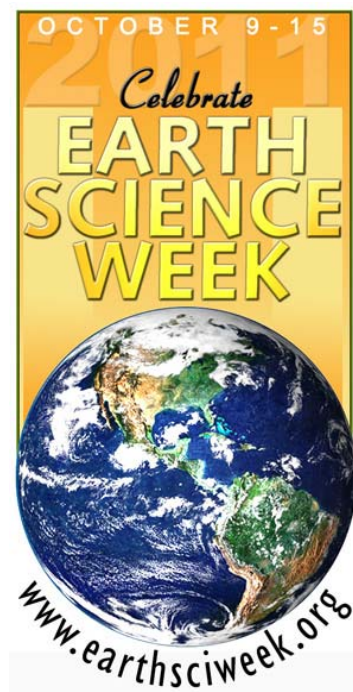

Earth Science Week 2011

“Our Ever-Changing Earth”

Highlights and News Clippings



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Made possible with support from
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Highlights and News Clippings

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Announcements and News Clippings

www.earthsciweek.org/highlights

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NOTE: Because of the large and increasing number of news clippings citing Earth Science Week activities and resources, the print edition of this report will no longer include clippings. To view the hundreds of press releases and news items promoting awareness of Earth Science Week each year, please go online to www.earthsciweek.org/highlights. Thank you for helping us in our efforts to conserve resources and protect the environment.

Highlights and News Clippings from Earth Science Week 2011

Introduction

Held October 9-15, 2011, the 14th annual **Earth Science Week** celebrated the theme of **“Our Ever-Changing Earth.”** Earth Science Week 2011, like past celebrations, promoted public and professional awareness of Earth science in education and society.

Each year, AGI organizes Earth Science Week as a service to member societies, with generous help from partner organizations that provide funding, donate materials, organize events, and publicize the celebration. Major funding partners in 2011 included the United States Geological Survey (USGS), the American Association of Petroleum Geologists (AAPG) Foundation, the National Park Service, the National Aeronautics and Space Administration (NASA), ExxonMobil, and Esri.

“Planetary change raises important questions among young people, educators, and the public,” said Ann E. Benbow, Ph.D., AGI’s Director of Education and Outreach, in announcing the theme of the celebration. “Earth Science Week 2011 will highlight the important roles that paleontologists, geologists, and other earth scientists play in building understanding of the complex interactions among the earth systems.” Indeed, Earth Science Week 2011 provided educators, students, and interested citizens with information, resources, and activities for scientifically sound education about change over time.

Earth Science Week **participation remained strong.** People in all 50 states and in more than five countries participated in events and activities. Over 80,000 people visited the Earth Science Week web site in 2011. In addition, hundreds of people nationwide actively participated in the program’s visual arts, essay, and photography contests.

Earth Science Week events ranged from educators teaching Earth science activities in their classrooms to open houses held at major USGS field stations. A detailed list of events can be found in Part 1. This list represents only events reported directly to AGI, so please notify Earth Science Week staff if your participation is not listed.

Additional events are highlighted in Part 2, a compilation of news releases and other items by members of the geoscience community. Each year, more and more people are introduced to Earth Science Week by reading or hearing a news story in the media. This year, Internet, print, and broadcast media coverage of Earth Science Week soared to reach a documented **48 million people.** Part 2 contains examples of print and electronic media promoting Earth Science Week activities, resources, and materials. In addition, television news programs covered Earth Science Week on local stations in three states.

This report is designed to give an overview of the activities organized by AGI and other groups for Earth Science Week. We hope this information on 2011 events and publicity inspires you to develop your own activities next year. Please visit www.earthsciweek.org for event planning, materials, resources, and support. Contact Earth Science Week staff at info@earthsciweek.org for assistance in planning for Earth Science Week.

Earth Science Week 2011 Summary of Activities

Overview

More than 48 million people gained a new awareness of the geosciences through the 14th annual Earth Science Week. That's how many people worldwide learned about Earth science through program promotions, education efforts, news media, and Internet coverage. The event celebrated the theme "Our Ever-Changing Earth" by promoting scientific understanding of the natural processes that shape our planet over time.

Earth Science Week events ranged from individual teachers and classes conducting playground science projects to activities at locations such as USGS field stations, NASA facilities, and national parks. Many activities were organized around the days of Earth Science Week that routinely are set aside times for areas of special focus:

- Geocachers worldwide used GPS devices to find and learn about sites of geoscientific significance on **International EarthCache Day**, October 9.
- AGI's new "Big Ideas of Earth Science" videos and activities allowed students to explore core concepts on **Earth Science Literacy Day**, October 10.
- Schools nationwide held activities for **No Child Left Inside Day** on October 11, encouraging students to explore geoscience topics firsthand outdoors.
- The second annual **National Fossil Day**, October 12, invited young people to learn about paleontology at national parks and other locations across the country.
- **Women in the Geosciences Day**, October 13, provided a chance for professional geoscientists to share the excitement of their careers with young women.
- Finally, **Chemistry and Our Earth Day**, October 14, offered resources to help young people explore the chemistry of geoscience.

Internationally, students and others in the United Kingdom, Australia, India, and Trinidad and Tobago participated in events, explorations, and activities during Earth Science Week. Hundreds of essayists, artists, and shutterbugs once again entered the annual Earth Science Week contests.

New Partnerships and Efforts

Earth Science Week's success depends on the collaboration of key partners. In 2011, AGI forged partnerships with several organizations that helped the effort reach new audiences:

AGI collaborated with a new partner, the **American Chemical Society** (ACS), to launch "Chemistry and Our Earth Day," October 14, at the end of Earth Science Week 2011. The event helped raise awareness of the International Year of Chemistry 2011 (IYC 2011), a worldwide celebration of chemistry that offered a range of interactive, entertaining, and educational activities. ACS provided geoscience-related educational materials for the Earth Science Week 2011 Toolkit and organized additional activities.

Teachers who participate in Earth Science Week were invited to compete for an award for Excellence in the Teaching of Natural Resources in the Earth Sciences offered by the **American Association of Petroleum Geologists** (AAPG) and the AAPG Foundation. The \$5,000 prize is being presented at the April 2012 AAPG Annual Convention.

