



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 Elroy Kadrmas, Fred Anderson, or map clerk by phone at (701) 328-8000.

GENERAL INFORMATION

The North Dakota Geological Survey continues to stock the following maps:

The Middle East Graphic (1:4,500,000) \$15.00

Iraq (1:1,250,000) \$10.00

Baghdad (1:40,000) \$10.00

Lewis and Clark: A Legacy of Science \$10.00

National Wildlife Refuge System Map \$7.00

Surficial Deposits and Materials in the Eastern and Central United States

Derived from 31 published maps from the U.S. Geological Survey's Quaternary Geologic Atlas of the United States map series (Miscellaneous Investigations Series I-1420), this 2003 geologic map provides a broad overview of the location and distribution of over 150 types of surficial geologic materials and deposits. This map depicts the surficial deposits and materials that have been accumulated and deposited over the past two million years which encompasses the time period of human interaction with the planet. This map will be of interest to local and regional aggregate resource explorationists, scientific and engineering educators and industry professionals, government agencies and the general public. The map has been compiled at a scale of 1:1,000,000 to be viewed as a digital map at a 1:2,000,000 nominal scale and as a printed conventional paper map at a scale of 1:2,500,000.

To view the map online, visit: <http://pubs.usgs.gov/imap/i-2789>

Title: Map of Surficial Deposits and Materials in the Eastern and Central United States

Stock #: 115020

Size: 48" x 50"

Price: \$7.00 for the map and pamphlet, plus \$5.00 handling charge

Recently Released: Topographic Contour Maps of Mars

A new map of the planet Mars has recently been completed and released by the USGS Astrogeology Program. The new map (Geological Investigations Series I-2782) consists of a two-map sheet set that contains a topographic map and a color-coded contour map of the planet. The landing sites of the recent Mars Exploration Rovers A (Spirit) and B (Opportunity) can be located on this topographic map. The landing sites of the previous Mars missions are also marked on the map. The map was prepared by the USGS for NASA and represents data collected on recent, previous missions. The image used as the base of this map set represents the collection of over 600 million measurements obtained during 1999 and 2001 from the Mars Orbiter Laser Altimeter (MOLA) onboard the Mars Global Surveyor (MGS) spacecraft.

Further information on this exciting new map set can be found at <http://pubs.usgs.gov/imap/i2782>

Title: Topographic Contour Maps of Mars

Stock#: 115419

Size: 32" x 36"

Price: \$14.00 for the maps plus \$5.00 handling charge

North Dakota Government Land Office Survey Plats (GLO) and Resurvey Notes now available Online!

The North Dakota State Water Commission (NDSWC) and the Office of the State Engineer in cooperation with the U.S. Bureau of Land Management (U.S.BLM) have created access to the repository of GLOs and resurvey notes for the State of North Dakota on the world wide web. As the officially responsible agency for the preservation and the dissemination of GLOs and re-survey information in North Dakota, The NDSWC in cooperation with the U.S. BLM has recently completed the digital capture of this valuable geographic information data resource via the creation of scanned images of the GLOs and the original survey notes. The scanned GLO images have also been geo-registered for use with GIS software and are currently available to the public on the world wide web. The website contains an interactive search engine that will provide an image of the GLO, a link to a larger format GLO (for easy onscreen viewing), links to any available resurvey notes, a link to GLO metadata information, and a link to ZIP files containing: a scanned GLO at original scale (for printing and/or plotting), a geo-reference file (for GIS usage), and the generalized metadata file for all of the GLOs.

To view the information online and gain access to the GLO search engine, visit the following web address:
<http://www.swc.state.nd.us/dataresources/glosearchform.html>

NIMA Maps of the Middle East, Iraq, and Baghdad

The National Imagery and Mapping Agency (NIMA), currently known as the National Geospatial-Intelligence Agency (NGA), completed seven special reference maps of the Middle East, Iraq, Baghdad, and the towns of Tikrit, Al Basrah (Basra), Karkuk, and Al Mawsil (Mosul). NIMA produced these maps as a reference tool to help government public-affairs offices relate with the public on efforts pertaining to the region.

Paper versions of these maps are still available and may be purchased directly from the North Dakota Geological Survey.

Title: Middle-East Graphic
Stock #: 114513 – Price \$10.00
Title: Iraq
Stock #: 114514 – Price \$10.00
Title: Baghdad-
Stock #: 114515 – Price \$15.00

The following maps are available through the NDGS but are currently not considered to be regular stock items:

Title: Tikrit
Stock #: 114891 – Price \$15.00
Title: Al Basrah
Stock #: 114944 – Price \$15.00
Title: Al Mawsil
Stock #: 114943 – Price \$15.00
Title: Karkuk
Stock #: 114942 – Price \$15.00

NEED A NORTH DAKOTA TOPOGRAPHIC MAP? - FIND IT FAST!

The USGS online store provides a quick and simple way to locate a topographic map for any area of North Dakota and all other States. A new map locator tool is now available that depicts a map of the United States where a point may be selected and redrawn with increasing detail. At particular zoom levels the boundaries for the different maps available for purchase are displayed to assist in map identification and selection. Map searches are also available by utilizing the Geographic Names Information System (GNIS) which contains upwards of 2 million physical and cultural geographic features throughout North Dakota and the U.S.

