Background Image “Animals of Ashfall” - Nebraska Public Media

Ashfall Fossil Beds

Matthew Graminski, Zachary Koehler, Calvin Pham, Erron Murphy, Sam Burnett
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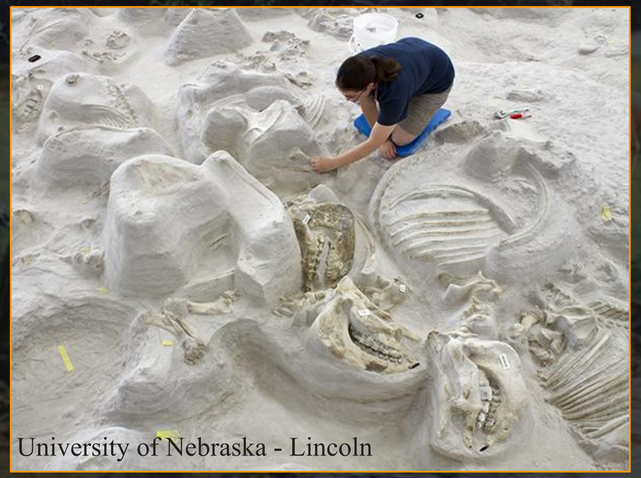


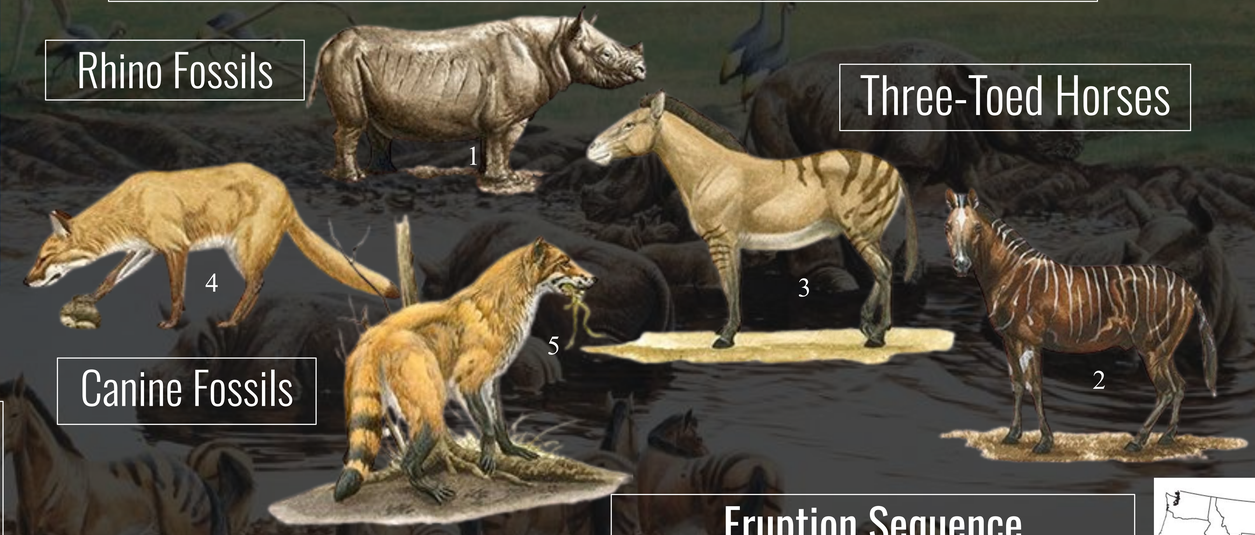
University of Nebraska - Lincoln

Site Significance

- Ash preserved many complete specimens
  - scientists could begin to parse together how these species lived and their patterns
- Evidence suggests that the entire area was a watering hole
  - Many species coming to the same area

Species Imaged
1 - *Teleoceras* - NPM
2 - *Cormohipparion* - NPM
3 - *Pseudhipparion* - Nebraska Public Media (NPM)
4 - *Leptocyon* - NPM
5 - *Cynarctus* - NPM

- Not pictured above: *Testudinidae, Accipitridae, Sciuridae, Camelidae, Poaceae*



Adrienne Stroup - University of Nebraska State Museum

Eruption Sequence

- Bruneau-Jarbidge caldera in Idaho Erupted
- As the ash settled, smaller animals buried first
- Larger animals succumb to ash inhalation in the following weeks

Age and Location

- 11.86 ± 0.13 Ma (Mid-Miocene)
  - Dated using zircon crystals
- Located in Northeastern Nebraska, US
- Part of the Ogallala Formation

Paleoenvironment

- Savanna-woodlands.
- Early Miocene had denser forests,
- Dominated by C3 grasses and dicot woody vegetation
- Diverse hooved mammals,
- Herbivore diversity peaked during the mid-Miocene
- Caliche layer beneath the ash indicates that the area experienced periods of drought