Young women were specially invited to celebrate the third annual Women in the Geosciences Day on Thursday, October 13, during Earth Science Week 2011. Thanks to the **Association for Women Geoscientists** (AWG), an AGI member society and longtime program partner, a set of worksheets are included in the Earth Science Week 2011 Toolkit, and copies can be downloaded from the AWG web site. For the first time, one sheet is available in Arabic, Chinese, Danish, French, German, Italian, Portuguese, Romanian, Russian, Tagalog, and Turkish translations.

AGI presented at the “Connecting People to Science” national conference conducted shortly before Earth Science Week 2011 by the **Astronomical Society of the Pacific** in partnership with the American Geophysical Union and the Space Telescope Science Institute. Geoff Camphire, Earth Science Week program manager, was featured in a panel discussion on promoting public engagement in science, “Examining Large Public Education/Public Outreach Events: Defining, Achieving, and Measuring Success.” He also offered a brief presentation titled “Making the Most of Your Annual Outreach Event or Campaign: Lessons Learned from Earth Science Week.”

AGI launched a set of free videos and other electronic resources to help students, educators, and others explore the “big ideas” of Earth science during Earth Science Week 2011 and throughout the year. **Big Ideas videos** bring to life the nine core geoscience concepts that everyone should know. The Earth Science Literacy Initiative, funded by the National Science Foundation, codified these principles. A Big Ideas DVD is featured in the Earth Science Week 2011 Toolkit, and the videos are available for free online viewing on YouTube and TeacherTube. The Earth Science Week web site also provides dozens of classroom activities linked to the “big ideas.”

AGI also expanded eligibility for its annual **Earth Science Week photography contest** to allow members of AGI International Affiliates to participate for the first time. Previously open only to residents of the United States, the photo contest has always been a major part of Earth Science Week. By celebrating the theme of “Our Ever-Changing Earth,” Earth Science Week 2011 provided an excellent opportunity to invite our colleagues and friends around the world to join the celebration.

Presented by the Society of Petroleum Engineers, **Energy4Me** offers education resources on energy sources. The program provided a poster for the Earth Science Week 2011 Toolkit, outlining pros and cons of renewable and nonrenewable energy sources, offering educational activities, and detailing program opportunities for science teachers and students.

Earth Science Week promoted GIS Day, November 16, to raise geographic awareness. GIS Day 2011 events, held in 48 states and 66 countries, allowed users of geographic information systems to demonstrate real-world applications that make a difference in society. **Esri**, a GIS Day sponsor and longtime Earth Science Week partner, offered a wealth of related educational resources for Earth Science Week participants and others.

A major program partner and longtime supporter of science and mathematics education, **ExxonMobil** generously supported the week's activities. Earth Science Week promoted awareness of an ExxonMobil Foundation initiative supporting 1,200 middle-school students taking part in summertime math and science experiences. ExxonMobil Bernard Harris Summer Science Camps were hosted by 25 universities in 2001.

When an earthquake shook the East Coast in August 2011, teachers were looking for ways to make the most of such "teachable moments." Earth Science Week promoted awareness of several free earthquake education resources from the U.S. Department of Homeland Security's **Federal Emergency Management Agency**. The collection, "Earthquake Publications and Tools," includes posters, teacher packages, a storybook for children, hands-on activities, and guidance for teachers, students, and child care providers.

The **Geological Society of London** (GSL), an AGI member society, organized an event, "Poetry and Geology: A Celebration," to coincide with Earth Science Week and England's National Poetry Day on October 10, 2011. Earth Science Week Update helped get the word out about the free event, including performances, discussions, and a poetry reading.

To help teachers and students delve into the science behind current events, Earth Science Week directed them to "Recent Earthquake Teachable Moments," a web site of **Incorporated Research Institutions for Seismology** (IRIS). These online resources — including PowerPoint presentations, animations, and visualizations, as well as links to Spanish-language materials and USGS data — dealt, for example, with the catastrophic 2011 earthquake that struck New Zealand.

AGI, a key partner of the **International Year of Planet Earth** (IYPE), promoted awareness of IYPE's collaboration with The Discovery Channel to launch the new Discovery Earth web site in 2011. The site's "Earth Top 10" features detailed information and stunning images relating to Earth Science Week's 2011 theme of "Our Ever-Changing Earth," including topics such as climate change, earthquakes, ocean movement, acid rain, and extinct creatures.

The **National Earth Science Teachers Association** (NESTA), a longtime Earth Science Week partner, took on a new role in helping AGI promote excellence in geoscience education in 2011. At the National Science Teachers Association Annual Conference in San Francisco, the NESTA Reception included a ceremony during which a teacher was given the Edward C. Roy, Jr. Award for Excellence in K-8 Earth Science Teaching.

Earth Science Week promoted the **National Ground Water Association's** Ground Water Awareness Week in March 2011 as well as NGWA's new Protect Your Groundwater Day program in September 2011, advocating water conservation and contamination. The AGI member society offers Ground Water Adventures, a web site providing educational activities for young people. Also, NGWA offered a free webinar on career opportunities in the geosciences during Earth Science Week 2011.

A longtime Earth Science Week partner, the **National Park Service** (NPS) continued for the second year a major component to its involvement in Earth Science Week. National Fossil Day, established as a celebration to take place annually on the Wednesday of Earth Science Week, reached more than 15 million people. The “Geologic Heritage of the National Parks” poster, appearing in the Earth Science Week 2011 Toolkit, successfully continued the series of park posters produced collaboratively by the National Park Service and AGI.

Partners in Resource Education (PRE), a new program partner, provides programs and activities designed to get young people excited about the geoscience of conservation. This consortium of seven federal agencies educates thousands of young people, introduces them to natural resource careers, and cultivates the next generation of land and water stewards. In 2011, PRE collaborated to promote awareness of Earth Science Week, and vice versa.

Schlumberger Excellence in Educational Development (SEED) is a nonprofit education program that empowers Schlumberger employee volunteers and educators to share their passion for learning and science with students. AGI partnered with the program to launch a joint initiative, the SEED Earth Science Week Online Toolkit, to provide Earth science education resources in both Spanish and English in 2010. In 2011, nearly 30 educational activities and resources were added to the updated toolkit. Visitors now can view 76 lessons, posters, fact sheets and other items, each offered in both Spanish and English.

