RECLAMATION Managing Water in the West

Trackways Video Transcript

(digging sounds)

JESSE: There it is. The pad. The toes.

DR. THOMPSON: There it is! Yeah!

(music)

DR. THOMPSON: We're investigating fossil trackways that were left probably 72,000 years ago or longer.

NARRATION: These tracks lie on Bureau of Reclamation lands on a project site in Southeastern Idaho. They were discovered in August of 2010 by paleontologist and Reclamation Volunteer, Steve Robison.

STEVE: When I first saw them, I was walking the beaches looking to see if there was anything around. Rarely have I found fossils in the cliffs, but I glanced over (I was probably 150 feet from the outcrop) and I could see one of the deep tracks. And I thought, 'that looks almost like it could be a mammoth track.' There were several other shallower tracks [that] continued on. So I thought, 'it looks like I've got a trackway." I got Tyler to come out and we uncovered a bunch of it.

TYLER: [He] and I did the preliminary excavation on this area. We found 18 Proboscidean tracks and two Felid tracks.

NARRATION: These animals lived during the Pleistocene, or Ice Age. In this time, Southeastern Idaho was cool and moist, the landscape ridden with heavy vegetation and deciduous forests. The Bureau of Reclamation is interested in the tracks from this period because they are an exceptionally unique find.

DR. THOMPSON: We have a lot of dinosaur trackways because of the sediments those trackways were preserved in... more hard rock. When we get this young, into the Pleistocene (those Ice Ages), it's rarer that we find the trackways preserved. It's because of the sediments that these animals were walking in.

TOM: It's fairly significant, from a research perspective, to the paleontological community because of its rareness. It's important to Reclamation because it's a resource we need to manage and it has a lot of value to the public.

NARRATION: In April of 2011, tons of dirt fell from the cliff. But it was decided that this would help preserve the tracks until excavation could begin.

(music)

NARRATION: But three and a half months later the wave action of the reservoir undercut the clay layer.

STEVE: The reservoir stayed at the high water level. It down-cut underneath it and caved the banks off. We lost almost every track that we had last year.

JENNIFER: We found out very soon after that there was going to be an erosion control project right along the area where the tracks were.

STEVE: The Bureau of Reclamation and the Museum of Natural History came out to try to at least salvage some information.

NARRATION: Also involved in this project are Park Service, BLM, and Forest Service.

JENNY: We needed to document these tracks before this erosion control project came through because once it came through, the tracks wouldn't be available for study.

TOM: We try to do protective and preservation measures on resources like this so we can get some public benefit, primarily through education but also, in this case, gathering data for researchers.

DR. THOMPSON: It is two and three-quarters of an inch.

STEVE: It appears that the tracks were made in a very soft unit. Some kind of clay, silty stuff. As we try to collect them, we'll almost certainly destroy them... particularly larger mammoth or mastodon tracks. They just would not last. [I] don't want to use a shovel on them because it's damage the surface.

NARRATION: Therefore, they have had to find different methods of preserving the information.

JESSE: My main goal is making latex casts. It's just a simple latex with burlap. This is a Canid track that I made. You've got the pad and four toes. We also have one of the Proboscidean tracks with toe preservation.

DR. THOMPSON: Here are the toe prints. Right here.

(music)

TYLER: I started experimenting with preserving the sand in the cross-section. Some of them are more steep and that's a higher energy and some of them are just flat. I will be working on the palynology, which is the study of the pollen that was preserved at the time. It'll tell you the climate at the time and hopefully the season.

(music)

NARRATION: The trackway location itself is not available to the public due to the Paleontological Resources Preservation Act of 2009.

TOM: It protects paleontological resources on federal lands. There's a resources management component, an education component, as well as a criminal component for individuals who go onto public lands and steal and/or vandalize. Researches and legitimate people can be on the land, with permits, to excavate and research paleontological resources. When we do issue a permit, there has to be a relationship and agreement with a museum or repository to store and care for the federal property and perpetuity and then do research on it as well.

NARRATION: This is where the Idaho Museum of Natural History comes in. Through their research and partnership with the Bureau of Reclamation, they will publish information about the find and create an exhibit that will be available to the public in spring 2012. For more information, contact Reclamation's Snake River Area Office at (208) 383-2257.