

UTAH GEOLOGICAL SURVEY

Department of Natural Resources



INVESTIGATE
energy and
mineral resources

IDENTIFY
geologic hazards

MAP
the state's geology

EVALUATE
Utah's ground-water resources

MONITOR
the state's archaeological
and paleontological sites

EVALUATE
environmental changes

PROVIDE
assistance to
government agencies,
educators,
the public,
industry,
and business

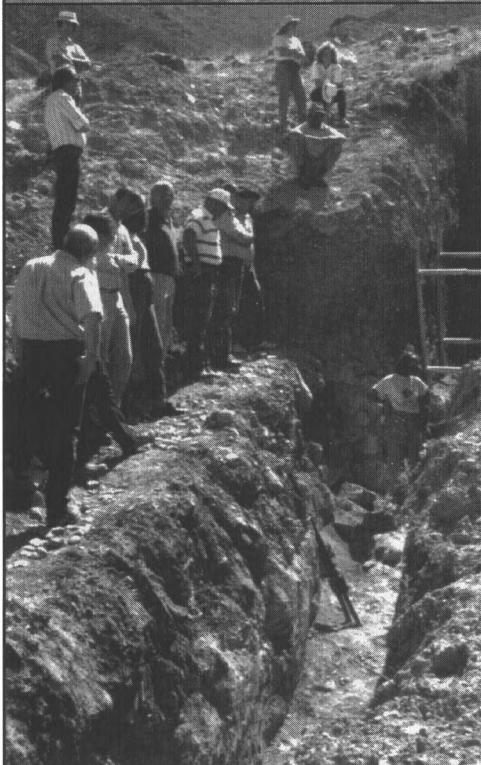
DISTRIBUTE
geologic information



PUBLIC INFORMATION SERIES 52
UTAH GEOLOGICAL SURVEY
a division of
Department of Natural Resources

The Utah Geological Survey's mission is to make Utah richer and safer by generating, interpreting, preserving, and distributing geological, paleontological, archaeological, and paleoecological information. To accomplish this, the UGS is divided into five programs.

Applied Geology Program



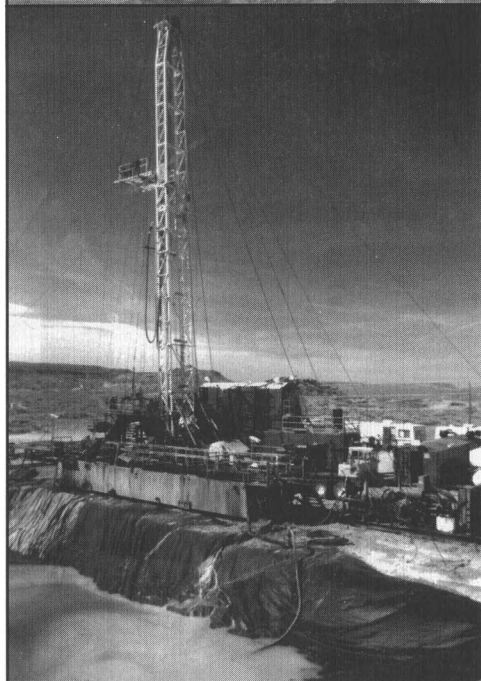
Applied geologists show local government officials evidence of past earthquakes uncovered in a trench along the Oquirrh fault.

Responds to requests from government agencies for engineering-geologic investigations, helps protect Utah's public health and safety by investigating hazards such as:

- earthquakes
- landslides
- subsidence
- problem soils
- flooding
- shallow ground-water flooding
- radon
- waste disposal

Responds to geologic-hazard emergencies; compiles small- and large-scale geologic hazard maps; provides the public, state, and local governments with information and technical services.

