover only seasonally in early summer. Almost 40 % of study area is endangered by aridification and 80 % the wetlands has already dried out or getting drier.

TOPIC: Remote sensing applications

ALTERNATIVE TOPIC: Multi-spectral and hyperspectral remote sensing