

# COMMUNITY RESPONSE TO CLIMATE VARIABILITY DURING WARMING AND STEADY CONDITIONS IN THE NORTH PACIFIC ARCTIC

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Chapter 0: Fossil biomass

**Chapter 1: High Latitude Death Assemblages as  
Archives of Ecologic Information**

Chapter 2: Creating a 150-Year History of Benthic  
Climate and Ecology in The North Pacific Arctic

Chapter 3: Community Response to Climate Variability

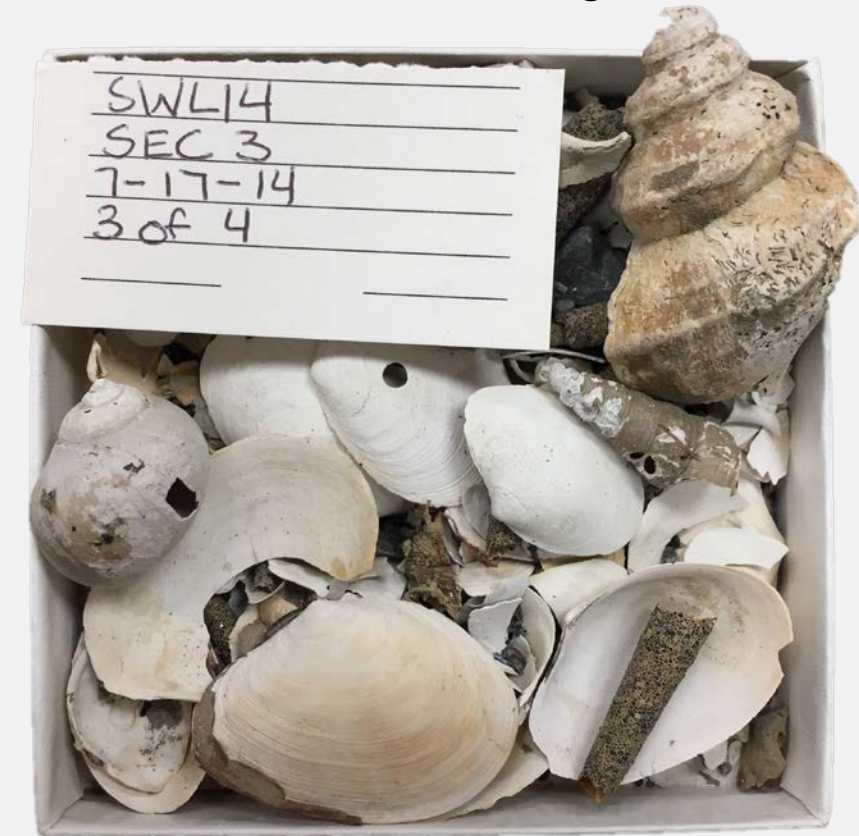




Living and Dead



Death Assemblage



- How well do death assemblages reflect living assemblages that have not yet changed?
- Can Live-Dead analysis detect known ecological shift due to environmental change?
- Is biomass more sensitive than numerical abundance in live dead analysis?



# DATA GATHERED

- 1 to 4 Van Veen Grabs per station
- 22 Bivalve Families
- Abundance (individuals/m<sup>2</sup>)
- Biomass (gC/m<sup>2</sup>) (Meadows, 2017 *in prep*)



