

## **Settlement of the Kvarner archipelago (northern Adriatic): archaeology, anthropology and environment**

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The interdisciplinary approach to the territorial development of the Kvarner archipelago, in particular Krk and Cres islands, is based on the examination of the long-term relationship between man and his environment. A particular attention is paid to the construction and transformation of territories and landscapes, as well as the fluctuation of different populations and their impact and/or adaptation to the environment. This interdisciplinary work combines approaches rarely encountered before. Thus, the methods and results obtained in the field of classical stratigraphic archaeology, spatial archaeology, anthropology, and associated specific analyses such as stable isotopes and ancient DNA are confronted with the disciplines of paleoenvironment. The evolution of local societies is thus associated with the mechanisms of the anthropization of local agricultural spaces.

The synthesis of these results sheds completely new light on the anthropization of these islands territories, on the transformations and interactions of the different populations, which have colonized these spaces throughout history, the way in which they have used and modified their environment. We can also understand how new populations and practices determine land management.

The paleoenvironmental approach is based on multiproxy analyses carried out on the sediment cores of three lakes located in the center of these islands. Geophysical and geochemical measurements of sediments (spectrocolorimetry, magnetic susceptibility, particle size, XRF, isotopic analysis of organic matter, tephrochronology) are associated with pollen grains and spores, non-pollen microfossils and micro-charcoals analysis. Thirty <sup>14</sup>C dates, associated with <sup>210</sup>Pb, <sup>241</sup>Am, <sup>137</sup>Cs dates, allow the construction of solid age / depth models.

The evolution of changes in the dynamics specific to each lake and their catchment area is then described precisely, since the introduction of the first agricultural practices: a succession of fluctuations in agrosystems can be highlighted during the Neolithic and of Protohistory, an important mutation affecting one of the lakes and its catchment area is visible around 2500 BP and hypotheses are put forward to explain the historical changes in the local environment.

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