

Make a Splash Read: Summer Reading Kickoff

In 2004, libraries in Bismarck and Mandan, the North Dakota State Library, the State Historical Society of North Dakota, and several other agencies including the North Dakota Geological Survey initiated an annual program, referred to as Summer Reading Kickoff, to encourage children to read books during summer vacation. These programs are held at the North Dakota State Library and North Dakota Heritage Center in Bismarck. This year's program was held on June 2 and contained 17 events drawing about 3,200 people. Several celebrities read children's books including First Lady Mikey Hoeven. John Hoganson gave a presentation titled "Prehistoric Marine Life of North Dakota" and Becky Gould and Jeff Person showed a variety of fossils of animals that lived in aquatic environments.



Several years ago, the North Dakota Geological Survey installed a fossil exhibit at the Cowboy Hall of Fame in Medora that featured the skeleton of *Mesohippus*, the primitive horse that lived in North Dakota during the Oligocene about 30 million years ago. Because of the popularity of that exhibit we expanded it in May 2010 to include fossils of other creatures that lived in western North Dakota at various times in the geologic past. The new exhibit includes fossils from the Cretaceous Period (about 65 million years old) when dinosaurs roamed western North Dakota. These fossils are remains of the three horned dinosaur *Triceratops*, petrified wood, conifer cones, and amber (fossilized tree sap). Portions of western North Dakota were covered by a shallow sea 60 million years ago. Fossils of North Dakota's 60 million-year-old state fossil, *Teredo*-bored petrified wood are displayed. Five million years later (55 million years ago) western North Dakota was a forested swampland and fossils in that part of the exhibit include the remains of crocodiles, turtles, fish, snails, and leaves from several kinds of trees. The rhinoceros, *Subhyracodon*, inhabited the savannahs of western North Dakota 30 million years ago along with the primitive horse *Mesohippus*. Jaws of this rhino are included in the display.

New Cowboy Hall of Fame Fossil Exhibit



*** Staff News ***

Timothy (Tim) Nesheim was hired by the North Dakota Geological Survey in mid-June to fill a new position for a subsurface geologist. Tim, who is from Northwood, North Dakota, began his career in geology while still in high school when he participated in the Survey-led 2001 public fossil dig in the Pembina Gorge. He graduated with a B.S. in geosciences from Minnesota State University Moorhead in 2007 and went on to obtain his master's degree from the University of Iowa. His thesis, entitled "*Are 1.1 Ga deformational fabrics present in metasedimentary rocks of the Belt Supergroup in northern Idaho?*" won him the 2008 GSA Structural Geology and Tectonics Division Student Research Grant Award. Before joining the Survey Tim worked as a research assistant in a geochemical clean lab at Washington State University.

Tim will be studying some aspects of the Williston Basin's deep geology including its Precambrian structural provinces, and CO₂ sequestration in the Deadwood Formation.

Also hired in June was **Jennifer Bickler**, who joined the Oil and Gas Division's Dickinson Office as a field inspector.