**DBO1**



**DBO2**



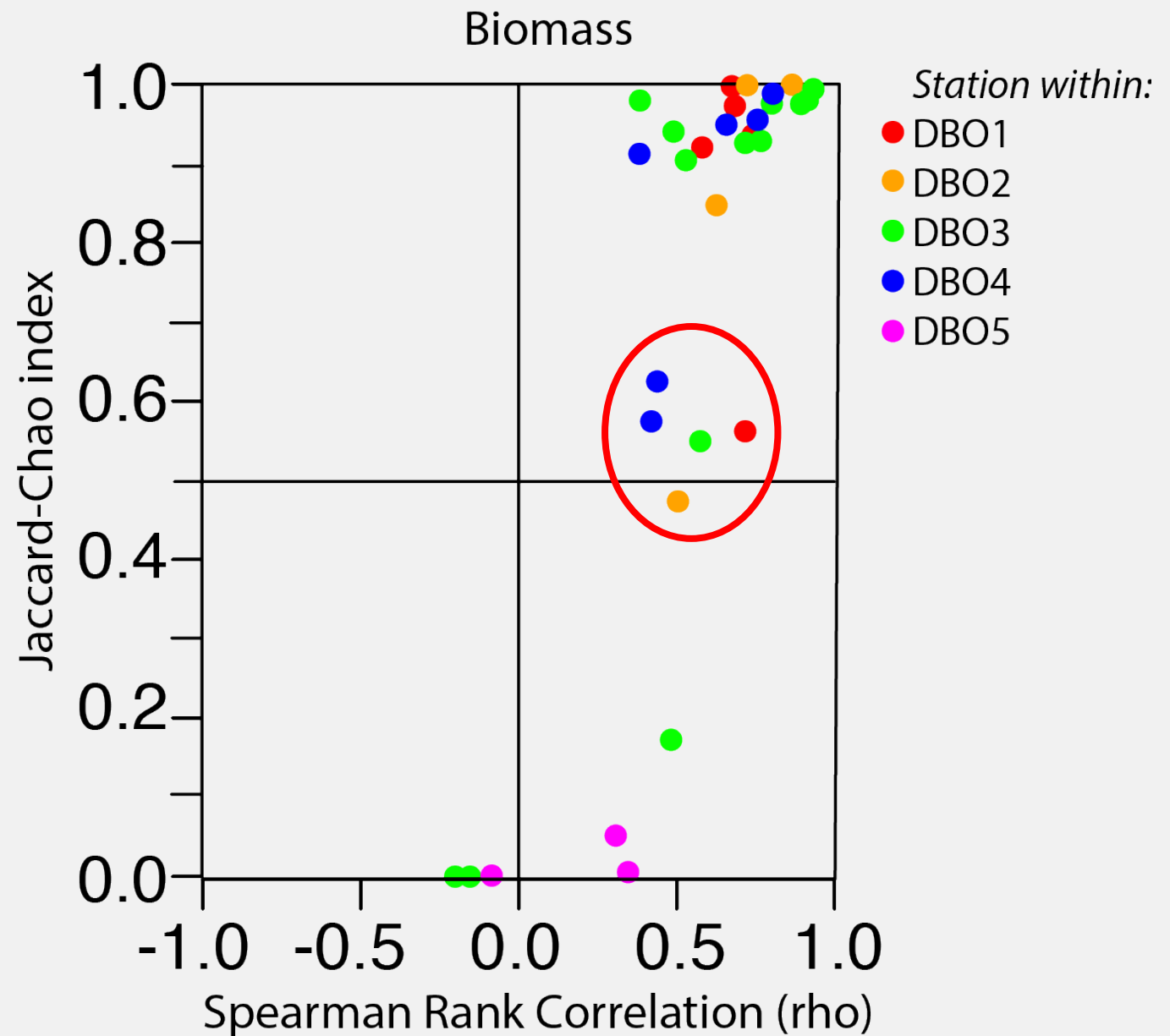
