



**Surviving in a changing environment  
– what can the paleo-record tell us  
about resiliency?**

**Session #11**

**Great Cypress Room**

**Tuesday, April 19, 2016**

# Surviving in a changing environment – what can the paleo-record tell us about resiliency?

## Goals of session

To address the following questions:

- 1) What types of paleo-data can be provided to resource managers (regime shifts, tipping points, thresholds)? Can we distinguish different survival strategies?
- 2) What tools do resource managers need to plan for future stressors and enhance resiliency?
- 3) What are the limitations of the paleo-record (time averaging, selective preservation, evolving adaptations)?

To develop a draft strategy for application of paleo-records to issues of resiliency that directly addresses management needs.

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Ted-Style Session - 10 minute talks:

- 1) Michal Kowalewski, Thompson Chair of Invertebrate Paleontology at the Florida Museum of Natural History
- 2) Evelyn Gaiser, Lead Principal Investigator of the Florida Coastal Everglades Long Term Ecological Research Program, Florida International University
- 3) Letitia Grenier, Senior Scientist and Program Director of San Francisco Estuary Institute's Resilient Landscapes Program
- 4) Robert Johnson, Director of the South Florida Natural Resources Center, Everglades National Park

Discussion – audience and panel discuss applications and potential problems

Related posters in tonight's Session

#34, #36, #37

# Discussion

- 1) What types of paleo-data can be provided to resource managers (regime shifts, tipping points, thresholds)? Can we distinguish different survival strategies?
- 2) What tools do resource managers need to plan for future stressors and enhance resiliency?
- 3) What are the limitations of the paleo-record (time averaging, selective preservation, evolving adaptations)?

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## Related Posters:

- Tues #34 - Survival and extinction during Past Climate Changes – Insights from The Paleontological Record (Wingard, USGS)
- Tues #36 - Mollusk death assemblages can record fine-scale spatial variability in marine communities (Casebolt, FMNH)
- Tues #37 - Mollusk assemblages as proxy for within-habitat differences in seagrass beds (Cummings, UF)