To view the information online and gain access to the GNIS search engine, visit: <http://store.usgs.gov>

EDUCATIONAL MATERIALS

Mapping Exercises and Lesson Plans for K-12 Educators

Map related teaching packets are available from the USGS. These map teaching packets provide students with opportunities to learn about maps and map concepts and to further explore the many valuable uses of maps. These are great interactive exercises for students of all ages and all

learning environments. They are available online at: http://interactive2.usgs.gov/learningweb/teachers/lesson_plans.htm#changingworld

The following map teaching packets are available at the web site:

Map Adventures: Students will learn concepts for visualizing objects from different perspectives and how to use and understand maps. This packet is targeted for grades K-3.

Lesson Titles: View from the ground
View from a Higher Point
View from Overhead
Symbols and Legends
Learning Directions on a Map
Map Grids
Map Scale

What do Maps Show?: Students will learn about different map and geographic themes such as: location, place, relationships, and regions. Students will have opportunities to view and compare shaded relief, road, and topographic maps. This packet is targeted for grades 5-8.

Lesson Titles: Introduction to Maps
Some Things You Need to Know to Read a Map
What You Can Learn From a Map
How to Read a Topographic Map

Exploring Maps: Exploring Maps is an interdisciplinary set of materials on mapping providing students with opportunities to learn and explore basic mapmaking and map-reading skills. Students will be provided with opportunities to learn how maps can answer fundamental geographic questions, such as: "Where am I?" "What else is here?" "Where am I going?" This packet is targeted for grades 7-12.

Lesson Titles: Location
Navigation
Information
Exploration

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

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/>

Seamless Data Distribution System*

Free seamless raster features: NED 30m DEM (10m where available), NLCD land cover, hi-res digital orthoimagery of urban areas, Shuttle Radar Topography Mission, and MODIS. Data extracted at user-specified boundaries.

<http://seamless.usgs.gov/viewer.htm>

USGS Web Mapping Portal*

Compilation of seamless U.S. and global geospatial datasets, interactive maps, and links.

<http://gisdata.usgs.net/>

Geospatial One-Stop Portal

Central portal for access to geospatial data and services from multiple agencies (mostly Federal).

<http://www.geodata.gov/>

USGS Geospatial Data Clearinghouse

Good starting point for digital data and other products from all USGS disciplines.

<http://mapping.usgs.gov/nsdi/>

USGS Maps and Aerial Photos Online

Links to USGS partner sites where you can view USGS maps and aerial photo images from your Web browser.

<http://mapping.usgs.gov/partners/viewonline.html>

Globalis*

Interactive world map from a collaboration of United Nations organizations.

<http://globalis.gvu.unu.edu/>

Seamless Data Distribution System

Free seamless raster features: NED 30m DEM (10m where available), NLCD land cover, hi-res orthoimagery of urban areas, Shuttle Radar Topography Mission, and MODIS. Data extracted at user-specified boundaries.

<http://seamless.usgs.gov/viewer.htm>

USGS Geographic Data Download

USGS Geodata by quadrangle. NED, DEM, DLG, LULC, NLCD, NHD.

<http://edc.usgs.gov/geodata>

DLGV32 Pro

Free USGS software for viewing USGS digital data (DRGs, DEMs, DLGs, DOQs) and doing very limited manipulation and analysis. This is a limited-feature version of "Global Mapper". PC only.

<http://mcmweb.er.usgs.gov/drc/dlgv32pro/>

Center for Advanced Spatial Technologies

Guide to mostly on-line and mostly free U.S. geospatial and attribute data.

<http://www.cast.uark.edu/local/hunt>

USGS Product Pricing Information

<http://mapping.usgs.gov/esic/prices/>

EarthExplorer

Order USGS air photos, satellite images, and cartographic products on-line. Locate products by name, coordinates, or point and click.

<http://earthexplorer.usgs.gov>

Photo Finder

A quick and easy way to find and order USGS National Aerial Photography Program (NAPP) Photos.

<http://edc.usgs.gov/photofinder>

Global Visualization Viewer (Glovis)*

Order Landsat TM (4, 5, 7) and Terra ASTER satellite images on-line. User-friendly global database allows convenient preview of images and scene mosaics.

<http://glovis.usgs.gov>

USGS on-line Map Lists

Lists latitude/longitude and date of 7.5´ USGS topographic maps.

<http://mapping.usgs.gov/mac/maplists.html>

Global GIS Project*

Integrated global datasets on 7 CD-ROMs. Organized by regions of the world.

<http://webgis.wr.usgs.gov/globalgis/>

USGS Planetary GIS Web Server (PIGWAD)

GIS tools for analyses of planetary datasets.

<http://webgis.wr.usgs.gov/>

Status Graphics

Status of USGS mapping products.

<http://mcmweb.er.usgs.gov/status/>

National Land Cover Data

Land cover type at 30-meter resolution for conterminous U.S. plus much more.

<http://landcover.usgs.gov/>

National Mapping Program Standards

<http://mapping.usgs.gov/standards/index.html>

Mineral Resources On-Line Spatial Data*

<http://mrddata.usgs.gov/>

Coordinate Conversions

www.tnris.state.tx.us/gistools/coordinate.htm

www.esg.montana.edu/gl/geocode.com/eagle.html

www.directionsmag.com/latlong.asp

www.geod.nrcan.gc.ca/

landsat7.usgs.gov/wrsconvert/

www.ngs.noaa.gov/TOOLS/

*Includes International data