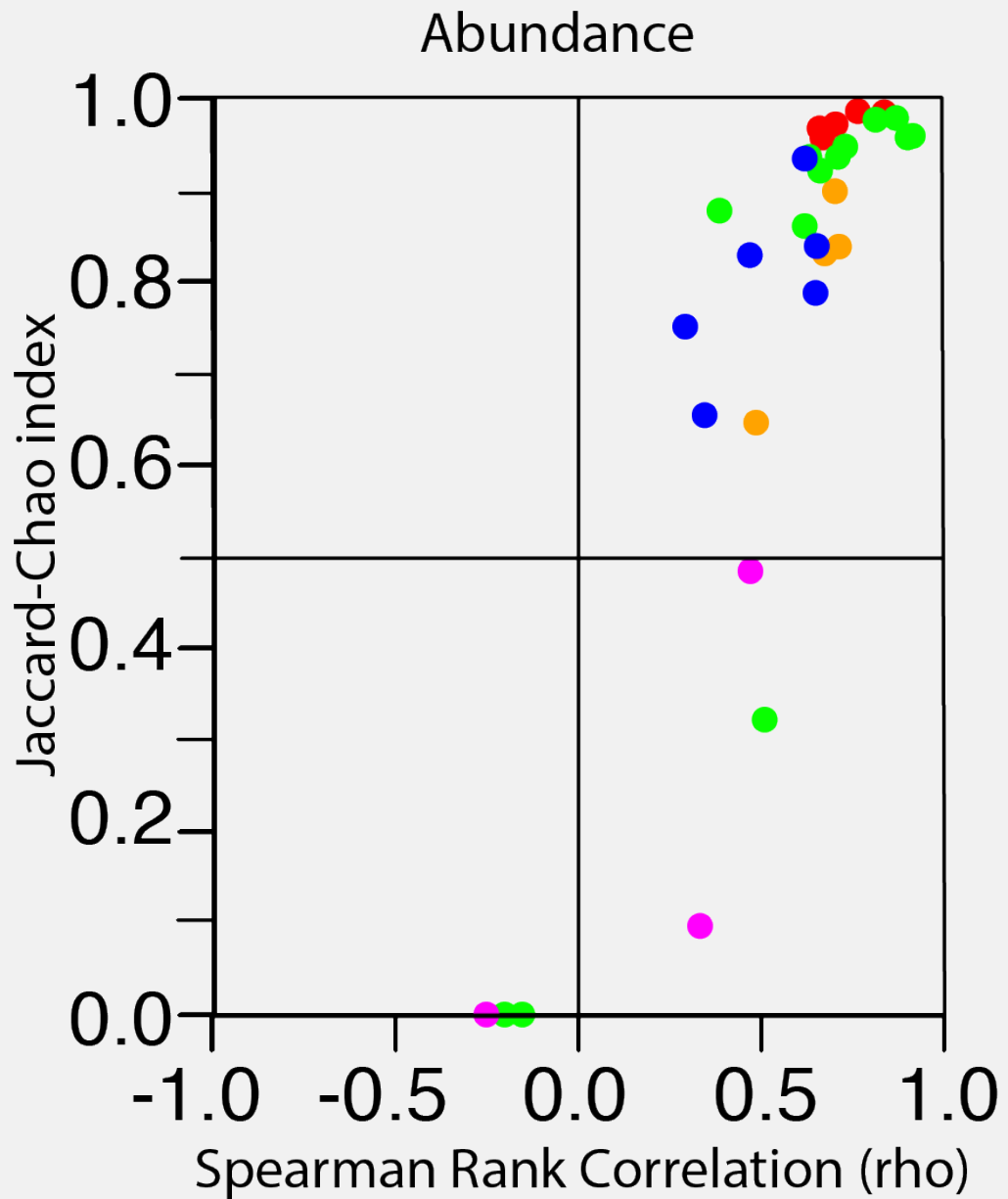
**DBO3**

