

# Conservation Paleobiology Symposium

February 3-4, 2020

Bologna

## Monday

08:30 Registration

09:00 Welcome

**09:15 Plenary:** Modified urban waterfronts: learning from the past (mistakes) to build a “bluer” future.  
*Laura Aioldi*

10:15 Coffee

**10:45** Ancient mtDNA suggests population dynamics of wild wolves in the Italian peninsula.  
*Paolo Abondio\*, et al.*

**11:00** Shells from the shoreline - a new perspective on changing Lake Tanganyika.  
*Jonathan Todd\*, Ellinor Michel*

**11:15** The Shell Beds of Lake Tanganyika: Palaeoecology, Environmental Change and Living Systems.  
*Ellinor Michel\*, Jonathan Todd, Michael Soreghan*

**11:30** Massive extirpation of native species from the Israeli Mediterranean shelf.  
*Paolo G. Albano\*, et al.*

**11:45** Southern sounds: tracking Conservation Paleobiology perspectives in the South American continent.  
*Matias do Nascimento Ritter\*, et al.*

12:00 Lunch

**13:00 Plenary:** The application of deep-time palaeontological data to conservation.  
*Erin Saupe*

**14:00 Lightning:** Molecules meet fossils – revealing diversification dynamics in Bryozoa.  
*Helen Jenkins\*, et al.*

**14:07 Lightning:** Drivers of paleodiversity fluctuations in Bryozoa.  
*Farideh Moharrek\*, et al.*

**14:14 Lightning:** Extracting Ancient Environmental DNA (aeDNA) from Hong Kong Coral Sediment Cores.  
*Alison Corley\*, et al.*

**14:21 Lightning:** Investigating Heracles’ myth of the Lernaean Hydra.  
*Danae Thivaoui\*, et al.*

**14:28 Lightning:** Influence of surface ocean density on plankton calcification.  
*Stergios Zarkogiannis\*, et al.*

**14:35 Lightning:** Network Paleobiology: Understanding the spatiotemporal dynamics of the Earth-Life System.  
*Alexis Rojas*

14:42 Coffee

**15:30** Thirty-million years of turbid reefs in the Coral Triangle.  
*Nadia Santodomingo\*, et al.*

**15:45** Beware of zombivalves! Shell exhumation, diachronous production and stratigraphic disorder in the post-glacial fossil assemblages on the northern Adriatic shelf.  
*Rafał Nawrot\*, et al.*

**16:00** Assessing Data Quality in Conservation Paleobiology: Common Trends and Suggestions for the Future.  
*Kimberly Cook\* & Robert Montoya*

**16:15** Resilience of nearshore communities to natural climate change in the northern Adriatic.  
*Daniele Scarponi\*, et al.*

**16:30** Coral growth and bioerosion on ancient and modern turbid-water reefs in the Coral Triangle: How well do these potential reef refugia function?  
*Kenneth G. Johnson\* and Nadia Santodomingo*



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Smithsonian Tropical Research Institute



### Organisers

Aaron O'Dea, Daniele Scarponi,  
Paolo Albano, Laura Airolidi

### Special thanks

Alessandro Cheli, Brigida de Gracia, Bruno Marano, Chiara Vallese, Costantino Zuccari, Erin Dillon, Federica Costantini, Gian Battista Vai, Giulia Tartaglia, Jessica Lueders-Dumont, Jonathan Cybulski, Jorge Morales, Kate Hibbs, Lisa Carrera, Luna Girolamini, Martin Zuschin, Marissa Batista, Matt Larsen, Massimo Zini, Max Titcomb, Michaela Berensmeier, Michal Kowalewski, Michele Azzarone, Miriam Greaves, Nadia Santodomingo, Niklas Hohmann, Pierpaolo Ciuffi, Piero Zannini, Rachel Burgess, Rafal Nawrot, Sara Meschiari, Sharon Pittau, Silvana Pacifico, Simone Toller, Thomas Gusmeo.

All the children at the  
**International School of Bologna**

# Tuesday

## 08:50 Housekeeping

**09:00 Plenary:** Is conservation paleobiology useful?

*Jeremy B.C. Jackson*

**10:00** Using the paleontological record to demonstrate the importance of conserving for change

*Jenny McGuire*

**10:15 BioResilience:** Biodiversity resilience and ecosystem services in post-conflict socio-ecological systems in Colombia.

*Ted Feldpausch, et al.*

## 10:30 Coffee [and group photograph]

**11:00** The taphonomy of Panama's Pacific coral reefs and their historical resilience.

*Jonathan Cybulski\*, et. al.*

**11:15** Basin-wide homogenisation of benthic soft-bottom communities in the wake of anthropogenic habitat degradation in the northern Adriatic Sea

*Alexandra Haselmair\*, et al.*

**11:30** *Chamelea gallina* response to anthropogenic and climate driven environmental change: Case study of the Holocene fossil records from Po-Adriatic system.

*Alessandro Cheli\*, et al.*

**11:45** Unraveling environmental and ecological changes in late Holocene marine sediments - new data from a gravity core from the west Northern Adriatic.

*Michaela Berensmeier, et al.*

**12:00** Extinction risk controlled by interaction of long-term and short-term climate change.

*Gregor Mathes\*, et al.*

## 12:15 Lunch

**13:15** Dermal denticle assemblages can reflect changes in shark abundance on coral reefs over time.

*Erin Dillon\*, Douglas McCauley, and Aaron O'Dea*

**13:30** Linking internal carbonate chemistry regulation and calcification in corals growing at a Mediterranean CO<sub>2</sub> vent. *Fiorella Prada\*, et al.*

**13:45** Conservation clues beneath the pavement: using fossils to guide sustainability planning in urban Southern California

*Emily Lindsey\*, Elizabeth Ellwood, Alexis Mychajliw*

**14:00** Estimating downcore changes in skeletal disintegration risk in Holocene and Anthropocene environments

*Niklas Hohmann\*, Adam Tomašových*

**14:15** Researches of the past: shell mounds as geoarchives for changes in clam body size.

*Anna Assumpção\*, et al.*

**14:30** Conservation Paleobiology Research Coordination Network. *Michal Kowalewski*

## 14:45 Coffee [and cons. paleo. RCN meeting]

**15:30** Data infrastructures for conservation paleobiology.

*Francesca Pilotto\*, Philip I. Buckland*

**15:45** Trophic reconstruction using fossil otolith-bound nitrogen isotopes: first data from Holocene reefs

*J.A. Lueders-Dumont\*, et al.*

**16:00** From Applied Marine Paleoecology to Conservation Paleobiology.

*Daniela Basso\*, Valentina Alice Bracchi*

**16:15** Do source-sink dynamics explain molluscan distributions in the lowermost channel of the Colorado River? A preliminary test

*Gregory P. Dietl\* and Jansen A. Smith*

**16:30** Collapsing Hotspots, Extinction, and Recovery: The Evolutionary History of Herbivorous Reef Fishes. *Francesco Santini\*, et. al.*

**16:45** Functional consequences of extinctions: from the Pliocene to the Anthropocene. *Catalina Pimiento*

## 17:00 Student prize announcement