Earth Science Week Toolkits

Across the country, AGI distributed some **16,000 Earth Science Week Toolkits** to teachers and geoscientists in 2011. The number of state geological surveys requesting complimentary kits for distribution remained level at 29 in 2011, level with 29 in 2010 and 28 in 2009. In addition, the number of AGI member societies requesting complimentary Earth Science Week Toolkits for distribution held at 23 in 2011, roughly equal to 25 in 2010 from and 22 in 2009. As in past years, thousands of kits also were distributed through program partners including USGS, NASA, the National Park Service, and AAPG Student Chapters. Hundreds of kits were shipped free to geoscience department chairs at colleges and universities nationwide. Toolkits were shipped to program participants in all 50 states and several countries.

The 2011 toolkit featured AGI’s traditional Earth Science Week poster, bookmarks, and school-year calendar showcasing geoscience classroom investigations and important dates of Earth science events. A major new addition was AGI’s “Big Ideas of Earth Science” DVD, which includes videos illustrating the core concepts of geoscience. A “Geologic Heritage of the National Parks” poster, included in the toolkit, was produced by AGI for the National Park Service to continue this unique poster series underscoring geoscience in the parks. Additional items created by AGI for the kit were flyers promoting the Earth Science Week contests, AGI Earth science education products and services, AGI publications, *Earth* magazine, and the Edward C. Roy, Jr. Award for Excellence in K-8 Earth Science Teaching.

Also included were posters, flyers, electronic disks, bookmarks, and activities provided by AGI, USGS, NASA, NOAA, the National Park Service, the U.S. Fish & Wildlife Service, the American Chemical Society, the Association for Women Geoscientists, the Consortium for Ocean Leadership’s Deep Earth Academy, the Earth Science Literacy Initiative, Esri,

GLOBE, Incorporated Research Institutions for Seismology (IRIS), Rite in the Rain, the Society of Petroleum Engineers (Energy4Me), and the Soil Science Society of America.

Web Resources

The Earth Science Week web site (www.earthsciweek.org), which delivers essential resources for educators throughout the year, was made more efficient in 2011. A redesign streamlined the site and made it easier than ever before for users to identify and find the programs, publications, and educational tools. Teachers readily could find news, activities, contest guidelines, event planning tips, potential collaborators in the community, resources in Spanish, and other resources. Students and others could find information on scholarships, internships, and networking opportunities.

As in past years, the **Earth Science Week web site** was updated regularly to reflect the new theme, contests, proclamations, events, initiatives, and classroom activities for 2011. The home page received 82,088 hits in 2011, up 32 percent from 62,232 hits in 2010. Within the site, the classroom activities page received 17,190 hits, the contests page received 17,406 hits, the teacher resources page received 14,709 hits, and the planning page received 5,276 hits — all up significantly from the previous year.

Improvements make it possible for users to search for a classroom activity tailor-made to match the Earth science topics they are teaching. The **Classroom Activities** page now features more than 120 free learning activities, most contributed by the leading geoscience agencies and groups that are Earth Science Week partners. Activities now are organized and searchable by various criteria, including grade levels and science education standards. Perhaps most useful, users also can search among 24 categories of Earth science topics, from energy and environmental impacts to plate tectonics and weathering.

To maximize access to education resources in both Spanish and English, dozens of classroom activities were added to the **SEED Earth Science Week Online Toolkit** before the October event. The web site, a partnership of Schlumberger Excellence in Educational Development (SEED) and AGI, was created in 2010 to provide educational materials, activities, and other resources for Spanish-speaking students and teachers, as well as English speakers, in U.S. and SEED network schools around the world. Resources developed by SEED, AGI, and other geoscience organizations include lessons, posters, and fact sheets.

Finally, Earth Science Week expanded its use of online social networking to reach new audiences, especially young people, in 2011. The program's presence on **Facebook**, the Internet's most popular networking site, was enhanced with the creation of an Earth Science Week Fan Page. Those who become Earth Science Week Fans instantly gain access to geoscience videos, begin receiving important updates and information, and help spread the word about Earth Science Week. In addition, web surfers are invited to receive geoscience news, resources, and opportunities by following Earth Science Week on **Twitter**. Tweets are sent frequently, whenever there is valuable news or information to share.

Newsletter

The monthly **Earth Science Week Update** newsletter reached some 7,200 teacher, student, and geoscientist subscribers in the past year, an increase of over 10 percent from the previous year. The online program resource rated most highly by Earth Science Week participants, this electronic newsletter kept planners and participants up-to-date on Earth Science Week planning at the national level, encouraged participation in local areas, and provided news on geoscience topics of interest to participants.

In addition to highlighting worthwhile resources, these monthly e-mail updates reinforce the belief that geoscience education is a priority throughout the year, not only during one week each October. It is little wonder that the e-newsletter remains the program's most popular online offering, with 92 percent of survey respondents rating it as "useful" or "very useful."

National Contests

AGI held three national contests in connection with Earth Science Week for the 10th consecutive year. The contests were designed to encourage K-12 students, teachers, and the general public to become involved in the celebration by exploring artistic and academic applications of Earth science. In a program first, Earth Science Week expanded eligibility for its annual photography contest to allow members of **AGI International Affiliates** to participate for the first time.

The three contests continued to provide ways for many people to participate in Earth Science Week in 2011. Photos, art, and essays were submitted by nearly 800 people this year, **33 percent more** than the previous year. Each first-place winner received \$300 and a "Faces of Earth" DVD set. Entries submitted by winners and finalists were posted online.

