

Highlights and News Clippings from Earth Science Week 2003

Introduction

The sixth annual Earth Science Week (ESW) was held from October 12-18, 2003, celebrating the theme "Eyes on Planet Earth: Monitoring Our Changing World". This outreach effort included participation from the geoscience and education communities in order to raise public awareness about the importance of Earth Science to society. The American Geological Institute organizes and publicizes the week as a service to its member societies, the geoscience community and the public. ESW 2003 was sponsored primarily through the generous support of the US Geological Survey, the American Association of Petroleum Geologists Foundation, the National Parks Service and NASA.

Earth Science Week events were held in all fifty states and in more than 10 countries around the world. Events ranged from individual teachers and classrooms completing in-class Earth Science activities, to open houses held at large USGS field stations. A comprehensive listing of events around the world is located in Section 1 of this volume. This list represents the events reported to AGI, so please notify ESW staff if your participation is not listed.

Some of the events held during Earth Science Week are highlighted in Section 2 of this volume. Use these highlights to get ideas or inspiration for your own future Earth Science Week participation, and to learn about activities planned by other Earth Science enthusiasts.

Each year, more people become aware of Earth Science Week by reading or watching a story about the week in the media. This year, printed media about Earth Science Week reached more than a million readers, and more than 35 million others learned about the week on their local television stations or on NASA TV. Section 3 of this volume is a compilation of examples of print media that appeared in regional and national publications advertising Earth Science Week Events.

This Highlights and News Clippings volume is designed to give you an overview of the activities planned by other organizations for Earth Science Week. We hope that you will find ideas about events and publicity that will encourage the development of your own Earth Science Week celebration. As always, please visit www.earthsciweek.org for event planning support, or contact Earth Science Week staff at info@earthsciweek.org if we can assist you in planning for Earth Science Week.

SECTION 1

Earth Science Week 2003: Summary of Activities

ESW kits

AGI distributed more than 11,500 ESW kits to the geoscience community and to educators in 2003. These kits were sent to all 50 states and to several countries. The kits included valuable posters, flyers and activities from AGI, the USGS, NASA, AAPG Foundation, and other organizations. The kits also included a copy of the jointly produced USGS/AGI Global GIS CD for North America, and an accompanying student activity designed to give students and teachers an introduction to using GIS.

This year's kit distribution was an increase of more than 3,500 kits over the number distributed in 2002. For 2004, AGI plans to almost double the number of kits distributed by sending out 20,000.

Web Resources

AGI staff completely revamped and updated the Earth Science Week website in 2003 in order to reflect the new theme and to better distribute information to teachers and the public. The layout and design was updated and improvements were made to the organization of information on the site, including headings directing different audiences to relevant ESW information, flyout menus, and a site map.

There were over 15,000 web hits in October of 2003 compared to 8,742 hits to the ESW site in October of 2002. This is evidence that the ESW website is an important tool in educating the public about ESW.

Newsletters

More than 559 teachers, students and geoscientists subscribe to the bi-monthly ESW Newsletter. This electronic newsletter keeps planners and participants up-to-date on Earth Science Week Planning at the national level, and encourages participation in local areas.

National Contests

AGI held national contests for Earth Science Week for the second time. The contests were designed to encourage K-12 students, teachers and the general public to get involved in the week. We received more than 282 entries in the art, essay, photography and lesson plan design contests, and awarded grand prizes of \$300 plus a complimentary one-year subscription to *Geotimes* to the winners in each category.

Official Proclamations

Official proclamations of Earth Science Week were made in 21 States, including Alabama, Alaska, Delaware, Florida, Illinois, Kentucky, Louisiana, Maryland, Michigan, Missouri, Nevada, New Hampshire, North Carolina, North Dakota, Ohio, Oklahoma, South Dakota, Tennessee, Texas, Utah, and Vermont.

In addition, President George W. Bush officially recognized the week. "Earth Science Week provides an opportunity to recognize our progress in conservation through environmental stewardship and the contributions of geologists, geophysicists, and other environmental scientists." wrote President Bush, "These professionals help preserve our natural resources, protect our health, keep us safe from natural disasters, and increase our appreciation for the Earth's beauty."

Key Outcomes of the Professional Evaluation of ESW 2003

For the second year in a row, AGI contracted a comprehensive, professional evaluator to conduct a survey of ESW participants. This statistical snapshot of the ESW program has been combined with data collected by AGI to provide information about the strengths and weaknesses of the ESW program and to guide our future planning.

