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Arizona Geology

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NEW! Geologic Highway Map



Governor Jane Dee Hull met with staff of the Arizona Geological Survey (AZGS) and members of the Arizona Geological Society (Society), to accept a copy of the new Geologic Highway Map of Arizona. Left to right: Mark A. Miller (Society), Corolla K. Hoag (Society), Governor Hull, Robert J. Kamilli (Society), Jon E. Spencer (AZGS), Stephen M. Richard (AZGS), and Peter F. Corrao (AZGS).

Governor Jane Dee Hull was given the first copy of the just-off-the-press Highway Geologic Map of Arizona by members of the Arizona Geological Survey (AZGS) and Arizona Geological Society (Society). The full-color, 26x48-inch sheet includes a 1:1,000,000-scale geologic map, and much more. The map, printed on a waterproof synthetic paper, supersedes the previous edition that the Society published in 1967.

The Highway Geologic

Map was prepared cooperatively by members of the Society and the AZGS. A committee composed of Society members and AZGS staff planned the project and prepared the inset maps and text. Society member Robert J. Kamilli served as co-editor with AZGS geologist Stephen M. Richard. AZGS graphic artist Peter F. Corrao did the design and layout.

The geologic map, cross sections, and columnar sections are printed on

the front side of the sheet, together with brief explanations of the geology of Arizona and how to use and interpret a geologic map. The map incorporates a substantial amount of new geologic mapping that was done by AZGS and other geologists since 1982.

The reverse side of the sheet includes a discussion of rocks and minerals, shaded-relief map, geologic map and columnar section of the Grand Canyon near the South

Rim Visitor Center, and four maps that depict specific aspects of Arizona's geologic history. Other maps, each accompanied by an explanatory text, show tectonic features, mineral resources, geologic hazards, and vegetation biotic communities of Arizona.

The Geologic Highway Map of Arizona may be purchased from the AZGS for \$10.00. Ordering information is given on page 2 of this issue.

Just Released

Ordering Information

You may purchase publications at the AZGS office or by mail. Address mail orders to AZGS Publications, 416 W. Congress St., Suite 100, Tucson, AZ 85701. Orders are shipped by UPS, which requires a street address for delivery. All mail orders must be prepaid by a check or money order payable in U.S. dollars to the Arizona Geological Survey or by Master Card or VISA. Do not send cash. Add 7% sales tax to the publication cost for orders purchased or mailed in Arizona. Order by publication number and add these shipping and handling charges to your total order:

Shipping & Handling CHARGES

In the United States:

Less than \$1.01, add \$1.00
1.01- 10.00, add 3.00
10.01- 20.00, add 4.50
20.01- 30.00, add 5.75
30.01- 40.00, add 6.50
40.01- 50.00, add 8.00
50.01- 100.00, add 10.25
Over 100.00, add 12%

Other countries, request price quotation.

Shipping and handling charges include insurance. For rolled maps, add \$1.00 for a mailing tube.

If you purchase Open-File Reports, Contributed Maps, or Contributed Reports at the AZGS office, allow up to two days for photocopying.

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The Arizona Geological Survey released the following maps and reports since the Summer issue of *Arizona Geology* was published:

Geologic highway map of Arizona: R.J. Kamilli and S.M. Richard, 1998, Arizona Geological Society and Arizona Geological Survey, Map 33, 1 sheet containing text and figures, scale 1:1,000,000. \$10.00 plus shipping and handling. Preparation and content of this map are described on page 1.

Arizona geologic index map: S.M. Kneale and S.M. Richard, 1998, Arizona Geological Survey Digital Information Series 9, version 1.0 (Pub. number DI-9), 5 p., 3 HD disks. \$30.00 plus shipping and handling. By using this disk one can find locations of areas where geologic maps were completed from 1903-1993. Some maps from 1994-1997 are also included.

Physiographic areas in Arizona used by the Arizona Geological Survey: R.A. Trapp, S.J. Reynolds, and S.M. Kneale, digitizer, 1998, Arizona Geological Survey Digital Information Series 10, version 1.0 (Pub. number DI-10), 4 p., 1 HD disk. \$5.00 plus shipping and handling. To assist in key-wording bibliographic citations, Arizona Geological Survey staff subdivided the State into 555 physiographic areas, which are shown on this disk.

AZMILS-MRDS records for mineralized sites in the San Carlos-Safford-Duncan Nonpoint-Source Management Zone, Arizona: S.M. Richard and R.C. Harris, 1998, Arizona Geological Survey Open-File Report 98-04 (Pub. number OFR 98-04), 48 p., scale 1:500,000. \$9.00 plus shipping and handling. The study area includes the San Carlos Indian Reservation and those portions of Gila, Graham, Greenlee, and Cochise Counties that are drained by tributaries of the Gila River upstream from Coolidge Dam.

Bibliography of geothermal resources in the San Carlos-Safford-Duncan Nonpoint-Source Management Zone, Arizona: R.C. Harris, 1998, Arizona Geological Survey Open-File Report 98-06 (Pub. number OFR 98-06), 7 p. \$2.00 plus shipping and handling.

Bibliography of geophysical studies and data in the San Carlos-Safford-Duncan Nonpoint-Source Management Zone, Arizona: R.C. Harris, 1998, Arizona Geological Survey Open-File Report 98-07 (Pub. number OFR 98-07), 9 p. \$2.00 plus shipping and handling.

Map showing the orientation of layering and faults in the San Carlos-Safford-Duncan Nonpoint-Source Management Zone, Arizona: S.M. Richard, compiler, 1998, Arizona Geological

Survey Open-File Report 98-08 (Pub. number OFR 98-08), 4 p., scale 1:250,000. \$5.00 plus shipping and handling.

