



## **The unique characteristics of the Neusiedler See: special area for climate change effects**

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It is evident that among the surface waters the extremely shallow lakes (1-5 m) are exposed particularly intensive to the effects of climate change. Among the European greater shallow lakes, the Austrian-Hungarian cross-border Lake Fertő/Neusiedler See, with an area of 309 km<sup>2</sup>, is expected to respond spatially in different ways and with different consequences to the climate change. The continuous water body of Lake Fertő/Neusiedler See (except of the shoreline reeds) is characterised by inner reed stands with variable extension, braking up the water surface into the large open water areas, inner ponds, varied channels/connections.

The investigation series of our more than three decades research, conducted on the 75 km<sup>2</sup> Hungarian part of the lake, revealed that these water areas separated by reeds have different physical features as well as different water- and sediment chemical characteristics, which is typically reflected in the biological diversity and community compositions. All of these, of course undergoes on almost continuous status change under the influence of seasonal dynamics and the actual changes in the weather. This very rare, unique mosaicity exhibiting on a larger water surface needs a special attention in the climate change impact assessments and it promises the recognition of basic hydrobiological knowleges and of more possibilities with applied orientation. Therefore shows this poster the mosaicity of Lake Fertő/Neusiedler See revealed by our research.