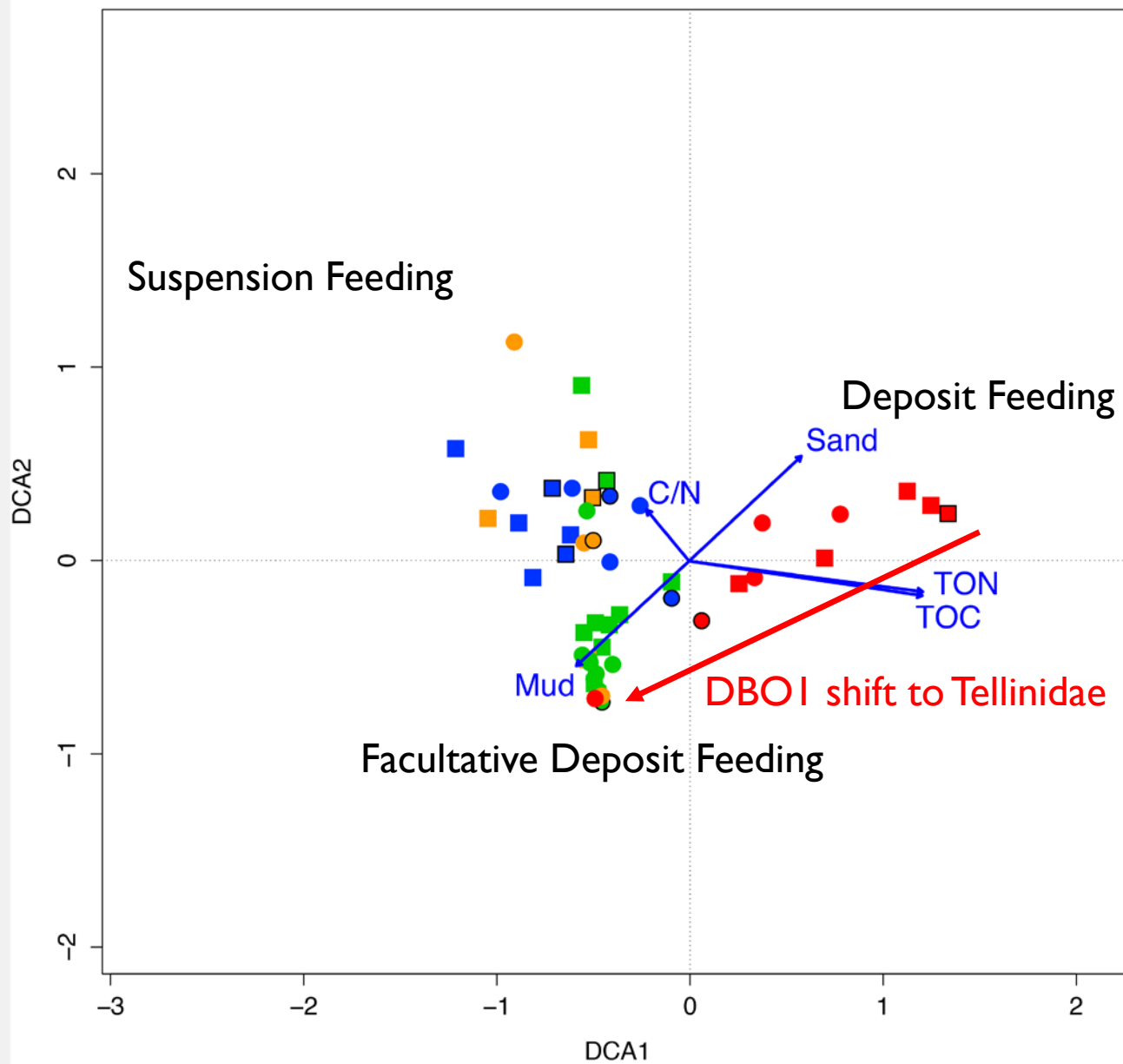