Prevalence of radon-resistant construction in the Phoenix and Tucson metropolitan areas, Arizona: R.C. Harris, R.S. Leighty, and J.E. Spencer, 1998, Arizona Geological Survey Open-File Report 98-09 (Pub. number OFR 98-09), 8 p. \$2.00 plus shipping and handling. The authors polled homebuilders to determine the extent to which they use construction methods to prevent elevated concentrations of radon gas from accumulating in homes.

Uranium levels and radon potential in selected areas north of Phoenix, in the St. Johns area, and north of Tuba City, Arizona: R.C. Harris, R.S. Leighty, R.B. Scarborough, and J.E. Spencer, 1998, Arizona Geological Survey Open-File Report 98-10 (Pub. number OFR 98-10), 13 p. \$3.00 plus shipping and handling.

Geologic relations of Martinez Ranch fault and Happy Valley Neogene basin, east flank of Rincon Mountains, Pima County, Arizona: W.R. Dickinson, 1998, Arizona Geological Survey Contributed Map 98-B (Pub. number CM 98-B), 16 p., 1 sheet, scale 1:24,000. \$5.00 plus shipping and handling.

Earth Science Week

Governor Jane Dee Hull has proclaimed the week of October 11-17, 1998 as "Earth Science Week." This is part of a nationwide effort sponsored by the American Geological Institute, which celebrates its 50th anniversary this year, to demonstrate the importance of earth science to the public. Many earth-science agencies, businesses, parks, and professional groups are planning special events for the week. For more information about scheduled activities contact the Arizona Geological Survey at (520) 770-3500.

INFORMATION PACKET

The governors of 15 states have issued Earth Science Week proclamations and resolutions and more are expected to follow. To request an Earth Science Week information packet or other information visit the American Geological Institute website: <http://www.earthsciweek.org>.

The American Geological Institute is a not-for-profit federation of 32 professional organizations in the Earth Sciences representing more than 100,000 geologists, geophysicists, and other earth and environmental scientists.

Office of the Governor

PROCLAMATION

'EARTH SCIENCE WEEK'

WHEREAS, the earth sciences are integral to finding, developing and conserving various mineral, energy and water resources needed by society; and

WHEREAS, the earth sciences provide the basis to prepare for and mitigate natural hazards such as floods, landslides, earthquakes, volcanic eruptions, sinkholes and coastal erosion; and

WHEREAS, the earth sciences are crucial to environmental and ecological issues ranging from water and air quality to waste disposal; and

WHEREAS, these geological factors are vital to land management and land use decisions at local, state, regional, national, international and global levels; and

WHEREAS, the earth sciences contribute critical pieces to our understanding of Nature;

NOW, THEREFORE, I, Jane Dee Hull, Governor of the State of Arizona, do hereby proclaim the week of October 11-17, 1998 as

'EARTH SCIENCE WEEK'

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona

Jane Dee Hull
GOVERNOR

DONE at the Capitol in Phoenix on this first day of June in the year of Our Lord One Thousand Nine Hundred and Ninety-eight and of the Independence of the United States of America the Two Hundred and Twenty-second.

ATTEST:

Betty Bayless
Secretary of State



AZGS OPEN HOUSE

To kick off Earth Science Week and celebrate the tenth anniversary of becoming a stand-alone State agency, the Arizona Geological Survey will hold an open house October 9, 1998, beginning at 1:00 p.m. Mark your calendars.

Other Publications

FIELDTRIP GUIDEBOOK

Geologic excursions in northern and central Arizona

The fieldtrip guidebook for the May 1998 meeting of the Rocky Mountain Section of the Geological Society of America in Flagstaff may be purchased from the Arizona Geological Survey (publication number NP 21) for \$18.00 plus shipping and handling. See p. 2.

GRAND CANYON

Geologic map of the eastern part of the Grand Canyon National Park, Arizona

This full-color map (scale, 1:62,500), published in 1996 by the Grand Canyon Association, may be purchased from the Arizona Geological Survey (publication number NP 22) for \$12.00 plus shipping and handling. See p. 2.

CATALINA MOUNTAINS

Geology and mineral resources of the Santa Catalina Mountains, SE Arizona: a cross-sectional approach

This 135-page book by Eric R. Force, 1997, U. S. Geological Survey, may be purchased from the Arizona Geological Survey (publication number NP 23) for \$49.50 plus shipping and handling. See p. 2.

Registration

Two more states, Indiana and Nebraska, have enacted laws that require geologists to be registered to practice. Twenty-three states now have practice act registration, three require certification, and three have statutory definitions of the practice of geology. For more information contact Larry D. Fellows.

Arizona Geology

is published quarterly by the Arizona Geological Survey to provide information about geologic materials and processes and their potential impacts on the development and use of Arizona's land, water, mineral, and energy resources. We encourage your comments and suggestions.

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CAREERS FOR GEOSCIENTISTS

The American Geological Institute (AGI), in cooperation with AGI member societies and other organizations, released a 40-minute video, "Careers for Geoscientists." The video provides information that can help undergraduates make career choices. It can also familiarize high school students with geoscience careers. The theme of the video is geoscientists' focus on exploration, discovery, and stewardship of the Earth. Interviews with 11 geoscientists with diverse occupations and backgrounds reveal information about the variety and opportunities of careers in the geosciences.

The regular price for the video is \$14.95. For ordering information about this video visit the AGI's Careers in Geosciences website: <http://www.agiweb.org/career/>



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