State Paleontologist John Hoganson has been chosen as the winner of the State Historical Society of North Dakota’s 2007 Editor’s Award. This award, which is presented annually, goes to the author of a full-length article published in the Society’s quarterly journal, North Dakota History, that best exemplifies the highest standards of research, writing, and scholarship. Hoganson received the award for his extended article, “Dinosaurs, Sharks, and Woolly Mammoths: Glimpses of Life in North Dakota’s Prehistoric Past,” which appeared in Volume 73.1 & 2 of the journal*. The award was presented at the 19th Annual Governor’s Conference on North Dakota History held on November 2-3 at the North Dakota Heritage Center in Bismarck.

Hoganson’s 60-page article covers the story of life in North Dakota - from the creatures that inhabited its primordial oceans 450 million years ago to the great mammals of the last Ice Age, which ended a mere 10,000 or so years ago. The story is beautifully illustrated with dozens of full-color photographs, graphics and marvelously detailed images by a number of well-known paleo-life artists.

Each section of “Dinosaurs, Sharks, and Woolly Mammoths” describes what the climate, environment, and plant and animal life were like during a particular period in North Dakota’s prehistory. Accompanying Hoganson’s text in each section are a state geologic map showing where fossils from that period have been found, a photograph of the geologic formation containing the fossils, numerous photographs of actual fossil specimens, and artists’ renderings of the various prehistoric creatures and the environments they inhabited.

This special paleontology issue of North Dakota History serves as a companion piece to the recently installed Corridor of Time exhibit at the North Dakota Heritage Center in Bismarck, which focuses on the history of life in the state prior to human habitation. A joint production of the State Historical Society of North Dakota and the North Dakota Geological Survey, the publication encapsulates a century of paleontological research done in North Dakota and is the first single-source publication to give an overview of life in the state during the past 500-plus million years.

* Also available from the North Dakota Geological Survey as NDGS Educational Series No. 31.

Hess Corporation Donation to the North Dakota Geological Survey Fossil Restoration Fund

One goal of the North Dakota Geological Survey’s Fossil Resource Management Program is to develop prehistoric life exhibits at the North Dakota Heritage Center in Bismarck in collaboration with the State Historical Society of North Dakota. These exhibits are meant to provide information to the public about life in North Dakota at different times in the geologic past and to show how life and the environment and climate have changed through time. Several fossil displays have been completed in the Corridor of Time and other areas of the Heritage Center. We are currently developing a new exhibit that will depict life in North Dakota about 30 million years ago when North Dakota was similar to an African savanna. At that time, huge herds of mammals, including rhinoceroses, camels, tiny horses, pig-like animals, rabbits, mice, saber-toothed cats and many others roamed the state.

The prehistoric life exhibits are funded by state appropriations and by private donations. We are very pleased to announce that Hess Corporation has made a $500 donation to the North Dakota Geological Survey Fossil Restoration Fund. This donation will be used for fossil exhibit development at the Heritage Center. On behalf of the citizens of the state the North Dakota Geological Survey would like to express sincere thanks to Hess Corporation and Mr. Wayne Biberdorf for this contribution.
A new book, “The Geology and Paleontology of the Late Cretaceous Marine Deposits of the Dakotas”, has recently been published by the Geological Society of America. GSA Special Paper 427 is a result of a Geological Society of America Symposium and contains 18 chapters about the Late Cretaceous Pierre and Fox Hills Formations in South and North Dakota. The book is edited by James Martin, South Dakota School of Mines and Technology, and David Parris, New Jersey State Museum. Articles in the volume provide the latest information about the stratigraphy, mineralogy, geochemistry, biochronology, and paleontology of these formations. Authors from the South Dakota School of Mines and Technology, New Jersey State Museum, Smithsonian Institution, Northern Kentucky University, University of Cincinnati, Rutgers University, University of Pennsylvania, Temple University, Fort Hays State University, Museo de la Plata-Argentina, University of California-Riverside, South Dakota Department of Environmental and Natural Resources, University of Oklahoma, Sam Noble Oklahoma Museum of Natural History, St. Lawrence University, University of North Dakota, and the North Dakota Geological Survey provided articles about their latest research. John Hoganson, J. Mark Erickson, and F. D. Holland wrote a chapter of the book titled “Amphibian, reptilian, and avian remains from the Fox Hills Formation (Maastrichtian): Shoreline and estuarine deposits of the Pierre Sea in south-central North Dakota”.

