## **Ken Olson: Am Amazing Journey through Religion, Paleontology** and **Art**

I've been fortunate to discover and deliver to The Museum of the Rockies hundreds of dinosaur specimens. That includes the sacrum of a *Triceratops* that was absolutely mauled by a *T. rex*; it has 58 bite-marks in the bone. (A paper about the specimen, for which I was second-author, described the first evidence of such behavior and is still one of the most cited on *T. rex*.)

Two skulls of the ultra-rare and huge horned dinosaur *Torosaurus* (the larger cousin of the familiar *Triceratops*, of which there are many skulls) are the most significant – and spectacular. This is a picture of the first one I located, in 1997, a nine-foot skull which I excavated, jacketed, by myself and hauled out in 14 days of my vacation. It was only the third such skull in the world.



Here's a picture of a second *Torosaurus* skull I located in 1999, following up on a piece of bone a rancher showed me that he had picked up some 25 years before. The picture shows me in my garage having put together a cast for a local exhibit. It shows well the distinctive two large holes in the parietal/frill.



And here's a shot of the skull at The Museum of the Rockies.



The skull was lifted out by a Black Hawk National Guard helicopter, serving as a great training exercise for them, and filmed live by NBC tv. Both of the skulls are 9' long; the second one is 6.5' in width, and they are known as the largest dinosaur skulls in the world, the largest skulls of any land animal, ever. Over the years, only three additional specimens have shown up of this genus.)

As a Research Associate in Paleontology (at Montana State University in a non-salaried staff position) I've been on BLM federal permits for three decades, but both of these skulls were from private land. Land-owners willing to donate such things for the public good are a rarity, as the commercialization of fossils now dominates. But I've been fortunate to work with those two land-owners, both of whom demonstrated that they care about science and education. (In great contrast, all too many ranchers in the West are absolutely paranoid. A couple of years ago, I asked a rancher for permission just to walk in and *photograph* the nest of a Red-tailed hawk. His answer: "Nope. You know, the gover-mint is always looking for ways to steal our land."

In South Dakota, when my son was in 5<sup>th</sup> grade, we located a bone-bed jammed with hadrosaur bones. The bone-bed was/is 500 yards wide! The Museum of the Rockies was up to their eyeballs with baby dinosaurs on the front range of the Rockies, so I initiated a crew of students

from Concordia College in Moorhead, MN. (Concordia had me come over perhaps a dozen times to give lectures and to teach about science and religion.) Over several two-week summer vacations, we took out some 6,000 bones. All were disarticulated in a massive river overflow deposit. (A funny aside: a newspaper account of our efforts said, "All these bones were *inarticulate*.")

Here's a photo of a composite hind foot of the duck-billed dinosaur, *Edmontosaurus* from that location.



And here's a picture of a femur of *Edmontosaurus* that was installed in a creation exhibit at Flathead Lutheran Bible Camp in western Montana.



I was a solo pastor in a large and active congregation, so most of my serious avocation in paleontology was done during my summer vacation and at some distance in eastern MT. I guess most of my free time went to paleontology. Of course, there were invitations to speak to school kids from kindergarten to senior high, so I'm sure that in the course of 40 years, I must have given more than a hundred of those talks, always dragging in dinosaur bones, large ammonites,

huge casts, etc. The kids were always amazed to be able to touch "the real thing." I never dealt with religion in those at all; but the silent message was, "here's a local pastor talking about dinosaurs and other critters from tens and hundreds of millions of years ago. It must be OK." When asked by teachers, etc., I would say something to the effect that "My view is simply that science tells us more of the world God has made, and that enhances our sense of wonder at it all. How can that be wrong?"

I have also given something like 20 hours of lectures at The Museum of the Rockies for docents and staff; about half were on my fieldwork/discoveries, etc. but, also at the Museum's request, I did half on science and religion, since they constantly have to deal with creationists. Nothing brings out those people like dinosaurs!

The Museum of the Rockies also commissioned me to do a dozen sculptures for exhibits. Here's a shot of an *Ankylosaurus* I created.



Here's one of a Torosaurus.



And here's one of an Ornithomimus.



Here's a final sculpture picture, one of the two big marine reptiles of the Cretaceous Period, a plesiosaur and a mosasaur.



And now, to bring things to a full circle, here's a diagram I drew of the sacrum of the *Triceratops* that was mauled by a *T. rex* indicating the 58 bite-marks in the bone that I mentioned in the opening paragraph above.

