

Stabilność ekosystemów północnego Adriatyku w późnym czwartorzędzie
(Stability of Northern Adriatic ecosystems during the late Quaternary)

Abstract

Responses of ecosystems to environmental changes vary greatly across habitats, organisms, and observational scale. The Quaternary fossil record of the Po Basin demonstrates that marine communities of the Northern Adriatic reemerged unchanged following the most recent glaciation which lasted ~100,000 years. The Late Pleistocene and Holocene interglacial ecosystems were both dominated by the same species, extinction and origination rates matched predictions of resampling simulations modeling a homogenous system, and comparable bathymetric trends in species turnover, sample-level diversity, dominance, and absolute abundance of specimens were observed in both time intervals. The Adriatic ecosystems appear to have been impervious to natural climate change. As ice ages waxed and waned, marine benthic species migrated back and forth in a coordinated Clementsian fashion. The resilience of the Adriatic communities to natural environmental oscillations contrasts with volatile ecosystem responses to rapid anthropogenic changes.