Fieldwork

Fieldwork is essential to make the new fossil discoveries that drive scientific research, increasing our knowledge of Earth's history. New fossils also build the museum collection, providing the raw material for new exhibits.

Our fieldwork program is one of the largest in the region, spending up to three months in the field every year.

Currently, we are collecting dinosaurs from the Hell Creek and Judith River formations of Montana and North Dakota. These rock formations record the end of the Cretaceous Period, shortly before dinosaurs become extinct 66 million years ago in the K-Pg mass extinction.

Discovering New Dinosaurs

Judith River Formation

The Judith River Formation was deposited ~79-76 million years ago. At this time, northern Montana was a vast floodplain with deltas and coal swamps reaching out into the shallow seaway that covered the Dakotas and what became the central United States. Historically, very few good dinosaur skeletons have been collected the Judith River Formation, despite it having been studied for over 100 years.
Since 2017, our field crews have been working two exposures of the Judith River Formation. In this time we have discovered some remarkable sites, including multiple disarticulated and articulated tyrannosaur skeletons; a mummified duckbill arm; two bonebeds recording the catastrophic death of dozens of duckbills; partial skulls of adult and juvenile horned dinosaurs; and many microsites.

**Hell Creek Formation**

The Hell Creek Formation of Montana and the Dakotas was deposited ~67-66 million years ago, and records the last non-avian dinosaurs to have lived before the K-Pg mass extinction.

It is famous for dinosaurs such as *Tyrannosaurus, Edmontosaurus* and *Triceratops*, which are common fossils in the Hell Creek. We collect our fair share of these giants, but our fieldwork especially focuses on the less common dinosaurs, including rare species or young growth stages of larger species.

We currently work mainly in Montana, where we have important research sites, but would like to expand our operation into southwest North Dakota and will be exploring for some new localities in 2021 and beyond.

**Volunteer On A Field Crew**

Our field crews are mostly made up of volunteers.

We usually ask for a commitment of at least two weeks (although this is flexible depending on circumstances, especially experience). Campsites can also be quite
remote, and very basic without amenities. We typically work a six-day week with one day each week set aside for resupplying in town. Digging can be very hard physical work, in hot weather and rough terrain. Volunteers therefore need to be fit, and we insist on volunteers having valid health insurance. For legal reasons volunteers must be aged 16 or over.

If you are interested in volunteering on one of our summer field crews, then please see our Fieldwork Volunteer Page for more details of our program and how to apply, and/or email denver.fowler [at] dickinsongov.com.