

What Is the Carnian Pluvial Episode (CPE)?

The CPE led to mass extinctions of older species but also gave rise to modern ecosystems — most importantly, dinosaurs began to dominate right after this episode. Prior to that, they were just one of many reptilian side-characters.

Why This Expedition Is a First

Until now, most CPE fossil evidence has been found in South America, especially Brazil. It's one of the few places where the unique sediment layers from this episode were preserved. But this expedition? We're now potentially uncovering CPE-era fossils in the Northern Hemisphere — Portugal, to be exact.

Our mission:

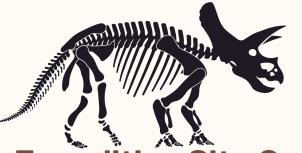
- Discover new species of dinosaurs and prehistoric mammals
- Confirm the first evidence of the Carnian
 Pluvial Episode in the Northern Hemisphere
- Document the expedition through the lens of our expert photographers

Visit the Site & Join the Dig!





can you



Expedition Site One

Fully excavate a newly identified bonebed for comprehensive analysis. Excavation involves initial quarry excavation (12x12m), bonebed division (1x1m grid), and fossil block extraction.



Expedition Site Two

Objective: Establish a field sieving lab for microvertebrate fossil discovery and engage the local community. Location: Penina village, accessible site with promising microvertebrate yields.



We will be bringing along the Explorers Club flag, while identifying bone bed sites in Penina, about 2.5 hours south of Lisbon in the Algarve, which hold significant untapped paleontological potential.



05/03/2025 Arrival

David will have an SUV (holds 3 people + luggage) and we'll need to rent one additional SUV. Teams will take off to the dig sites. Algarve region of Portugal

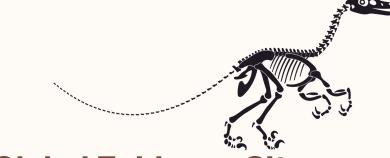
05/09/2025 Depart

The team prepares to take off. The field crew shifts from excavation to documentation, stabilization, and transport logistics.



Excavation Objective:

To uncover, document, and analyze fossil-bearing strata from the Late Triassic-specifically targeting sediment layers potentially dating to the Carnian Pluvial Episode (CPE)—in order to establish the first confirmed Northern Hemisphere site for this pivotal climatic and evolutionary event.



Global Evidence Sites

- South America: Brazil, Argentina (Santa Maria & Ischigualasto formations)
- Europe: Italy (Dolomites), UK
- Asia: China
- Potential new site: Portugal (Northern Hemisphere first) – under active investigation by the Dino Dawn Expedition

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CARNIAN PLUVIAL EPISODE: Late Triassic Period

234

million years old

33-50%

all land vertebrate species went extinct or were replaced

1-2

million year life span

