



The NDGS is an affiliate of the Earth Science Information Center (ESIC) network. The U.S. Geological Survey coordinates the nationwide ESIC network, which provides information about geology, hydrology, topography, and land use in the form of maps, books, reports, and aerial, satellite, and radar images, and related products. ESIC also publishes and distributes earth-science data in digital form. As an ESIC office, the NDGS can assist the public in locating earth-science materials dealing with North Dakota. For more information, contact Fred Anderson, Donna Bauer, or Elroy Kadrmay by phone at (701) 328-8000.

GENERAL INFORMATION

The North Dakota Geological Survey continues to make the following maps available through our publications office:

Iraq Planning Map (1:2,000,000) \$10.00
The Middle East Graphic (1:4,500,000) \$15.00
Iraq (1:1,250,000) \$10.00
Baghdad (1:40,000) \$10.00
Tikrit, Al Basrah, Al Mawsil, Karkuk \$15.00 each
Lewis and Clark: A Legacy of Science \$10.00
National Wildlife Refuge System Map \$7.00

MAPS and RECENT PUBLICATIONS

Spatial and Temporal Relations of Glaciations on the Northern Plains

This Scientific Investigations Map with accompanying pamphlet depicts the relationship of Pleistocene age glaciations in the northern Great Plains of northwestern North Dakota and northern Montana. Completed in 2004, this map depicts the distribution of mountain glaciation and continental glaciation and their relationships in space and time for the northern Great Plains. The areal distribution of differing glacial tills and limits of glaciation, in addition to sags, spillways, and buried valleys, are featured on this map.

Title: *Map showing spatial and temporal relations of mountain and continental glaciations on the Northern Plains, primarily in northern Montana and northwestern North Dakota*

Scale: 1:1,000,000

Publication ID: SIM-2843

Size: 44" x 28"

Price: \$7.00 for the map, plus a \$5.00 handling charge.

Also available in digital format as PDF documents and GIS coverages at: <http://pubs.usgs.gov/sim/2004/2843/>

Seismic-Hazard Maps of the United States

New probabilistic seismic-hazard maps have been prepared for the conterminous United States. This set of six seismic hazard maps and accompanying pamphlet depict seismic hazards in the form of peak horizontal acceleration and horizontal spectral response for selected probabilities of occurrence. Each map was prepared by combining the seismic hazard derived from historic seismicity with fault-hazard data. Contours of the random horizontal component of ground acceleration are displayed.

Title: *Seismic-Hazard Maps for the Conterminous United States*

Scale: 1:7,000,000

Publication ID: SIM-2883

Size: 31" x 25"

Price: \$20.00 for the maps, plus a \$5.00 handling charge.

Also available in digital format as PDF documents and GIS coverages at: <http://pubs.usgs.gov/sim/2005/2883/>

New Geologic Map of Mars

A newly created geologic map with accompanying pamphlet of the northern plains of Mars has been created using recent topography and image data from the Mars Global Surveyor and Mars Odyssey missions. This planetary geologic map was created with the intent of reconstructing the history of geological activity in this region. All of the plains regions, within the northern hemisphere of Mars, as well as an adjacent cratered highland and volcanic region bordering the plains, are featured on this map.

Title: *Geologic Map of the Northern Plains of Mars*

Scale: 1:15,000,000

Publication ID: SIM-2888

Size: 59" x 43"

Price: \$7.00 for the map plus a \$5.00 handling charge.

Also available in digital format as PDF documents at: <http://pubs.usgs.gov/sim/2005/2888/>

Reprint of Public Land Survey Map

This large highly detailed wall map depicts the original thirteen colonies with outlines of past historic land purchases, land grants and annexes and also shows all States and their cities, hydrology, and remaining public lands, national forests, Indian reservations and national parks and monuments, as of 1965. This map can be a great tool for educators!

Title: *United States of America Public Land Surveys (1965)*

Scale: 1:3,000,000

Stock #: 101208

Size: 64" x 40"

Price: \$7.00 for the maps plus a \$5.00 handling charge.