AGI gathered evaluation data from participants in Earth Science Week through an email survey distributed by professional evaluators. Responses to the 2003 ESW celebration represented a positive increase from the 2002 evaluation. The survey received 186 responses, for a response rate of 17% against the original mailing list.

About 75% of the respondents in the statistical survey said they participated in ESW 2003, up from 60% in 2002, and more than 90% of the respondents plan to participate in 2004. This indicates a huge potential to increase participation in the week, and illustrates the high demand for continuing the ESW program. The most dramatic increase in participation in 2003 was from teachers. More than 70% of teachers participated in the week, up from 32% in 2002. Participation by geoscience professionals has remained at the same high level of about 90%. Nearly 75% of survey respondents rated the usefulness of Earth Science Week as *good* or *excellent*, and 61% said they were more active in ESW this year, figures that represent a substantial increase from 2002.

The evaluation also provided information about ways to improve ESW. The concerns and recommendations that we received fall into several categories. Forty-eight percent of respondents want to see better publicity and media coverage, both locally and nationally. About 21% of survey respondents suggested that AGI start to promote ESW earlier in the year, and 14% suggested that partnerships be set up to provide more resources for local ESW events. Respondents rated the content of Earth Science Week kits as excellent, interesting and sufficient, however there were a number of requests for materials in the kits that target K-5 aged students. AGI is currently already working to address these concerns in planning for Earth Science Week 2004.

Earth Science Week activities by State:

Alabama

Tuscaloosa

- Fossils of the Black Belt V – a hands-on field workshop. This workshop was for Earth science teachers to familiarize them with paleontology and field geology.

Alaska

Anchorage

- First graders celebrated Earth Science Week by attending the exhibit “T. Rex named Sue” and by doing activities in their classrooms.

Arizona

Flagstaff

- The USGS Flagstaff field center held a ten-day family event called the Flagstaff Festival of Science. Events included open houses, lectures, in-school presentations, hikes and excursions.

Petrified Forest National Park

- Ranger programs were held every day through the Giant Logs area of Rainbow Forest.
- Hikes were held to learn about the Blue Mesa or the Painted Desert.
- Scavenger Hunts were held at the park.
- Displays and exhibits were set up to let patrons feel rocks and fossils found at Petrified Forest National Park.

Phoenix

- Arizona State University sponsored an Earth Science Day. Approximately 900 people visited the activities, booths, and demonstrations throughout the day.

California

Santa Barbara

- The Santa Barbara Museum of Natural History held an Earth Fair. The event showcased Earth science institutions, research and educational programs. Activities were interactive and hands-on, appealing to visitors of all ages.

Ukiah

- Students participated in the GLOBE Soil Moisture Campaign.

Colorado

Aurora

- A geography and Earth science workshop was held for 250 elementary school students.

Denver

- The Rocky Mountain Association of Geologists held a poster and essay contest for grades one through eight.

Green Mountain

- The USGS held a short hike to explore the geology and ecology around Green Mountain.

Morrison

- The Friends of Dinosaur Ridge held tours of a geology/paleontology site near Golden, Colorado. Triceratops tracks were visible along vertical sandstone walls at the site.

Wheat Ridge

- The USGS held a field trip to learn about the geology, ecology, human history, and water quality of Clear Creek.

Connecticut

Windsor

- Students took part in the NASA S'Cool cloud observation research project.

Delaware

Newark

- Iron Hill Museum held a "Fossil Fun" event for pre-school children to learn about prehistoric Delaware, dinosaurs, hikes, and hands-on examination of fossils.
- The Newark Parks and Recreation sponsored "Great Discoveries" at Iron Hill Museum for children ages seven through eleven.

Florida

Ft. Lauderdale

- Broward Community College geology classes took a field trip to the Spruce Pine area of North Carolina.

Miami

- The Florida International University sponsored an Internet-based contest for high school students and teachers.

St. Petersburg

- The children's museum, Great Expectations, opened its newest exhibit: "Great Splash", which consists of seven different components to introduce and foster awareness of water conservation and quality.
- The USGS Center for Coastal and Regional Watershed Studies hosted an open house for fourth grade students and the general public.

Tallahassee

- The USGS held a family fun day at Innovation Park to demonstrate their interactive groundwater model and field equipment.
- The Florida Geological Survey held an annual open house especially for the home schooling community. Building tours and activities for school aged children were featured.

