

Marine Conservation Paleobiology: The Fossil Record as an Archive of Preindustrial Ecosystems

SYNOPSIS: Conservation paleobiology complements approaches of historical ecology and archaeology by melding geochemical, geochronological, and paleontological data to study human impacts on the environment. Fossil, archaeological, and other historical data have been used for decades to assess human-ecosystem interactions, but the modern-style conservation paleobiology that capitalizes on rapid advances in geochemistry, paleontology, and ecology has emerged only recently. Using multiple case examples from various habitat types and regions, we will explore the utility of fossils as a tool for improving assessmenet, management, conservation and restoration of aquatic habitats.

Prof. Michał Kowalewski Florida Museum of Natural History, University of Florida



Monday 11 March 2019

Aula G1 Dipartimento di Scienze Biologiche, Geologiche e Ambientali - BiGeA via Zamboni 67 - Bologna





Program:

10.00-11.00: Marine Conservation Paleobiology: Conceptual Introduction 11:00-12:00: Temporal Nature of Shell Accumulations: Shell Dating and Time-Averaging 12.00-13.00: Paleontological Fidelity and Shifting Baselines

Lunch

14.30-15.30: Conservation Paleobiology in Action: Case Examples 15.30-16.00: Discussion

Michał Kowalewski is an invertebrate paleontologist interested in ecology, evolution and taphonomy of marine benthic communities. He integrates paleontological, geological, and ecological data to study past ecosystems over a wide range of spatial and temporal scales. His current projects span multiple continents, habitat types, and time-intervals, but his primary focus is on late Quaternary mollusks. He is particularly interested in using fossil data to assist in monitoring and restoration of marine habitats impacted by human activities. Michał's didactic and mentoring activities center on guiding graduate students and post-doctoral researcher toward developing successful professional careers in academic and non-academic settings. He teaches workshops on quantitative methods in paleontology and summer field courses for graduate students. Over his career, Michał served as a chair of the *Paleontological Society Student Research Grants* program, editor of *Paleobiology*, and chair of the organizing committee for the *2014 North American Paleontological Convention*.

Michał is a Curator and Professor in the Florida Museum of Natural History (University of Florida) where he holds an endowed appointment as *Jon L. and Beverly A. Thompson Chair of Invertebrate Paleontology*. Additional information about Michał is available at the following online sites:

Museum Website: https://www.floridamuseum.ufl.edu/museum-voices/michal-kowalewski/ Google Scholar: https://scholar.google.com/citations?user=HUfTMk0AAAAJ&hl=en