EDUCATIONAL MATERIALS

USGS School Yard Geology

This fun and interesting web site provides resources and an introduction for teachers on how to introduce geologic concepts, such as mapping and rock identification and description, right in their own schoolyard. Three individual lessons are currently available online that involve students in mapping their schoolyard, describing sedimentary rocks, and introducing the relationships between the geologist as an investigator and a detective. Each lesson can be given individually or as an effective teaching sequence. These materials are accessible at the USGS Schoolyard Geology website located at <http://education.usgs.gov/schoolyard/index.html>

Careers in Science

It is never too early to introduce to students the excitement and possibilities of a career as a geoscientist! This informative webpage provides access to websites and downloadable video files with such topics as, Careers and Opportunities with the USGS, which provides students and educators with an opportunity to learn about current job positions available, student employment, the "Volunteers for Science" program, postdoctoral employment, and career development and benefits of working as a career scientist for the USGS. Also available is an informative research program website allowing for an opportunity for students and educators to view the many different and exciting science programs at the USGS. These resources can be accessed directly through the USGS Educational Resources Careers in Science webpage located at: <http://education.usgs.gov/common/careers.htm>

Science in our State

Providing students with interesting and exciting real-world examples of current scientific activities and investigations being conducted in North Dakota are of vital importance for demonstrating the daily relevance of scientific inquiry. An exiting and informative website on USGS related science in North Dakota highlights real-time data collection monitoring programs in operation throughout North Dakota such as hydrologic monitoring, information on biological, mineral resource, and recreational information for the State, and links to research and science centers in North Dakota and the upper-Midwest, which highlight current programs and research activities. Access to the Science in Your State website for North Dakota, can be obtained by linking to: <http://www.usgs.gov/state/state.asp?State=ND>

GEOSCIENCE, MINERALS, AND REMOTE-SENSING RELATED WEBSITES:

Geoscience Informatics

Currently described as informatics focused to the biological sciences, this informative website provides for an understanding of an applied example of the discipline of

Informatics. From the information contained on this website an interesting parallel model can be drawn for the Geosciences. Since there is much to be gained from a familiarity and understanding of allied scientific disciplines related to the geosphere, this website can provide for some thought provoking opportunities related to geoscience Informatics. This website provides information on relevant aspects of information access, information collection management, models and analytical tools, and information on IT infrastructure. For more information, visit the USGS Center for Biological Informatics at: <http://biology.usgs.gov/cbi/>

Mineral Deposit Models

The USGS Mineral Resources Program is converting its previously completed mineral deposit models literature into digital versions that will be presented on the World Wide Web and on CD-ROM. Information on mineral deposits models, including such topics as the characteristics of mineral deposit occurrences, the theory and practice of using mineral deposit models, descriptive deposits of industrial minerals deposits, developments in mineral deposit modeling, and the use of remote sensing and geophysics in the assessment of aggregate resources are available. Individual reports are available as PDF files and can be obtained by accessing the Mineral Deposits Models webpage of the USGS Central Mineral Resources Team website at: <http://minerals.cr.usgs.gov/team/depmod.html>

National Satellite Land Remote Sensing Data Archive

At the direction of Congress in 1992, the Department of the Interior was to establish a permanent Government archive that would contain satellite remote sensing data of the Earth's land surface, and provide ready access to this data for study. In accordance with this directive, the USGS has created, and currently maintains, the National Satellite Land Remote Sensing Data Archive (NSLRSDA). Through worldwide distribution and acquisition of data from Landsat satellites (over 630,000 gigabytes of data), this collection from Landsats 1 through 5 and 7, including image data from both the Thematic Mapper (TM) and Multispectral Scanner (MSS) sensors, forms the core of NSLRSDA. The total projected holdings for 2005 were to be 1,400,000 gigabytes of data. Information on data holdings, availability, and access, can be obtained by linking to the NSLRSDA webpage, maintained by the USGS Eros Data Center, in Sioux Falls, South Dakota at: <http://edc.usgs.gov/archive/nslrda/index.html>

NDGS Earth Science Information Center (ESIC) Affiliate

For assistance in finding and/or ordering a product, or if you have any questions, you may contact the North Dakota Geological Survey's, USGS Earth Science Information Center Coordinator, Mr. Fred J. Anderson, at: (701) 328-8000 or via email at: fjanderson@state.nd.us

USGS Homepage
<http://www.usgs.gov>