### Outreach Activities Associated with the PALEONICHES TCN



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#### **TCN Overview**

PALEONICHES-TCN: Digitizing Fossils to Enable New Syntheses in Biogeography

TCN Pl's: Bruce Lieberman (Univ. Kansas), Alycia Stigall (Ohio Univ.), Jonathan Hendricks (SJSU)

PEN (Partners to Existing Networks) Pl's: Ann Molineux (UT-Austin), and Derek Briggs (Yale Univ.).

#### Time intervals and institutions:

- Cambrian-Ordovician: Ohio Univ., Miami Univ., Cincinnati Museum Center, UT-Austin, Yale Univ.
- Pennsylvanian: Univ. Kansas, UT-Austin, Yale Univ.
- Paleogene-Neogene: Florida Museum of Natural History, UT-Austin

#### **TCN Education & Outreach Components**

1) The Digital Atlas of Ancient Life

2) K-12 and post-secondary activities associated with the Digital Atlas

# The Digital Atlas of Ancient Life

New digital "field guides" to help members of the pubic (and scientific community!):

- Identify fossils from particular regions
- Explore ancient biodiversity patterns
- Understand how species ranges vary over geological time scales, including in response to environmental changes

Atlas content (occurrence data, images, etc.) derived from digitization efforts associated with TCN.



### The Digital Atlas of Ordovician Life

Exploring the Fauna of the Cincinnati Region

# The Digital Atlas of Pennsylvanian Life: American Midcontinent

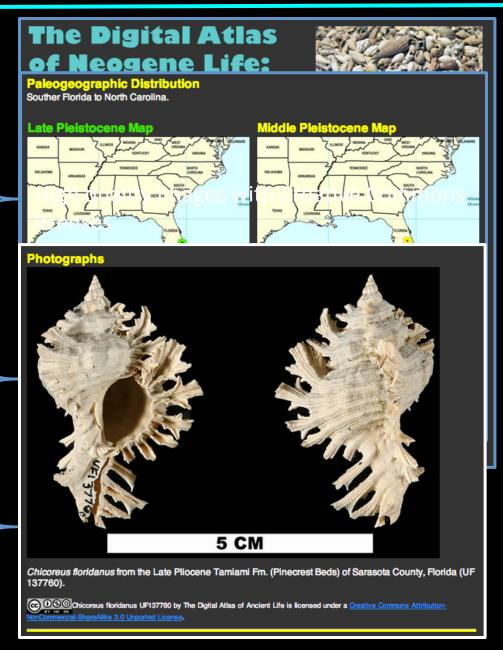


# The Digital Atlas of Neogene Life: Southeastern U.S.



### The Digital Atlas of Neogene Life





# The Digital Atlas of Neogene Life: Southeastern U.S.



~ 200 of 500 planned Neogene Digital Atlas pages have been completed.



#### **Resources for Teachers**

We are planning to develop a number of classroom (or take-home) exercises for educators that will utilize the Digital Atlases to address topics that are aligned with Common Core and/or Next Generation Science Standards.

#### Examples might include:

- Online scavenger hunts (e.g., "Can you find a snail that coils to the left?")
- Based on the fossils present, how has a region changed over time?
- Simplified analyses of diversity change over time, including relationship(s) to environmental change.

### **Thank You!**

- iDigBio for organizing this workshop.
- NSF for supporting our PALEONICHES-TCN.



### The Digital Atlas of Ancient Life