Kristine Zheng of Ann Arbor, Michigan, won first place in the visual arts contest with a colorful drawing of planetary change taking place in the geosphere, atmosphere, hydrosphere, and biosphere. Finalists were Jahow Yu, Zaina Tarafder, Hillary V. Constanza Barrientos, and Bhavya Sethi. Students in grades K-5 made two-dimensional artworks illustrating the theme "**A World of Change in My Community.**" Amanda Hackett of Virginia Beach, Virginia, won first place in the essay contest with her writing about the changes undergone by pyrite and other facets of interacting Earth systems. Finalists were Marika Livingston, Annie Fick, Marcus Weeks, and Corvyn Kusuma. Students in grades 6-9 wrote essays of up to 300 words addressing this year's theme, "**How Change Shapes Our Planet.**" Susan Tate of Montague, Michigan, won first place in the photo contest with her image of people monitoring a wind storm on the shore of Lake Michigan. Finalists were Patricia delli Vernneri, Jonathan T. Canfield, Gurmeet Kaur Chhabra, and Claire Kobold-Vettraino. Submissions illustrated the theme "**Picturing Our Ever-Changing Earth.**"

Earth Science Teacher Award

For the fourth consecutive year, AGI and the AGI Foundation offered the **Edward C. Roy, Jr. Award for Excellence in K-8 Earth Science Teaching**. Greer Lynn Harvell, a teacher at Clifford C. Meigs Middle School in Shalimar, Florida, was named the 2011 recipient. Harvell, who earned her bachelor's degree in education from the University of West Florida, began her career teaching first grade, then went on to engage seventh- and eighth-graders with inquiry-based, hands-on learning in the Earth sciences.

Harvell received a \$2,500 prize and an additional grant of \$1,000 to enable her to attend the National Science Teachers Association 2011 National Conference to accept the award during a reception hosted by the National Earth Science Teachers Association. Finalists for the award were Amy Clapp of Salisbury Community School in Salisbury, Vermont, and Jan L. French of Cincinnati Country Day School in Cincinnati, Ohio. The award recognizes one classroom teacher from kindergarten to eighth grade for leadership and innovation in Earth science education. This award is named in honor of Dr. Edward C. Roy, Jr., a past president of AGI and strong supporter of Earth science education.

Late in 2011, AGI announced that more teachers than ever would be eligible to win the 2012 award. In addition to U.S. teachers, instructors throughout the United Kingdom were invited to compete for the prize. U.K. teachers were provided with detailed guidance on entering the competition by AGI and The Geological Society of London, a member society and Earth Science Week partner.

Events

Earth Science Week 2011 officially kicked off on Sunday, October 9, with **International EarthCache Day**. “EarthCaching” is a variation of a recreational activity known as geocaching, in which a geocache organizer posts latitude and longitude coordinates on the Internet to advertise a cache that geocachers locate using GPS devices. The activity has attracted over a million participants worldwide. When people visit an EarthCache, they learn something special about Earth science, the geology of the location, or how the Earth’s resources and environment are managed there. EarthCaching has been developed by the Geological Society of America, a major program partner.

On Monday, October 10, educators and young people were encouraged to explore “big ideas” as part of **Earth Science Literacy Day**. The Big Ideas of Earth Science DVD included in the Earth Science Week 2011 Toolkit provides several short videos outlining the core concepts of geoscience, as codified by the Earth Science Literacy Initiative with support from the National Science Foundation. To help teachers and students use the videos, which also are available on YouTube and TeacherTube, the Earth Science Week web site offers dozens of related classroom activities.

One of the highlights of recent years’ Earth Science Week celebrations has been **“No Child Left Inside” Day**, an event that in its inaugural year engaged some 500 students in outdoor learning activities and received coverage by news media from NBC to NPR. In 2011, students and educators nationwide were invited to take part on the Tuesday of Earth Science Week, October 11. AGI’s online NCLI Day Guide provided everything needed to plan a local NCLI Day event. The free guide provided 17 outdoor activities, including seven new activities, which educators could organize. Also included were recommendations for creating partnerships, planning logistics, reaching out to the local media, and following up in the classroom. In addition, for the first time, the NCLI Day Guide was made available in PDF format in 2011 for easy printing and outdoor use. The site received 3,752 hits in 2011, as teachers and children across the country seized the opportunity to discover Earth science in their own neighborhoods.

Earth Science Week featured the return of a popular event on Wednesday, October 12, 2011. In partnership with the National Park Service (NPS), AGI helped conduct the second annual **National Fossil Day**, including activities and resources designed to celebrate the scientific and educational value of fossils, paleontology, and the importance of preserving fossils for future generations. NPS offered a web site full of educational resources and information designed specifically for students and teachers. On the site's NPS Fossil Park Highlights page, visitors could find lesson plans developed to reflect state standards, fossil trading cards, videos about pygmy mammoths, special brochures, a virtual museum exhibit on dinosaurs, and more. NPS also held a National Fossil Day Art Contest. Earth Science Week staff joined paleontologists and park rangers for the second annual National Fossil Day Celebration on the National Mall in Washington, D.C. The event featured presentations and activities for all ages, including Jim Henson's Dinosaur Train, digging for fossils, and activities exploring prehistoric life. On hand were paleontologists and geologists from NPS, AGI, the Bureau of Land Management, the National Science Foundation, Maryland Dinosaur Park, and NOAA. And people took part in similar programs nationwide, such as the nearly 800 people who participated in Earth Science Week activities at Grand Canyon National Park.

The Association for Women Geoscientists (AWG), an AGI Member Society, collaborated with AGI to organize the third annual **Women in the Geosciences Day** on Thursday, October 13, during Earth Science Week 2011. The special day offered adult geoscience professionals a chance to share the excitement and advantages of their careers with women of all ages, especially those early in their education. Educators invited female geoscientists to speak in the classroom. Women geoscientists took their daughters to work, visited local schools, and volunteered at science centers. AWG worksheets were included in Earth Science Week Toolkit to promote the event. In addition, Earth Science Week offered guidance to geoscience professionals in the form of "Visiting Geoscientists: An Outreach Guide for Geoscience Professionals," an online handbook co-produced by AGI and the American Association of Petroleum Geologists' Youth Education Activities Committee.

Overlapping Earth Science Week, **National Wildlife Refuge Week** also was held during the second week of October 2011. The event celebrated the richness of the 550 units that make up America's National Wildlife Refuge System. The week focused on lands and waters where wildlife and habitats are under federal protection. Earth Science Week participants were urged to learn about the natural and cultural resources that are part of the conservation mission of the U.S. Fish and Wildlife Service. Refuge fact sheets were featured as part of the Earth Science Week 2011 Toolkit to promote awareness.

As part of Earth Science Week, AGI also has emerged as an official partner of the **USA Science and Engineering Festival**. The original event, which staged the country's first national science festival in 2010, represented a collaboration of over 500 leading science and engineering organizations, culminating in a two-day expo in Washington, D.C., following Earth Science Week 2010. Tens of thousands of people took the opportunity to explore science and engineering through hundreds of fun, hands-on activities. At AGI's booth, visitors explored seismology and other principles of geoscience. In 2011, Earth Science Week staff made preparations to participate in the second USA Science and Engineering Festival, scheduled for April 2012.