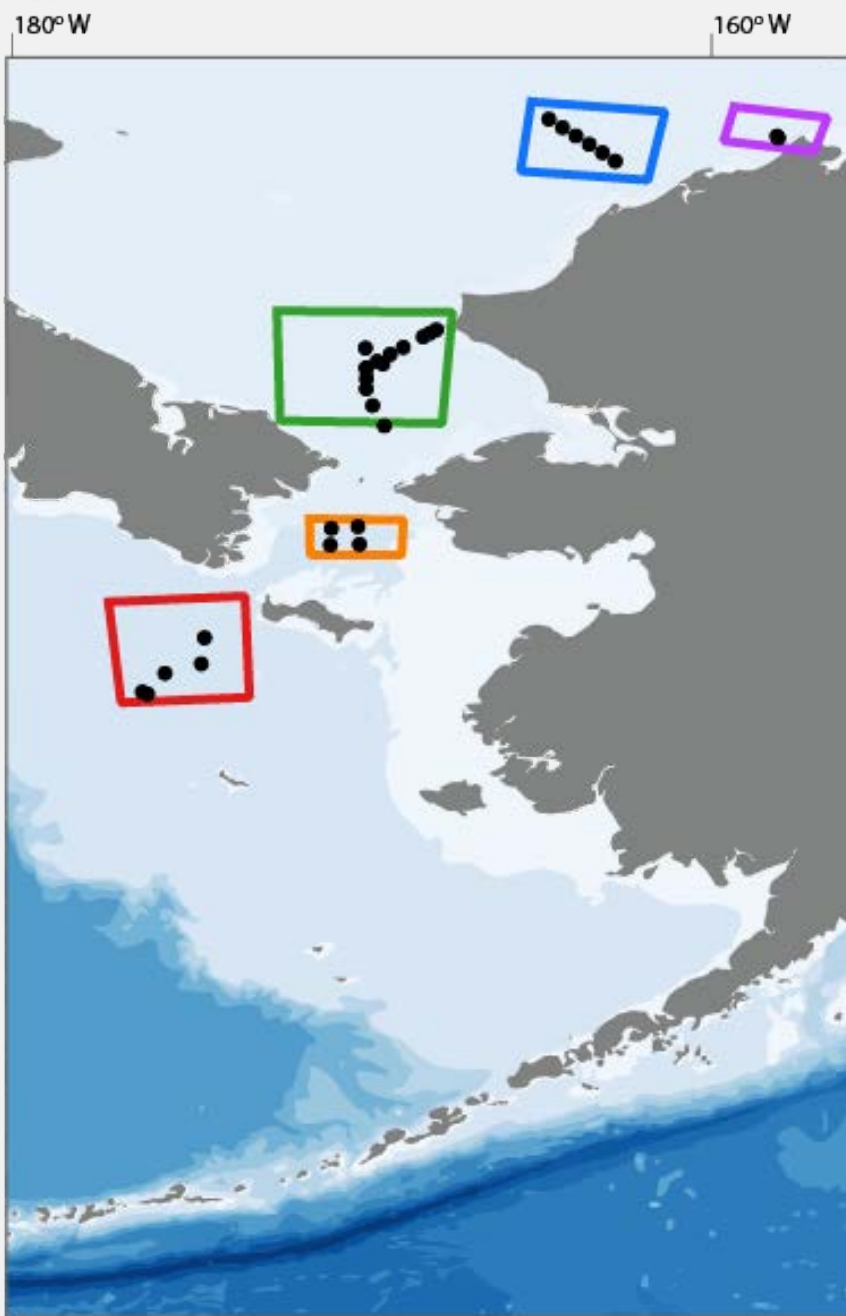


