

**Iconic Objects: Barosaurus**  
**Royal Ontario Museum**  
**David Evans, Associate Curator, Vertebrate Palaeontology**

*[Podcast begins with music and a close-up of Toronto on a satellite map; rapid zoom out to show the entire spinning earth and zoom in on map of the location of Dinosaur National Monument in Utah; animated white text and a red marker slides down the screen to indicate the location of the Barosaurus Site on the map]*

*[Cut to view of a mountain range in Utah; camera zooms in]*

*[Cut to shot of a sign, which reads: Dinosaur National Monument: Fossil Bone Quarry]* **David Evans:** Here we are in the wilderness *[cut to view of a mountain peak in Utah]* of north eastern Utah. *[Cut to David, standing on a ridge with a mountain range behind him]* We're standing in the rocks of the late Jurassic Morrison Formation that are about a hundred and forty-five million years old. They're here *[David points to his left]* over my left shoulder.

*[Cut to panning view of the rock formation]* **David:** It's one of the most important dinosaur *[pans and zooms in on a low structure]* sites discovered in North America to date. *[Cut to interior view of the bone bed, as seen from within the structure]* It's also where the Royal Ontario Museum's *[cut to long shot of David making his way across the enclosed bone bed on foot]* barosaurus *[cut to view of a dinosaur bone embedded in rock]* was first collected *[cut to close-up of textured rock]* almost a century ago *[pans over the surface of the rock]*.

*[Atmospheric sound effect]*

*[Cut to interior view of David standing beside the bone bed]* **David:** In 1909, when this site was discovered, *[screen splits; David stands beside the bone bed on the left; animated simulation of two sauropods at a watering hole on the left]* it provided one of the first good looks at these giant sauropod dinosaurs, and in fact, *[cut to view of an archival still showing the excavation of the barosaurus; camera zooms in on the photograph]* the ROM's barosaurus was excavated from this quarry wall behind me.

*[Music cuts in; cut to view of an archival still photograph of a horse-drawn cart in the Utah landscape; camera zooms in to a close-up of the cart]*

*[Cut to view of Dan Chure, Palaeontologist, Dinosaur National Monument standing in front of an interior rock face]* **Dan Chure:** The Carnegie Museum, in their excavations here, had collected 700,000 pounds of dinosaur bone. *[Panning detail of a fossilized bone embedded in rock]* They put a notice out for institutions that might want bones, *[screen splits; view of Dan standing in front of a rock face on the left; panning view of an archival still photograph of two men at an excavation on the right]* but you were kind of getting the crates unopened...*[cut to archival still of two men adjusting a crate on a horse-drawn sledge]* and the ROM obviously, I think, knew what they were looking for and got the right crates.

*[Music cuts in; cut to view of a full-colour illustration of a barosaurus; camera zooms out from the tail to reveal the entire dinosaur]*

*[Music cuts out; cut to David standing beside an arrangement of bones embedded in the bone bed rock face]* **David:** The dinosaurs that we find here are about a hundred and forty-four million years old.

*[Cut to an interior view of the bone bed; camera pans across the rock face, which is lit by windows on the opposite side]* **David:** To give you an idea of just how old that is, *[zoom in on a cluster of bones embedded in the rock]* Tyrannosaurus rex, which lived at the end of the age of dinosaurs, is in fact, *[David enters the frame as he moves across the bone bed]* closer in time to us than it is to the *[zoom in on David]* dinosaurs found in this quarry.

*[Music cuts in; cut to view of a mountain ridge; cut to view of a mountain pass; cut to view of low foothills dotted with small shrubs; cut to view of a shadowy pass between two mountain ridges; music cuts out]*

*[Cut to a view of the base of a sloping rock face]* **David:** The landscape here *[camera zooms out]* during the late Jurassic would have looked very different than it does today. *[Cut to view of David standing in a valley between two low hills]* It would have been a low-lying plain with scattered vegetation and *[screen splits; view of David standing in a valley between two low hills on the left; on the right, an animated simulation of a small herd of sauropods foraging in the vegetation]* the Dinosaur National Monument bone bed represents the bottom of a relatively deep ancient channel where dinosaur bones had accumulated.

*[Cut to close-up of a craggy peak; camera zooms out and pans to show dried shrubbery at the base of a pile of rocks]* Animals would have died in the dry season *[cut to view of David crouched on a ledge upon the bone bed at the*

*Dinosaur National Monument]* along the river courses where they would have concentrated and then in the wet season, their bones, after they had being picked apart by scavengers, would have been swept into the river.

*[Atmospheric sound effects; interior view of the structure overlying the bone bed; camera pans to show the rock face]* **David:** Subsequent geological forces took those horizontal strata and *[cut to interior view of the bone bed as seen from the opposite direction]* uplifted them and put them into the vertical position *[cut to view of David inspecting bones embedded in the rock of the bone bed; the bone bed is seen from the side, emphasizing its steep pitch]* that we see them in here today *[cut to a close-up of a cluster of bones embedded in the rock]* and the two most *[cut to view of David standing beside the bone bed]* complete barosaurus have been excavated from this wall behind me—the one at the American Museum of Natural History and our very own barosaurus at the ROM.

*[Music cuts in; panning close-up of a bone embedded in the bone bed; camera zooms in to a detail of the exposed bone]* **David:** The giant long-necked, long-tailed sauropods *[cut to view of David standing, inspecting the bone bed]* have a unique ability amongst dinosaurs to capture our imaginations. *[Cut to view of the Utah landscape with a flat foreground and mountains in the distance]* The fact that the ROM sauropod, our barosaurus was collected here, *[cut to view of the location of Dinosaur National Monument]* at Dinosaur National Monument makes our barosaurus a particularly special piece in our collection.