AGI Promotions

This was an exciting year for AGI, as the organizer of Earth Science Week officially changed its name in 2011. Known since its inception in 1948 as the American Geological Institute, AGI changed its name to the **American Geosciences Institute**. Earth Science Week's newsletter promoted this news, emphasizing that AGI adopted the new name to reflect the evolving nature of the association — in 2011 AGI grew to embrace 50 member societies, reflecting roughly a quarter of a million geoscientists in the United States alone — and the scientific fields it represents.

In addition, Earth Science Week promoted awareness of numerous AGI programs and resources of interest to Earth science educators, students, and enthusiasts, including the AGI International Affiliates program, the William L. Fisher Congressional Geoscience Fellowship, the annual Geosciences Congressional Visits Day, the Pulse of Earth Science web site, the Visiting Geoscientists, the Earth Science Organizations web site, the Faces of Earth DVD, the This Is AGI video, GeoSpectrum, and EarthNotes.

Official Proclamations

Governors issued proclamations recognizing Earth Science Week 2011 in **18 states**: Alaska, Arkansas, Delaware, Illinois, Louisiana, Michigan, Missouri, Nevada, New Jersey, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Tennessee, and Washington. Seven of these states have issued “perpetual proclamations,” ensuring recognition of Earth Science Week every year.

Publicity and Media Coverage

AGI enlisted the support of a wide range of media in promoting awareness of Earth Science Week, resulting in unprecedented reach for promotional activities in 2011 and helping to lay a foundation for more coverage in years to come.

Internet: Earth Science Week was highlighted on hundreds of Internet pages besides the official event site. Program partners USGS, AAPG, NSBE, AIPG, GSL, NSTA, NESTA, NSTA, SSSA, NAGT, AESE, NASA, the National Park Service, the Bureau of Land Management, Esri, Windows to the Universe, Public Education Network, National Geographic, Triangle Coalition for Science and Technology Education, Wikipedia, Geology.com, Ask.com, and About.com featured information promoting that organization's events and publicizing the celebration. Earth Science Week was mentioned on over 200 web sites, social networks, and blogs.

Television and Radio: Earth Science Week was covered by television stations across the country, including NBC Washington 4 and WJLA ABC 7 of Washington, D.C.; KVIA ABC 7 of El Paso, Texas; WRCB TV of Chattanooga, Tennessee; WECT 6 of Wilmington, North Carolina; WABI TV 5 of Bangor, Maine; KPVI 6 of Pocatello, Idaho; and KFYZ-TV, Bismarck North Dakota. In addition, the event was covered by radio stations such as KCFO 970 AM in Tulsa, Oklahoma.

Print Media: AGI distributed press releases to hundreds of newspapers, magazines, and other print media outlets. Many local and national publications ran items on Earth Science Week (for examples, see Section 2). AGI staff also wrote articles for the National Science

Teachers Association's *NSTA Reports* magazine and the National Earth Science Teacher Association's *The Earth Scientist* magazine. The articles highlighted Earth Science Week activities and theme.

Earth Science Week news and events were covered by major national news organizations such as *The Washington Post* and *The Huffington Post*. Coverage of Earth Science Week programs and activities was provided by local news organizations such as *The Salt Lake Tribune* of Utah; *El Paso Times* of Texas; *The Seattle Times* of Washington; *Examiner News* of Freehold, New Jersey; *Illinois Times* of Springfield, Illinois; *Martha's Vineyard Patch* of Massachusetts; *Missoulian* of Montana; *Nevada Appeal* of Carson City, Nevada; *Pegasus News* of Richardson, Texas; *Rutland Herald* of Vermont; *The Jamestown Press* of Rhode Island; *Current-Argus* of Carlsbad, New Mexico; *The Portland Press Herald* of Maine; *The State Journal-Register* of Springfield, Illinois; *Grand Forks Herald* of North Dakota; *Casper Star Tribune* of Wyoming; *Tulsa World* of Oklahoma; *WCF Courier* of Waterloo, Iowa; *Your Houston News* of Texas; and *The Martha Vineyard Times* of Massachusetts.

Some 50,000 copies of the Earth Science Week 2011 poster, featuring a geoscience learning activity in addition to promotional content, were distributed as inserts in publications carrying articles about the event, such as *The Earth Scientist*, *GSA Today*, *AAPG Explorer*, the Society of Exploration Geoscientists' *The Leading Edge*, and AGI's own *Earth* magazine.

External Evaluation of Earth Science Week 2011: Key Findings

Following the event, AGI secured an independent contractor, PS International, to complete a formal external evaluation of Earth Science Week 2011, as it has in past years. Some 7,200 program participants were invited to participate in a survey in the closing months of 2011, with a valid response rate of 4.6 percent.

Results were overwhelmingly positive. Comparing participation last year and plans for next year, 88 percent of survey respondents said they anticipate either increasing or maintaining level participation. “Very cool stuff,” commented one respondent. “I plan on using more of the resources next year.” While comments were generally positive, some indicated that participation was limited by respondents’ budgetary constraints.

A large majority of participants (86 percent) said Earth Science Week offers opportunities for teaching and promoting Earth science that they wouldn’t have otherwise. “The ESW packet provides content and resources that we would normally not be able to provide,” said one. “The activities provided are very helpful,” commented another.

Similarly, 86 percent said program resources and activities are “very” or “somewhat” important to educating students and others about Earth science. “Keeps us up-to-date, and teachers appreciate a new resource,” a respondent remarked.

Most respondents find Earth Science Week and related resources highly useful, with 75 percent rating the program’s overall usefulness as “excellent” or “good.” When respondents were asked to rate 18 key items from the Earth Science Week 2011 Toolkit and the program web site, all were rated “very useful” or “useful” by majorities of participants. Top-rated items were the AGI Big Ideas DVD, Energy4Me poster, USGS Earthquake poster, NASA flyer, NPS poster, ESW newsletter, Big Ideas activities, and AGI curriculum resources.