**DBO4**



**DBO5**





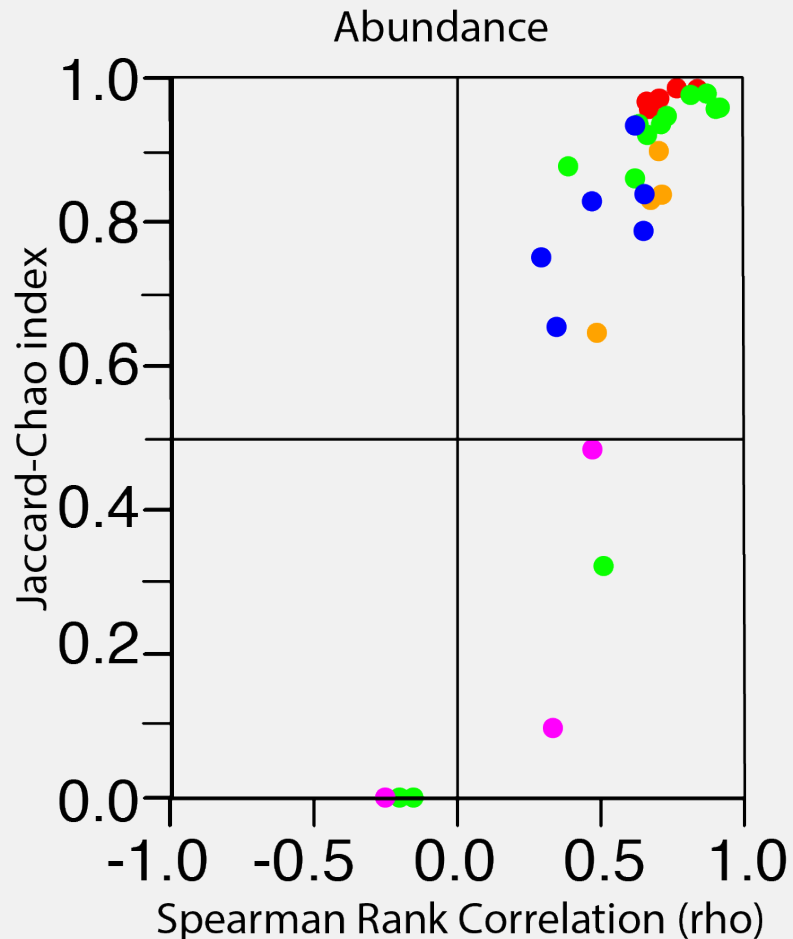
Introduction

Materials and Methods

Results

Conclusions

# THE POWER OF HIGH LATITUDE LIVE-DEAD DISCORDANCE



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  - Yes
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  - Yes