The Department of Mineral Resources’ Role in Publication of the 2007-2008 North Dakota Blue Book

The 2007-2008 North Dakota Blue Book was published recently through the Secretary of State, Alvin A. Jaeger’s, office. This is the 27th edition of the Blue Book although early versions date back to 1887. The early versions of this book were meant to provide information to legislators. The first volume of the Blue Book was published in 1942. Currently, it is published with funds appropriated to the office of the Secretary of State. It is a highly informative compilation of facts about North Dakota’s environment, history, culture, economy, and politics. Many dedicated volunteers contributed information.

Each year Department of Mineral Resources staff members provide information for the Blue Book. This year our input focused on the status of energy development and resources in North Dakota and new prehistoric life exhibits at the North Dakota Heritage Center. The Blue Books are wonderful sources of information about our state. They are available at the North Dakota Heritage Center gift shop and book stores around the state.

North Dakota Legendary: A New North Dakota Studies Textbook

A new North Dakota studies textbook by Neil D. Howe and Theodore B. Jeliff entitled “North Dakota Legendary” is now available. To update North Dakota studies curricula, the North Dakota Legislative Assembly authorized and funded the production of this new textbook for use in the eighth grade. It is produced, published, and distributed by the North Dakota Center for Distance Education in Fargo. The book tells the story of North Dakota and is divided into four units:

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<td>Current Issues in North Dakota</td>
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The authors relied on several advisors to assure accuracy of the information. John Hoganson, paleontologist with the North Dakota Geological Survey, was an advisor about the geology and prehistoric life of North Dakota. Color images occur throughout the hard cover book, which is a badly needed and wonderful addition to North Dakota’s education efforts. It is more than just a textbook, however; it is a great source of information for anyone interested in North Dakota. It is available through the North Dakota Center for Distance Education and is also being sold at the North Dakota Heritage Center gift shop.
Survey geologists Julie LeFever, Stephan Nordeng, and Fred Anderson, along with Oil & Gas Division geologist Bruce Juenker, attended the 56th Annual American Association of Petroleum Geologists – Rocky Mountain Section (RMS-AAPG) Meeting, held in Snowbird, Utah on October 7-9, 2007. The meeting hosted over 690 attendees and featured 16 technical sessions. Over 100 presentations (oral and poster) were given on subjects such as shale gas exploration and development, geochemistry, and Williston Basin structural geology.

Julie LeFever presented a talk entitled “Exploration Frontiers in the Bakken Formation, Montana and North Dakota”, which highlighted some of the more recent exploration trends and well completion techniques favored for the Bakken Formation. This talk was attended by over 200 individuals and the meeting space available during the talk was standing room only.

The conference also hosted 31 technical exhibitors, including the ND Department of Mineral Resources Booth, which provided a focal point for discussion of the many studies recently completed by the Geological Survey and the Oil & Gas Division. DMR geologists were on hand to visit with interested attendees and answer questions. A computer demonstration terminal was available for visitors to become acquainted with the Oil & Gas Division’s online oil and gas information subscription service. This service has been very well received by industry.

More than 150 individuals were estimated to have stopped at the DMR booth, either as interested passers-by or to specifically inquire about department programs and recent investigations.

Comings and Goings

We bid a fond farewell to administrative assistant Linda Johnson at the end of September. She is now working for Johnson and Borchert Consulting Geologists of which her husband, Bob, is now sole owner following the unfortunate loss of his partner, Roger, earlier in the year. In spite of her departure Linda is still a frequent visitor to the Survey offices, having agreed to help with the training of her replacement, Trudi Hogue, and this, her last newsletter.

Trudi began her career with the Survey on November 1 and has settled into her new position very quickly. Originally from Wilton, Trudi has lived in Bismarck for the last 18 years. Prior to joining the Survey she worked at Coventry Management Services and before that was an employee of the Bank of North Dakota. Trudi has two daughters, one son, and a two-year-old grandson, Tyson.

In August the Oil & Gas Division hired Jason Hicks as a field inspector for the Minot District. Jason is from Boissevain, Manitoba - a small farming community about 12 miles north of the Peace Garden, and holds a B.A. in geology from Minot State University. He and his wife Sarah and their three children live in Minot where they are active in several local sports programs.

In December the Oil & Gas Division also welcomed its new receptionist, Jeanette Bean. Jeanette is an army brat. She was born in Okinawa but has no memory of her life in Japan because she and her family moved to Halliday when she was 1 ½. She has lived in North Dakota ever since. Before joining Oil & Gas, Jeanette was an apartment manager for Valley Rental. She has a husband, Kevin, and a 17-year-old stepson, Justin.