Participants said they were very active during Earth Science Week. Eighty-four percent said they conducted a “major” activity. Moreover, many reported specific activities that were highly active. For example, 89 percent reported activities categorized as “most active” (e.g., field trips and teacher workshops), “active” (e.g., external speakers and open house discussions), or “somewhat active” (e.g., lesson plans and kit distribution).

Asked how Earth Science Week might be improved, 32 percent of respondents advocated additional materials and activities. Another 18 percent recommended building partnerships. Additional suggestions included increasing promotions and communication among stakeholders and participants. AGI uses evaluation findings to improve the program.

Earth Science Week Sponsors

United States Geological Survey
American Association of Petroleum Geologists Foundation
National Aeronautics and Space Administration
National Park Service
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Earth Science Week Contributors

American Association of Petroleum Geologists Foundation
American Chemical Society
American Geosciences Institute
Association for Women Geoscientists
Association of American State Geologists
Association of Science-Technology Centers
Consortium for Ocean Leadership
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ExxonMobil
Geological Society of America
Geological Society of London
Incorporated Research Institutions for Seismology
National Earth Science Teachers Association
National Energy Education Development Project
National Science Teachers Association
Rite in the Rain
SEED: Schlumberger Excellence in Educational Development
Society of Exploration Geophysicists
Society of Petroleum Engineers
Soil Science Society of America
U.S. Fish and Wildlife Service
U.S. Geological Survey
U.S. National Aeronautics and Space Administration
U.S. National Oceanographic and Atmospheric Administration
U.S. National Park Service

Earth Science Week 2011 Events and Activities by State and Territory

Alabama

- The Birmingham Paleontological Society hosted a special fossil display at the McWane Science Center on Monday, October 10.
- The Geological Survey of Alabama hosted a workshop for teachers. Participants collected and identified Cretaceous marine fossils of West-Central Alabama, such as mosasaur bones, shark teeth, gastropods, and giant oysters.

Alaska

- The governor of Alaska issued a perpetual proclamation of Earth Science Week.
- The Anchorage Alaska Public Lands Information Center hosted a screening of “When Dinosaurs Roamed America’s National Parks.” Visitors were able to learn about Alaskan fossils with rangers.
- The Pratt Museum celebrated National Fossil Day and Earth Science Week with local experts Geoff Coble and Lee Post. Visitors brought in fossils to be identified and shared with the community.
- The Glacier Bay National Park Headquarters hosted a Park Fossils Show-and-Tell on October 12 to celebrate National Fossil Day. Gustavus students visited the park headquarters, met with the park curator and examined the park’s collection of fossils.

Arizona

- Grand Canyon National Park celebrated Earth Science Week and National Fossil Day by offering a variety of special ranger and evening programs. Activities included a Fossil Walk and special presentations on Grand Canyon caves and geology.
- Glen Canyon National Park hosted event activities on October 8 at the Carl Hayden Visitor Center. A local artist helped participants make clay dinosaurs with cutouts and “freeform” and provided instruction in watercolor using a Therizinosaur skeleton as a model. Other activities included a faux dino bone dig, making dinosaur hats, and creating fossil casts.
- The Museum of Northern Arizona held an event on October 8 as part of its family programming series “Discovery 2nd Saturdays.”
- Staff at Petrified Forest National Park led a guided hike in an area called the “Clam Beds” as well as behind-the-scenes tours of the paleontology laboratory and museum collections. Lab tours focused on how fossils are collected, cleaned, and entered into the park museum collection for preservation and future study. Participants viewed the fossil bones of animals that lived in the area during the time of the dinosaurs. The guided hike also explored local geological history. Participants learned about the Late Triassic landscape and its inhabitants.

Arkansas

- The Arkansas governor declared October 9-15 to be Earth Science Week.
- The University of Arkansas at Little Rock held an open house displaying its collection of fossils. Experts led discussions and answered questions. The open house also included teacher workshops and a public lecture on fossils.

- The Arkansas Geological Survey hosted an event to celebrate Earth Science Week and National Fossil Day. The event included a presentation on the rock formations around the Crater of Diamonds State Park in Murphreesboro, Arkansas. Participants dug for diamonds.

California

- To celebrate National Fossil Day 2011, the Fossil Discovery Center of Madera County held tours of the museum and set up a “Pleistocene Pond” and mock digs. The center also had a special animal from the Chaffee Zoo at the event.
- The Page Museum highlighted vertebrate paleontology in its National Fossil Day celebration. Attendees viewed specimens recovered from the La Brea Tar Pits.
- Museum paleontologists from the Western Science Center offered special demonstrations of fossil preparation tools and techniques used at the museum.
- The Natural History Museum of Los Angeles County’s staff of Vertebrate Paleontology, Dinosaur Institute, Invertebrate Paleontology, and Malacology organized tables of specimens throughout the museum. Scientists offered show-and-tells of specimens from behind-the-scenes and interacted with the public. Visitors learned about the conservation/preservation of specimens found on public lands to better understand the past. The museum also hosted the Junior Scientist program at the museum simultaneously.
- Geological sciences curators offered “sneak peek” tours of new paleontology exhibits in the San Bernardino County Museum’s Hall of Geological Wonders. Displays of Ice Age fossils from southern California’s inland valleys demonstrated the effects of climate change and the process of fossilization. Also, new exhibits on plate tectonics and Earth processes opened.
- The Northern California Geological Society hosted a field trip for K-12 teachers, who retraced the events of the 1906 earthquake and fire as they walked through downtown San Francisco.
- The Stout Research Center Paleontology Laboratory and Collection Hall at the Anza Borrego Desert State Park hosted “Jaws: Secret Treasures of the Anza-Borrego Desert.” The display showcased the center’s collection of jaws. Visitors learned what fossils say about the environment. Many of the fossils displayed had never been shown and included carnivores, herbivores, and omnivores that inhabited this region over the past 5 million years.
- The University of California Museum of Paleontology hosted “Who Lived Here Before the Giants?” During the event at AT&T Park in San Francisco, graduate students from the University of California Museum of Paleontology shared fossil evidence of earlier inhabitants of the Bay Area.

Colorado

- The Museum of Western Colorado and Colorado National Monument hosted fourth-grade classes from local elementary schools for National Fossil Day. The day involved a field trip to the monument for a hike and fossil activities at the Dinosaur Journey Museum. The public was invited to speak with staff paleontologists, have fossils and rocks identified, and learn about local fossils.

