
ESIC NEWS

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NDGS ESIC Coordinator



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 Kadrmas by phone at (701) 328-8000.

GENERAL INFORMATION

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

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

New Geologic Map of North America

The Geologic Map of North America, which depicts the geologic relationships between the continent of North America and adjoining ocean basins from the North Pole to Venezuela and from Ireland to Siberia is now available. The map is the result of a 20-year collaborative effort among the Geological Society of America (GSA), the USGS and the Woods Hole Oceanographic Institution (WHOI). The map is produced as a 3-sheet map set. A supporting digital database is also planned by the USGS. This map distinguishes between over 900 individual rock units, 110 of which are located offshore. It displays more than seven times as many land based geologic units as the previous map completed in 1965, prior to the advent of plate tectonic theory. This map is currently available only through the GSA.

Title: Geologic Map of North America

Scale: 1:500,000

Stock #: CSM1100F

Size: 74" x 39"

Price: \$120.00 for GSA members and
\$150.00 for non-members

Map of the United States of America 1857

A digitally enhanced reproduction of the original 1857 Map of the United States has been completed and is available through the USGS. The original map, which is kept in the Geography and Map Division of the Library of Congress, was drawn by George W. Colton and engraved by John M. Atwood, with additional extensive border design and engraving completed by W.S. Barnard. The map was first published in New York by J.H. Colton and Company in the 1800's. The United States, British Provinces, Mexico, West Indies and Central America, with parts of Granada and Venezuela are shown as they were in 1857. Additional map insets depict American and European shipping ports, the Isthmus of Panama, Bunker Hill, and the Cathedral in Mexico City.

Title: 1857 Map of the United States

Stock #: 113632

Size: 36" x 46"

Price: \$10.00 plus \$5.00 handling

Scientific Investigations Map of the Gunnison Gorge National Conservation Area, Colorado

Scientific Investigations Map 2825, covers one of the most beautiful and accessible wild areas to be found in the United States. The map was produced by Karl S. Kellogg, Wallace R. Hansen, Karen S. Tucker, and D. Paco VanSistine. The Gunnison Gorge National Conservation Area (NCA) was created by Congress in 1999 and is administered by the U.S. Bureau of Land Management (BLM). The NCA is the 57,725-acre downstream continuation of Black Canyon of the Gunnison National Park. This one sheet map shows not only some of the most spectacular geologic formations, but highlights some of the more interesting ecological and human-interest aspects of the Gunnison River gorge.

Title: Gunnison Gorge National Conservation Area

Scale: 1:45,000

Stock #: 116427

Size: 56" x 39"

Price: \$7.00 plus \$5.00 handling

A separate companion publication:

Title: The Geologic Story of Gunnison Gorge National Conservation Area, Colorado, Professional Paper 1699

Stock #: 116252

Price: \$10.00 plus \$5.00 handling

EDUCATIONAL MATERIALS

Digital Library for Earth Systems Education (DLESE)

Educators, students, and other interested individuals will find over 10,555 resources for the teaching and learning of Earth System Science at the Digital Library for Earth System Education (DLESE). This resource packed website located at <http://www.dlese.org/dds/index.jsp> has thousands of teaching resources from within the geographic, geologic, and ocean sciences intended to engage students in the curiosity and excitement of scientific discovery. Included are such resources as lesson plans, scientific data, interactive computer models, visualizations, and virtual field trips. Featured on the website are Teaching Boxes, an online assembly of interrelated learning concepts, digital resources, and cohesive narration that help to build the connection between individual resources and understanding. Individual topics of interest can be chosen from a view of the concepts that also help build an understanding of that topic, and further encourage the exploration of online resources that support selected concept learning. Teaching Boxes on plate tectonics and weather are currently available. Additional boxes on ocean and earthquake-related topics are also under development.

American Coal Foundations (ACF)

The American Coal Foundation (ACF) was created in 1981 as an organization with a mission to develop, produce, and disseminate coal-related educational materials and programs designed specifically for teachers and students. The ACF distributes free and inexpensive educational materials to all interested individuals and the general public. Available materials include: online and print lesson plans and curriculum activities for both elementary and secondary students; videos like the ACF video *Coal Today*, a modern story about new technologies used in coal production and the people who produce and generate the energy that is the foundation of the U.S. economy; online articles and print brochures offering general information on coal, electricity, and land reclamation, such as "Coal: Ancient Gift Serving Modern Man," as well as the coloring and activity book *Let's Learn More about Coal, the Power from Coal activity book with teacher guide, and the activity kit Coal: An Introduction*; coal samples and posters; a guide to coal videos; and a brochure with ideas for science fairs. These materials can be accessed directly at the ACF website located at <http://www.teachcoal.org/index.html>.