Georgia

Marietta

- Students in Marietta took part in classroom activities to learn about the importance of Earth science.

Hawaii

Honolulu

- The School of Ocean and Earth Science and Technology held an open house with the theme of “Science for a Sustainable Future”.

Pearl City

- Students took part in the NASA S’Cool cloud observation research project.

Idaho

Elk City

- Students in Elk City celebrated Earth Science Week by doing classroom activities, going on field trips and entering Earth Science Week contests.

Illinois

Franklin

- Students took part in the NASA S’Cool cloud observation research project.

Port Byron

- An Earth science fair was held at a local museum.

Indiana

Terre Haute

- The Earth Science Club at Indiana State University held several events for Earth Science Week.

Iowa

Cedar Rapids

- Students took part in the NASA S’Cool cloud observation research project.

Kansas

Lawrence

- The Kansas Geological Survey held a field trip to learn about the geology and fossils of the Kanopolis Lake area in Ellsworth County.

Kentucky

Lexington

- The Kentucky Geological Survey held an open house at the Mining and Mineral Resources Building. Dinosaur activities, trilobite masks, fossil hunts, tours, water demonstrations, and earthquake activities were featured.
- The University of Kentucky Department of Geological Sciences held an open house that featured viewing of rocks, fluorescent minerals, and videos of volcanoes.

Louisiana

Baton Rouge

- The USGS staff hydrologist, Jason Griffith, was the guest speaker for “Science Wonders”, an after-school program for grades K-5.
- The USGS sponsored a science information display at the Louisiana Resource Center for Educators.

Lafayette

- The Iberia Parish Library displayed a fossil and mineral exhibit.
- Posters and bookmarks were given out at Lafayette Public Library.
- The Lafayette Geological Society sponsored 3rd through 6th grade classrooms.
- A “Dino Dig” was held for five kindergarten classes. Students were able to dig through sand for fossils and stones and were allowed to take some finds home.

Maine

Augusta

- The Maine Geological Survey and State Museum held an Earth Science Day that covered all aspects of the Earth sciences in Maine.

Lewiston

- The Geological Society of Maine sponsored a short class entitled “The Geology of Maine” at Bates College.

Maryland

Annapolis

- Columbine Scientific Inc. held an open house. Professional geoscientists also went on school visits in the area.

Massachusetts

Plymouth

- Students at North High went to a local museum and attended a lecture on Earth science. They also were able to look at Earth from space on a satellite system.

Turners Falls

- A successful Earth science fair was held to celebrate Earth Science Week.

Michigan

Grand Rapids

- Students took part in the NASA S’Cool cloud observation research project.

Minnesota

Pequot Lakes

- Students took part in the NASA S’Cool cloud observation research project.

Mississippi

Pearlington

- Students in Pearlington celebrated Earth Science Week by doing classroom activities.

Missouri

Jackson

- An Earth science display was set up at a local university.

Montana

Butte

- The Mineral Museum held an open house. Visitors were encouraged to bring rocks and minerals to the geologists to be identified. Free rock and mineral samples were given to children.

Joplin

- Earth Science students went on a field trip to collect “Dino bones.”

Nebraska

Agate Fossil Beds

- Agate Fossil Beds National Monument celebrated Earth Science Week by displaying ESW materials.

Nevada

Reno

- The Nevada Bureau of Mines and Geology held a free public field trip entitled “Get Out, Stay Out, and Stay Alive!” This field trip highlighted the geologic history and mining heritage of the Reno-Sparks area.

New Hampshire

Laconia

- Students took part in the NASA S’Cool cloud observation research project.

New Jersey

Medford

- Students took part in the NASA S’Cool cloud observation research project.

New Mexico

Cedar Crest

- Students took part in the NASA S’Cool cloud observation research project.

New York

Hamburg

- The Hamburg Natural History Society and the Buffalo Association of Professional Geologists sponsored an Earth Science Day. Thirty different organizations had displays on what geologists do, the importance of geology, and future employment opportunities.

Palisades

- The Lamont-Doherty Earth Observatory held a free open house for the general public. Exhibits dealt with the oceans, Earth’s interior, geologic hazards, estuaries, and aspects of the Earth system.

North Carolina

Wilmington

- Students took part in the NASA S'Cool cloud observation research project.

North Dakota

Theodore Roosevelt National Park

- Theodore Roosevelt National Park celebrated Earth Science Week by displaying ESW materials.