- The University of Colorado Museum of Natural History celebrated National Fossil Day by hosting a “trilobite cookie-decorating” session. Students decorated cookies and learned about trilobites.
- The Friends of Dinosaur Ridge celebrated National Fossil Day on October 8, 2011. An open house format included expert guides stationed along the famous Dinosaur Ridge trail. Geologists and paleontologists tended ridge stations and special booths where they presented rock and fossil identification. Hands-on activities for younger kids included a dinosaur dig, sifting for microfossils, fossil prepping, and dinosaur track painting. The Allosaurus boulder and a life-size Iguanodon were also out on display.
- The Denver Museum of Nature and Science celebrated National Fossil Day by hosting the Cretaceous Dinosaur Carnival. The museum provided visitors with Museum Touch Carts so they could touch real fossils from ancient seas, dinosaurs, and mammoths. Visitors also saw fossils being prepared by museum staff and volunteers at the Schlessman Family Laboratory of Earth Sciences. The museum’s Discovery Zone Dig at Dinosaur Gulch offered fun dinosaur crafts, songs, storytimes, and a moving, roaring prehistoric icon, Tyrannosaurus rex. A new, bilingual exhibition, T. rex Encounter, was also open to visitors.
- The Colorado National Monument in Fruta and Grand Junction celebrated National Fossil Day throughout October. The Visitor Center offered Junior Paleontologist books. Rangers partnered with the Museum of Western Colorado and the Bureau of Land Management to school groups at the Dinosaur Journey Museum.
- Florissant Fossil Beds National Monument celebrated National Fossil Day on Sunday, October 16. Activities included a ranger-guided hike on the Petrified Forest Loop, a visit to Fossil Lab, and Junior Paleontologist and Junior Ranger programs.
- For National Fossil Day, the Dinosaur Depot Museum in Canon City celebrated with a full day of activities. Young people made footprints and dinosaur masks. Tours explored local fossil sites, downtown buildings, and the gravesite of Amanda and Marshall Felch, the local rancher who recovered many significant fossils for Othniel Marsh. “The Great Harlini” (Harley Armstrong, a BLM state paleontologist) performed Dinosaur Magic.
- The Western Interior Paleontological Society’s October meeting was a celebration of National Fossil Day at the Denver Museum of Nature & Science in Ricketson Auditorium. Members shared what they found during their summer field trips and foraging in a show-and-tell.

Connecticut

- The Yale Peabody Museum of Natural History celebrated Earth Science Week on October 10 through expert-led demonstrations and activities that engaged visitors to take a closer look at geologic processes that change our planet. Visitors touched rocks and fossils, watched stones being polished, played games, and made crafts.

Delaware

- The Delaware Geological Survey distributed 50 Earth Science Week 2011 Toolkits to educators across the state.
- The governor of Delaware issued a perpetual proclamation of Earth Science Week.

District of Columbia

- The National Park Service and the Smithsonian National Museum of Natural History held the National Fossil Day Main Event on the National Mall on October 12. The event featured activities for all ages, including presentations by Jim Henson's Dinosaur Train, digging for fossils, games and activities testing participants' knowledge of prehistoric life. Smithsonian Natural History Museum staff helped participants identify fossils and answer questions.

Florida

- The Florida Museum of Natural History celebrated with its fall Thomas Farm Fossil Dig in Gilchrist County. The museum hosted two 10-day digs at the site, which formed 18 million years ago, and presented "Hall of Florida Fossils: Evolution of Life and Land" encapsulating 65 million years of history. The showcase exhibited 500 authentic fossils, many found within 100 miles of Gainesville.
- The Tampa Bay Fossil Club hosted National Fossil Day on October 8 at the Florida Aquarium in Tampa. Visitors talked with area collectors, saw found skulls and bones, and examined specimens.

Georgia

- The Fernbank Science Center celebrated Earth Science Week on October 15. The center hosted Kylie Ferguson, who discovered a fossil cat skull at Badlands National Park. The center also offered a graphic panel display about the story of her find and a case display along with casts of fossil cats, fossil presentations, fossil cast painting, a shark-tooth dig, face painting, and a "paleo art" contest for students.
- Georgia College celebrated National Fossil Day on October 12 at the Natural History Museum, Herty Hall, in Milledgeville.

Hawaii

- The Hawaii Environmental Education Alliance promoted Earth Science Week Toolkits among educators in Hawaii.

Idaho

- The Idaho Museum of Natural History hosted Fossil Identification Day on October 12 and featured new components to fossil exhibits, including Utahceratops and a new featured exhibit for Arctodus simus.
- Hagerman Fossil Beds celebrated on October 15 with special paleontology activities.
- Craters of the Moon National Monument and Preserve in Arco held various events for National Fossil Day, including hikes guided by park geologists and education specialists for visiting school groups, a special geology adventure hike involving off-trail hiking highlighting Hornitos, numerous tree molds, Kipukas, and lava flows.
- The Idaho Museum of Natural History in Pocatello hosted Fossil Identification Day on October 15 and featured new components to fossil exhibits, including Utahceratops and a new exhibit for Arctodus simus.

Illinois

- The governor of Illinois issued a perpetual proclamation of Earth Science Week.

- The Department of Geology and Geography at Eastern Illinois State University celebrated Earth Science Week with presentations on fossils, remote sensing imagery, discussions on climate, and demonstrations of mud logging and GIS.
- The Illinois State Museum celebrated National Fossil Day with special programs, including fossil-related activities and crafts.
- The Children’s Discovery Museum offered an Innovation Station for National Fossil Day. Museum visitors saw real fossils, dug in the dinosaur excavation unit, and cleaned real dinosaur bones.
- The Earth Science Club of Northern Illinois celebrated National Fossil Day at the College of Dupage on October 15. Participants brought their fossils to be identified by fossil experts. The event also included special Mazon Creek fossil displays.

Indiana

- The Indiana Geological Survey held Fossil Day and Scout Night events on October 12 in Bloomington. Scouts and interested students learned about Indiana fossils while focusing on Geology Merit Badge requirements.
- The Falls of the Ohio State Park held the Falls Fossil Festival on September 17. The festival showcased a fossil dig, mineral dig, rock and fossil identification, and geology guest speakers.
- The WonderLab Museum of Science, Health and Technology held events for preschool children and adults. Education staff read stories and offered hands-on science activities about fossils. Visitors used microscopes to investigate the diversity of tiny micro-fossils in Salem Limestone, the world-renowned building stone quarried in Monroe and Lawrence counties.

