

THE FOSSIL RECORD

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Recap of 2018 Activities

Field Trips, curation, and Exhibits

Our summer field trip took us to eastern Oregon for a combined geology/environmental tour. For the geological part we looked at some of the older rocks and fossils from Oregon. For the environmental part we saw how Izee Rancher, Phil St. Clair, manages the upper reaches of the South Fork of the John Day River that meanders through his land. A prior ranch landowner straightened the stream (eliminated meanders) and in the process down-cut the stream so that its level went from 2-3 feet below valley floor to about 6 feet. Thus, the ground adjacent to the stream would dry out in the summer, killing the willows and other trees that once thrived there. Phil has taken measures to reconstruct the stream, including building dams (beaver analogue dams) and replanting trees. So, he along with resident beavers building their own dams, are slowly raising the stream bed and bringing the valley back to its “natural” state. Phil has a special interest in working with the land and it really shows!

While we continued with specimen preparation and outreach, we worked to prepare a paper describing the dinosaur sacrum from Cape Sebastian we have been discussing.

Museum News:

Oregon’s First Dinosaur Find

We are pleased to announce that our paper on Oregon’s first dinosaur find, the duckbill sacrum, is now published. The article is in a New Mexico Museum of Natural History and Science Bulletin. The dinosaur most likely belongs to the subfamily of “flat-headed” duckbills and lived about 75 million years ago. The living animal may have been about 30 feet long.

Dinosaurs were land-dwellers, and so their fossils are rare in Oregon, where Mesozoic-age rocks are marine. For reasons we do not fully understand, the fossils of “flat-headed” hadrosaurs are more common than those of other kinds of dinosaurs in 75 million-year-old marine rocks.

Although found in Oregon, the specimen was from a terrane that migrated up from Southern California since it was entombed.

The sacrum was discovered in the 1960’s by scientists with the U. S. Geological Survey. A crew of paleontologists from the University of California, Berkeley visited the site in 1969 and sketched the specimen while it was in the rock. In 1993 National Geographic Magazine recorded the Oregon dinosaur locality. We excavated the specimen in 1994. There were newspaper articles and an OPB broadcast covering our recovery of the fossil. The dinosaur was discussed in the book, “Oregon Fossils”, by Drs. Elizabeth and William Orr.

Some of the specimen was lost between the time the Berkeley crew sketched it in 1969 and we excavated it in 1994. Our work salvaged the specimen before it eroded entirely from the Cape Sebastian sea cliffs.



Photograph of the fully prepared duckbill sacrum, left side, 1 1/2 feet long. Two other pieces not figured here make the preserved sacrum well over two feet long

We are now reaching out to the news media to correct an erroneous report last month publicizing Oregon’s first dinosaur find as a toe bone from Mitchell found in 2015.

Exhibit

As we mentioned, we have been building an exhibit to display our dinosaur. We are now making arrangements

to have the sacrum exhibited in the Portland area. We hope eventually to take it to other parts of the State, especially SW Oregon from where the fossil came. We plan to complement

the exhibit with educational programming for kids and adults alike.

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