







Kinds of Fossils

Body Fossils

Soft Parts Preserved:
carbon print, amber,
frozen in ice



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Kinds of Fossils

Body Fossils

Hard Parts Preserved:
Original Material






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Kinds of Fossils

Body Fossils

Hard Parts Preserved:
Casts and Molds

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Kinds of Fossils

Body Fossils

Hard Parts Preserved:
mineralization,
permineralization,
replacement




Kinds of Fossils:

Trace Fossils

What are those Strange Shapes?






Kinds of Fossils:

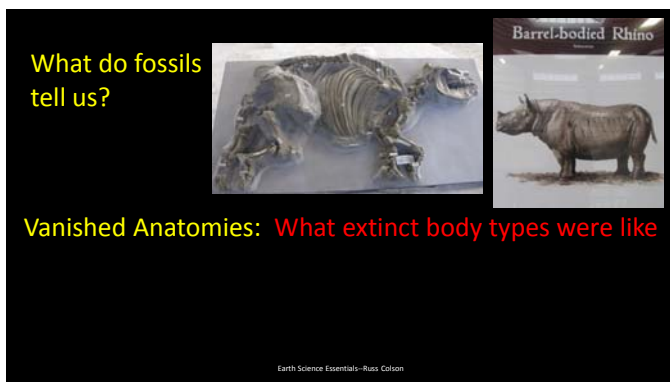
Trace Fossils

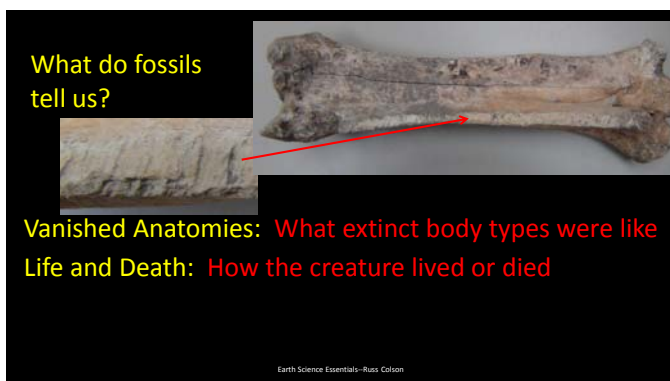
Stuff left behind:
tracks,
burrows,
coprolites, etc



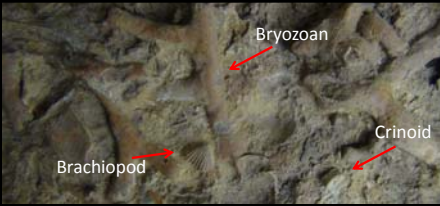







What do fossils tell us?



Vanished Anatomies: What extinct body types were like
 Life and Death: How the creature lived or died
 Environment and Ecosystem: Interacting communities

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What do fossils tell us?



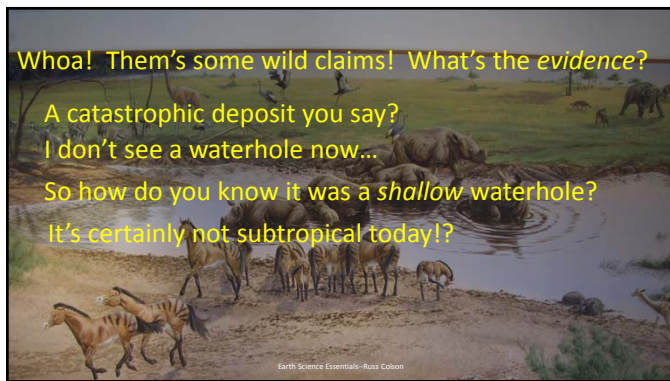
Vanished Anatomies: What extinct body types were like
 Life and Death: How the creature lived or died
 Environment and Ecosystem: Interacting communities
 Stratigraphic position: Canals and Petroleum

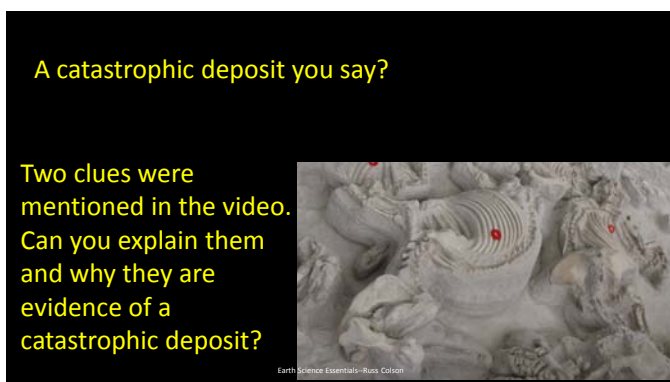
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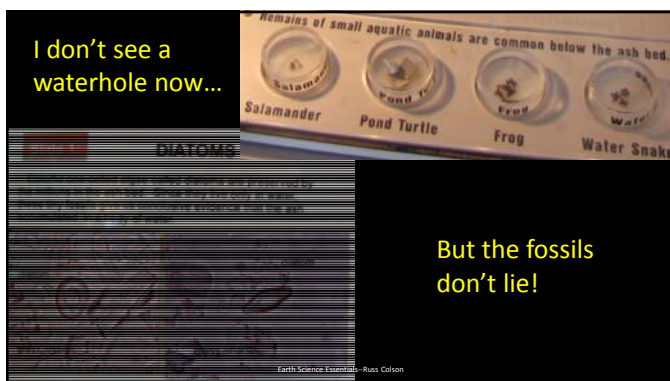
What do fossils tell us— A Case Study



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So how do you know it was a *shallow* waterhole?



Dogs chewed on these bones, proving it was shallow enough for them to reach bones at the bottom.

Ripples formed in the ash, proving it was shallow enough for waves at the surface to affect sediment on the bottom.

It's certainly not subtropical today!?



Notice that the annual rings in this specimen are quite uniform in thickness, suggesting that the climate here didn't vary much from year to year between 13 and 14 million years ago.



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