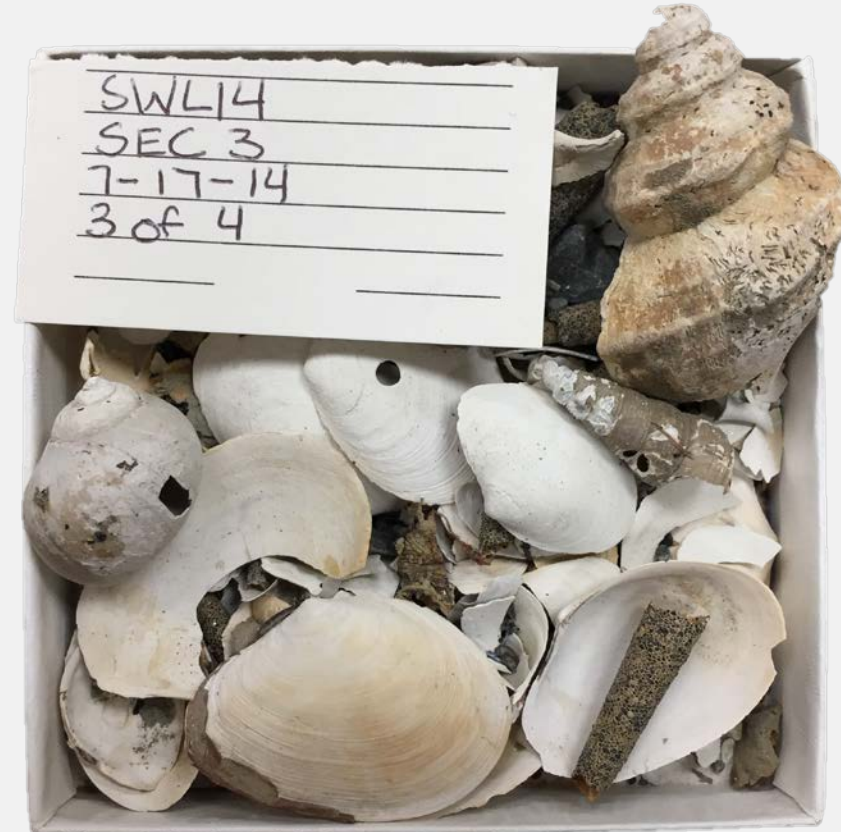


# THE POWER OF HIGH LATITUDE LIVE-DEAD DISCORDANCE

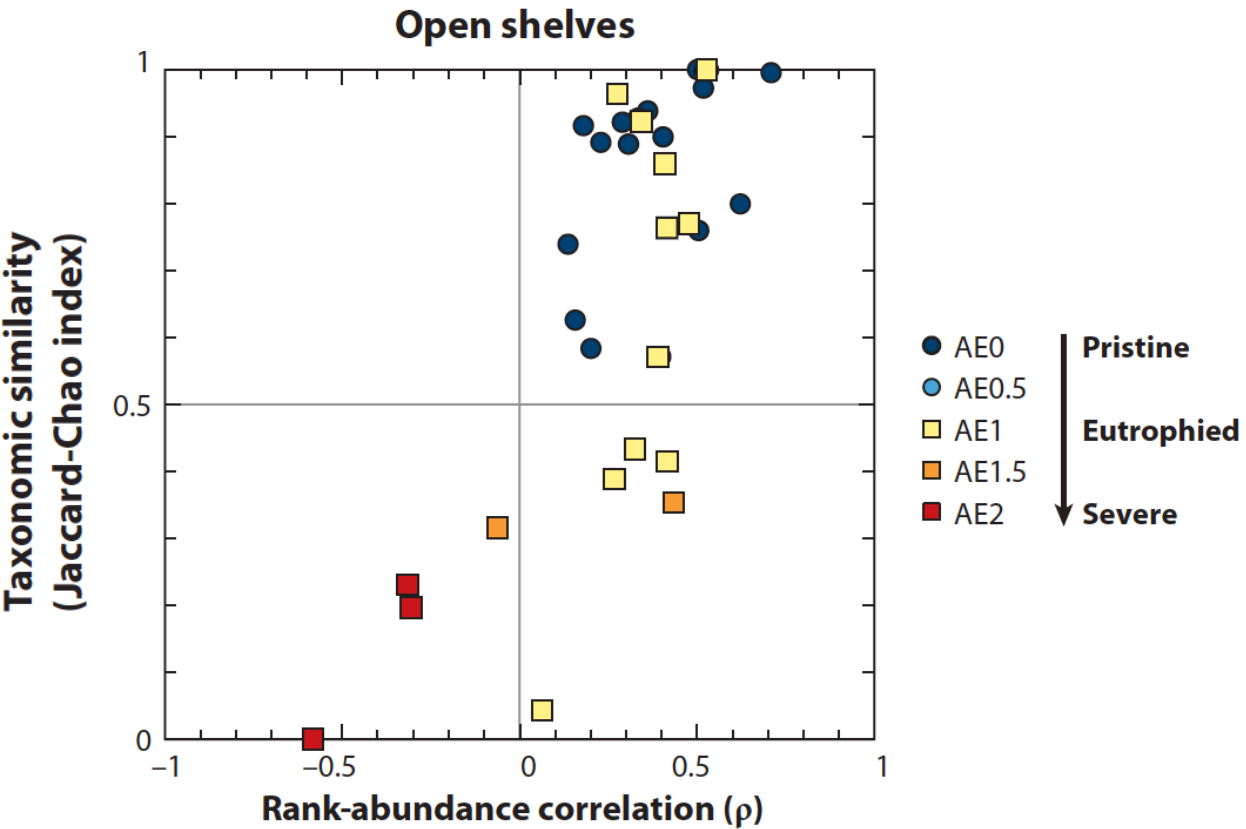
Living and Dead



Death Assemblage



**Don't Throw Out the Dead!**



Kidwell and Tomasovych, 2013

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