Ohio

Cleveland

- The Cleveland Museum of Natural History held an "Antiques Rock Show." Hands-on exhibits, demonstrations and lectures were a part of this Earth science celebration. Visitors were also encouraged to ask the museum curators and others questions and bring in rocks to be identified.

Columbus

- Professional geoscientists held an Earth Science Week exposition at the Metropark.

Summit County

- The Cuyahoga Valley National Park celebrated Earth Science Week by hosting exhibits, games, demonstrations, talks and family fun. The fair gave children the opportunity to earn a Junior Ranger badge.

Oklahoma

Tulsa

- AAPG hosted an Earth Science Week teacher workshop about "Petroleum Exploration, Environmental Issues, and Other Energy Sources."
- The Tulsa Chapter of the Desk and Derrick Club sponsored an Earth Science Week essay contest entitled "The Many Uses of Petroleum from Discovery to Present." Cash prizes were given to students and their teachers.
- Dr. Jack Bacon (NASA Systems Integrator) made a presentation at the Tulsa Air and Space Museum.
- AAPG sponsored the Community Education presentation "There's Gold in That There Vacuum!"
- The University of Tulsa Department of Geosciences hosted Harrison Schmitt, geologist, Apollo 17 astronaut, and Senator.

Oregon

Pendleton

- Students celebrated Earth Science Week with several activities in their classrooms.

Pennsylvania

Lancaster

- Franklin & Marshall College hosted an Earth science open house.

Rhode Island

Little Compton

- Students and parents participated in activities and heard a guest speaker in local classrooms.

South Carolina

Pendleton

- Students took part in the NASA S’Cool cloud observation research project.

South Dakota

Sioux Falls

- USGS EROS Data Center gave presentations to 125 middle school students on “Exploring our Changing Planet, Tracking Change over Time.”
- A third grade class visited the Eros Data Center.

St. Francis

- The teachers of St. Francis put up posters publicizing Earth Science Week.

Tennessee

Dandridge

- The Smoky Mountain Mineral Society set up a display in the Dandridge Public Library featuring Earth Science Week materials, rocks, minerals, and fossils.

Knoxville

- The University of Tennessee held its fourth annual Earth Science Fair for 500 people.

Texas

Austin

- The Texas Space Grant sponsored a workshop for teachers grades five through eight.
- The Wild Basin Teacher’s Workshop was held. Kindergarten through grade three educators learned how to introduce their students to geology.
- The Austin schools organized its fourth annual career fair for more than 300 middle school students. More than 60 Earth science professionals volunteered their time to participate.

El Paso

- The city hosted its annual *Celebrations of Our Mountains*. This is a month-long festival of events to encourage appreciation of the El Paso region's environment. More than 30 hikes, field trips, driving tours, nature walks, and bicycle rides were organized.

Houston

- A Family Earth Science Festival was held at the Houston Museum of Natural Science.
- Two fieldtrips were held in conjunction with ESW that took participants to Stone City Bluffs and the U.T. Bureau of Economic Geology’s Houston Research Center.

Midland

- The West Texas Geological Society, SIPES, SPE, and the Permian Basin Geophysical Society placed over 80 volunteers in local public and private schools during Earth Science Week.

San Antonio

- Presentations by geologists were given in local classrooms.
- Trinity University college students were introduced to ESW with T-shirts, radio and TV shows, and geophysical experiments.

Utah

Salt Lake City

- The USGS hosted a hands-on GIS workshop for educators investigating earthquakes, tornadoes and other natural hazards.
- The USGS hosted a workshop at the National Council for Geographic Education on mapping and Earth science.
- The Utah Geological Survey celebrated Earth Science Week by having activities for school children. Some of these activities included gold panning, investigating rocks and minerals, and paleontology.

Vermont

Statewide

- The Vermont Dept. of Environmental Conservation, Environmental Assistance Division gave Power Point presentations on mercury to local schools, grades four through nine.

Groton, Mt. Philo, and Little River State Parks

- The Vermont Geological Society and the Vermont Geological Survey sponsored a Geologists-in-the-Parks program.

Burlington

- The University of Vermont held seminars on meteorites and gneiss.

Middlebury

- OMYA hosted an open house at their white marble quarry.

Norwich

- The Montshire Museum of Science displayed an exhibit called “Dinosaur Eggs: Hatching the Past” that featured over 100 dinosaur fossil eggs, dinosaur models and paintings.