Economic Geology Program



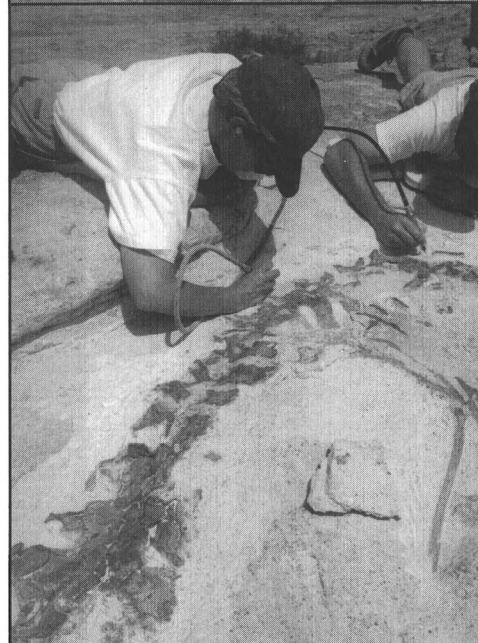
The Paradox Basin in southeastern Utah is the site of oil recovery studies the UGS conducts cooperatively with industry and the U.S. Department of Energy.

Carries out activities having as their purpose the exploration and development of the state's resources, ascertains the value of Utah's mineral and energy resources, maintains computerized resource databases and other file data, and responds to requests for information on Utah's geologic resources. Provides geologic information to government, industry, and individuals to aid in the prudent development of the state's mineral and energy resources:

- industrial and metallic minerals and salines
- uranium
- oil and gas
- coal and coalbed methane
- geothermal
- tar sands and oil shale

Maintains the UGS Sample Library; assesses energy and mineral resource-forming processes and settings to aid exploration; transfers acquired knowledge and technology to industry through seminars, publications, and presentations at meetings and symposiums.

Environmental Sciences Program



Utah's rich fossil history beckons amateur and professional paleontologists alike.

Maintains and publishes records of Utah's fossil resources, provides paleontological and archaeological recovery services to state and local governments, conducts studies of environmental change to aid resource management, and evaluates the quantity and quality of Utah's ground-water resources. Public outreach, data management, education, and research programs include:

- Utah Friends of Paleontology
- Utah Prehistory Week
- paleontological locality database
- fossil recovery and analysis
- archaeological surveys and recovery
- Quaternary paleoecology
- ecosystem management
- water-well siting
- ground-water contamination
- drinking-water source-protection area delineation
- water-well cuttings analysis
- geological framework of aquifers and hydrologic basins

Manages a paleontological training program for amateurs, provides state government and the public with detailed studies on paleontological, archaeological, and ground-water resources, and identifies paleoecologic change.

Geologic Extension Service



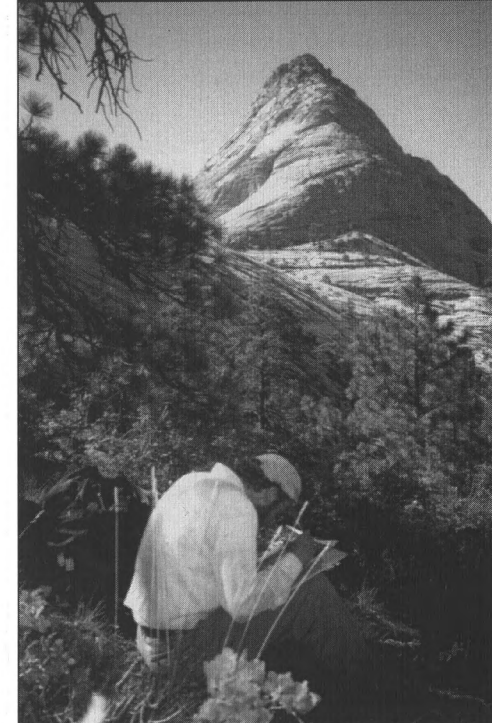
The Natural Resources Map & Bookstore carries a complete line of Utah topographic maps and geologic publications.

Answers questions and provides information on Utah's geology to the public, educators, industry, and decision makers. Produces non-technical publications on a variety of geologic topics including:

- geologic hazards
- geologic history
- rock and mineral collecting
- state park geology
- travel region geology

Maintains the Department of Natural Resources Map & Bookstore and Library, maintains the UGS Internet Home Page, and oversees the public-access computer databases. Provides resources and geologic workshops to teachers. Represents the UGS at conferences, professional meetings, and information booths targeted at non-geologic audiences.

Geologic Mapping Program



A mapping geologist records geologic information while mapping in southern Utah.