Sigma Xi

Sigma Xi, pronounced Sigma "ZEYE," was founded in 1886 as an honor society for science and engineering. Today, it is an international research society that promotes the health of the scientific enterprise and honors scientific achievement. There are several science education

resources currently available through the Sigma Xi website at: <http://www.sigmaxi.org/resources/publications/index.shtml#sciencee>. Topics include: A Science Fair Guide for Finding the Right Approach with Tailgate; Careers in Science and Engineering (created by the National Academy of Sciences); Sharing Science with Children; and Sharing Science, Linking Students with Scientists and Engineers.

MAPPING, REMOTE-SENSING, AND GIS-RELATED WEB SITES:

USGS Geologic Mapping Color Standards Publication

The recent U.S. Geological Survey (USGS) Techniques and Methods publication (I1-B1) describes the color and pattern standards and conventions for geologic map production. The conventions and standards of geologic map colors and patterns contained within this publication enable geologists, cartographers, and map editors to produce geologic maps that have a consistent geologic-age color scheme and pattern. Such consistency enables geologists and other users of geologic maps to obtain a wealth of geologic information at a glance and to produce maps that can easily be compared to other published maps that follow the color and pattern standards and conventions, particularly within the digital geologic map environment. This publication, entitled: *Selection of Colors and Patterns for Geologic Maps of the U.S. Geological Survey - Version 1.0* is currently available online at: <http://pubs.usgs.gov/tm/2005/I1B01/>.

USGS Satellite Imagery Featured in Global Environmental Change Atlas

A collection of USGS before-and-after satellite image pairs for 80 sites around the world is featured in a new atlas documenting global environmental changes. The 332 page large-format atlas, *One Planet, Many People: Atlas of Our Changing Environment* was produced by the United Nations Environment Programme UNEP in cooperation with USGS, the National Aeronautics and Space Administration (NASA), and the University of Maryland. The atlas highlights more than 30 environmental case studies supported by narratives, Landsat images, and ground photographs, and a compilation of recently released environmental maps. This publication is intended for environmental policy makers, non-governmental organizations, the private sector, academics, teachers, and citizens. The North American node of the UNEP Global Resource Information Database (GRID), located at the USGS National Center for Earth Resources Observing Systems (EROS) located in Sioux Falls, S.D., provides information technology tools — remote sensing, Geographic Information Systems (GIS), data management and advanced Internet technologies, to address sustainable development issues. For more information about UNEP GRID visit <http://grid2.cr.usgs.gov/>.

SRTM 90m Digital Elevation Data

Global coverage of processed Shuttle Radar Topography Mission (SRTM) 90 meter Digital Elevation Model (DEM) data is currently available online at: <http://srtm.csi.cgiar.org>, by the Consortium for Spatial Information (CSI) and the Consultative Group for International Agricultural Research (CGIAR). DEMs for nearly the entire globe, covering most of the countries of the world, are available for download on this site. The SRTM 90m DEM's have a resolution of 90m at the equator, and are provided in mosaiced 5° x 5° tiles for download and use. All are produced from a larger dataset to allow for seamless mosaicing. Files are available in both ArcInfo ASCII and GeoTiff formats to permit use in a variety of image processing and GIS applications. Data can be downloaded using a browser or directly from the ftp site. Data processing is ongoing. Online DEM data will be updated in mid-2005, with future enhancements to include shoreline clipping and improved void interpolation (using GTOPO30 global topographic data).

USGS Photographic Archive

The on-line system of the United States Geological Survey Photographic Archive provides access to over 25,100 photographs dating from 1868 through 1992. Photos contained within the archive are not copyrighted and may be viewed and downloaded free of charge. Every photo within the archive is available in a resolution of 100, 700 and 1400 dots per inch (dpi). The collection consists of photos ranging in age from 1868 through 1992 with emphasis on Geology, Earthquake Damage, National Parks and Monuments, the Mount St. Helens Volcanic Eruption of 1980, and Mines, Mills and Quarries. The system may be searched using a free-form string search engine which permits a more accurate caption and/or image query. The photographic archive is located at: <http://libraryphoto.er.usgs.gov>.

USGS Earth Science Information Center

For help finding a product, ordering a product, or if you have any questions, please contact the USGS Earth Science Information Center (ESIC):
1-888-ASK-USGS (1-888-275-8747)
ask@usgs.gov (email)
<http://ask.usgs.gov/>

USGS Homepage

<http://www.usgs.gov>