Virginia

Northern Virginia

- The Northern Virginia Earth Science Society sponsored an Earth Science Fair for children.

Richmond

- The Science Museum of Virginia celebrated Earth Science Week with “Science Rocks! Earth Science Celebration” which taught about Virginia’s natural resources through special hands-on activities.

Washington

Statewide

- The Washington Department of Natural Resources sponsored and publicized many geologic field trips throughout the state. These trips were often led by local geoscientists.

Everett

- Students at James Monroe Elementary did Earth Science Week activities, went on a field trip and had three guest speakers discuss the Earth sciences.

West Virginia

Sissonville

- Students took part in the NASA S'Cool cloud observation research project.

Wisconsin

Mequon

- Students took part in the NASA S'Cool cloud observation research project.

Wyoming

Yellowstone National Park

- Yellowstone National Park displayed Earth Science Week materials.

International ESW Events:

Argentina

The University of Buenos Aires Department of Geology celebrated Earth Science Week with a series of special lectures. For more information visit <http://www.gl.fcen.uba.ar/>

Australia

Canberra

- Sam Lucia and Leharne Fountain entertained family audiences with the shows "How to Become a Fossil" and "Your Mission: Capture and Storage" which dealt with the capture and storage of greenhouse gases.
- The Deep Space Communication Complex displayed exhibits on the history of space exploration.
- At Questacon the exhibition "Awesome Earth" combined education and entertainment in over 30 interactive exhibits.
- The National Dinosaur Museum held a show that looked at mammals, dinosaurs and the threat of sharks.

New South Wales

- The NSW Minerals Council organized and coordinated the NSW Minerals Council Teacher Mining Seminar Tours.
- The Australian Museum and the Geological Society of Australia joined forces and came up with GeoFest. Through this collaboration, a diverse program of activities was developed.
- The Geological Society of Australia held a public lecture series, “Making Australia: Landscape, Climate and Tectonics.”

Northern Territory

- The Minerals Council celebrated Earth Science Week with a remote sensing and GIS open house.

Queensland

- The Mining Council ran an in-school education program to talk about minerals, mining, geoscience and energy.
- The University of Queensland held several events including an ESW Quiz to identify rocks and minerals.

South Australia

- The Minerals and Energy Division organized Earth Science visits to discuss earthquakes, volcanic eruptions, and finding minerals.
- The Mineral and Energy Resources Department held public programs on paleontology, mineral identification and uses, earthquake seismology, engineering, and careers in geoscience.

Tasmania

- The Mineral Resources Tasmania (MRT) held a successful open house.

West Australia

- The Australian Prospectors and Miners Hall of Fame held a public lunchtime talk.
- The curator of the Geology Museum of the University of West Australia organized a professional development course for teachers.

Austria

The Austrian National Committee of Geology advertised ESW on their webpage <http://www.geo.ac.at/indro.htm>.

India

The Science Center and the faculty of Fergusson College in Pune held a slide show, lecture, and exhibition on gemstones and diamonds. The focus of this series was the formation, occurrences, mining, cutting and polishing, economics, and myths about gemstones.

Indonesia

A seminar and workshop to discuss energy, mitigation, and environmental conservancy was held on April 28, 2003.

New Zealand

The government gave helpful tips about how to celebrate Earth Science Week on their website <http://www.gsnz.org.nz/gses02b.htm>.

Nigeria

Students at the Polytechnic Ibadan celebrated Earth Science Week in December of 2003.

Oman

The AAPG-SEG student group at Sultan Qaboos University held a public exhibition to spotlight the role of geology and geophysics in society.

Puerto Rico

The University of Puerto Rico at Mayaguez held an open house to celebrate Earth Science Week 2003. Events included exhibitions, movies and conferences of the Puerto Rico Seismic Network, Middle America Seismograph Consortium, Department of Natural Resources of Puerto Rico, Fish and Wildlife Service, South United Speleological Society and several departments and programs from the University of Puerto Rico-Mayaguez Campus.

Trinidad

The University of the West Indies, in collaboration with the Seismic Research Unit, the Geological Society of Trinidad and Tobago and the Association of Petroleum Geoscience Students held a week-long open house and Earth science display at the St. Augustine campus of UWI. The event was geared towards location of petroleum and the processes and systems needed for oil to be present. For more information, see http://www.uwiseismic.com/SRU_Site01/Outreach/eo_esw.html.