Maps the geology of the state at 1:100,000 and 1:24,000 scales and produces both print and digital (Geographic Information System) maps and booklets that describe:

- stratigraphy
- structure
- bedrock and Quaternary (surficial) geology
- geologic hazards
- economic geology
- ground-water resources
- scenic geologic resources

Provides geologic maps to geologists, government officials, industry representatives, and the public to promote better understanding of Utah's geology, delineate the resource potential of property, and assess geologic hazards.

SERVICES

Public Inquiry

Answer questions on Utah geology by responding to walk-in visitors, letters, telephone calls, and e-mail.

Computer Databases

Provide public-access databases on a variety of topics including energy and mineral resources, geothermal wells and springs, coal quality, oil and gas fields and wells, geophysical well logs, national uranium resource data, geographic and geologic names, and bibliographies (current ones are geologic maps, geologic hazards, and geologic resources).

Sample Library

Provide facilities to archive and examine borehole cuttings, core, type oils, coals, and selected surface rock samples from Utah; conduct workshops, tours, loans of geologic samples, and core slabbing. Open Mon-Fri, 7 a.m. to 4 p.m.

Library

Maintain numerous reference materials on Utah geology and topography, full-size geophysical logs from Utah oil and gas wells, and reference material relating to the missions and objectives of other divisions of the Department of Natural Resources; available to the public for research, Mon-Fri, 8 a.m. to 5 p.m.

Map & Bookstore

Provide large selection of publications and maps on Utah geology from the UGS, U.S. Geological Survey, Utah Geological Association; publications and materials from other divisions of the Department of Natural Resources; complete inventory of USGS topographic and geologic maps of Utah. Discounts for bulk sales and retailers. Open Mon-Fri, 7:30 a.m. to 6 p.m.; Sat. 9 a.m. to 1 p.m. Toll free phone 1-888-UTAH MAP.

Geologic-Hazard Assistance

Provide state and local governments with advice in geologic-hazard emergencies, site investigations for critical public facilities, hazard evaluations for school trust lands, and reviews of consultants' reports to local governments which deal with geologic hazards.

Water-Resource/Environmental Evaluations

Identify water resources; protect drinking-water supplies; investigate environmental impacts of waste disposal, storage, and treatment facilities for local governments and state agencies; evaluate the quantity and quality of Utah's ground-water resources.

Archaeological/Paleontological Services

Interpret and protect archaeological/paleontological sites, assess long-term environmental trends as a baseline, and investigate paleoecological changes.

Industry Outreach

Maintain contact and exchange information with mining and petroleum operators, promote exploration and development opportunities, and respond to technical industry inquiries.

Economic-Resource Evaluations

Investigate the economic resources of counties, sovereign land tracts, and school trust lands for county governments and state agencies.

Industry Cooperatives

Oversee joint cooperative research with industry; projects include developing geological and petrophysical characterizations of oil and gas reservoirs, increasing coalbed and oil production, and reactivating idle oil leases in Utah.

Teacher Workshops/Field Trips

Offer instruction, designed especially for teachers, on different aspects of Utah geology.

Rock/Paleontological Kits

Provide teaching kits containing rock, mineral, and dinosaur and other fossil specimens; available for free checkout with refundable deposit.

Free Publications

Survey Notes

Official UGS newsletter: informative, nontechnical magazine on noteworthy and interesting geologic topics in Utah; published three times a year.

Fault Line Forum

Official newsletter of the Utah Seismic Safety Commission concerning earthquakes and faults statewide; published quarterly.

Petroleum News

Biannual newsletter on petroleum recovery efforts in Utah: emphasizes cooperative Department of Energy projects in Utah and new contributions to the UGS Sample Library.

UGS Internet Home Page

Information on the programs and activities of the Utah Geological Survey; updated daily.



If you have any questions or need additional information, contact us by phone, fax, letter, or Internet:

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(801) 537-3320 or toll free (888) UTAH MAP

Map & Bookstore Fax: (801) 537-3395

Internet Home Page: <http://www.ugs.state.ut.us>

UGS Sample Library

Carolyn M. Olsen, Sample Librarian

4060 South 500 West #4

Salt Lake City, UT 84123

Phone: (801) 266-3512

UGS Southern Utah Regional Office

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