Iowa

- Effigy Mounds National Monument led special fossil-themed hikes to local fossiliferous limestone wall throughout Earth Science Week for all visitors.
- BMC Aggregates’ Raymond Quarry hosted an event for Earth Science Week. Program participants and presentations included the University of Northern Iowa Earth Science Department, Iowa Geological Survey, IOWATER, U.S. Geological Survey, Black Hawk County Soil and Water Conservation Watershed Program, Black Hawk Gem and Mineral Society, City of Waterloo, and Iowa Learning Farms. All attendees had the opportunity to collect rocks, fossils, and minerals with the Gem and Mineral Society, do a geology tour of the quarry, and participate in activities.
- The University of Iowa Museum of Natural History offered presentations by paleontologists and geologists discussing how their work is relevant. Other activities included fossil, rock, and artifact identification with experts, hands-on rock and fossil displays, a fossil hunt, and pterosaur excavation activities. Examples of fossils, rocks, and geology were on display.

Kansas

- University of Kansas Natural History Museum held an event called “What on Earth? Fossils, Rocks and Meteorites” on October 23. Visitors brought rocks, fossils, and meteorites to be identified by experts. Scientists with specialties in invertebrate and vertebrate fossils, plant fossils, and geology helped identify specimens.

Kentucky

- The Kentucky Geological Survey distributed 50 Earth Science Week 2011 Toolkits to educators throughout the state.

Louisiana

- The Louisiana Geological Survey distributed 50 Earth Science Week 2011 Toolkits to educators throughout the state.
- The Louisiana governor declared October 9-15 to be Earth Science Week.

Maine

- The L.C. Bates Museum celebrated National Fossil Day on October 8. Museum guests learned about fossils and ancient life and viewed a cast of “Black Beauty” the T. rex’s skull on loan from Tony Sohns.

Maryland

- The Calvert Marine Museum celebrated National Fossil Day on October 8 during the annual Patuxent River Appreciation Days event. The Department of Paleontology and the Calvert Marine Museum Fossil Club offered exhibits on fossils. Paleontologists on hand identified fossils brought to the museum by the public.
- Prince George’s County Department of Parks and Recreation hosted the Dinosaur Park Open House in Laurel in celebration of National Fossil Day. Participants joined paleontologists in discovering the county’s ancient past at Dinosaur Park. Paleontologists and volunteers interpreted fossil deposits from the Early Cretaceous period about 110 million years ago, introduced participants to park fossil deposits, and provided an opportunity to see, touch, and find fossils.

Massachusetts

- The Harvard Museum of Natural History commemorated National Fossil Day on October 12 with featured programs and exhibitions. Museum visitors performed hands-on investigations with fossilized bones, teeth, claws, and footprints.
- The Marine and Paleobiological Research Institute celebrated National Fossil Day on October 13 at the Oak Bluffs Library on Martha’s Vineyard. The public was invited to meet collectors and bring fossils for show-and-tell and identification.

Michigan

- The Michigan governor declared October 9-15 to be Earth Science Week.
- Susan Tate of Montague won the Earth Science Week Photography Contest, and Kristine Zheng of Ann Arbor won the Earth Science Week Visual Arts Contest.
- The University of Michigan’s Exhibit Museum of Natural History welcomed visitors for its Annual ID Day. Visitors brought objects and collections for identification by experts from the fields of paleontology, anthropology, archaeology, botany, zoology, and geology. Young people were also able to earn their Junior Paleontologist badges by participating.
- Michigan State University Museum hosted a National Fossil Day Celebration in East Lansing. Young paleontologists examined fossils and learned about Michigan’s geologic past. Special talks and tours included a special program, “Dinosaur CSI:

Who or What Murdered the Dinosaurs?” by Ralph E. Taggart, professor in the departments of Geological Sciences and Plant Biology. Taggart took visitors through a network of clues that revealed unexpected “partners in crime.”

Minnesota

- Earth Science Week was celebrated at the Science Museum of Minnesota on October 22. The museum offered activities on the Twin Cities’ fossils, fossil preparation, fossil research, and trilobites.
- The Duluth Children’s Museum celebrated National Fossil Day on October 12 with activities including dinosaur-related crafts, viewing of fossil collections, fossil preparation, and digging for dinosaur bones.

Mississippi

- The Mississippi Museum of Natural Science held a Fossil Day on October 14. There were information stations on Mississippi fossils and crafting, as well as a fossil dig for visitors.
- The Dunn-Seiler Museum sponsored a contest focusing on the Mosasaur for Mississippi students in grades K-12.

Missouri

- The Missouri governor declared October 9-15 to be Earth Science Week.
- Missouri Department of Natural Resources’ Division of Geology and Land Survey celebrated National Fossil Day on October 12. Visitors to the Ed Clark Museum received small Crinoids, the official state fossil of Missouri, to add to their personal collections. Visitors learned about the Crinoid, collecting Missouri fossils, and the geology of Missouri.
- The Mastodon State Historic Site celebrated National Fossil Day on October 15 with activity tables stationed throughout the museum. In addition, the Museum Annex was opened. The annex features a hands-on activity room for children, including a paleontological dig box.
- The Cape Girardeau Public Library hosted an October workshop for elementary students, in cooperation with Missouri NASA Educator Resource Center staff. A short PowerPoint presentation using NASA images explained star formation and showed what the Big Dipper looks like in the night sky. Students created sky wheels and learned how to use the wheels and locate circumpolar constellations such as the Big Dipper, the Little Dipper, Draco, Cassiopeia, Cygnus, and also Polaris. Students also learned how celestial objects appear to rise in the east and set in the west and how seasons can be marked by the constellations.

Montana

- The Museum of the Rockies held various events in celebration of National Fossil Day throughout Earth Science Week. The museum offered two major events: Archaeopteryx Birthday Bash and Tours for Tots. Museum visitors crafted, toured the museum, and participated in hands-on activities.

- For National Fossil Day, the University of Montana Paleontology Center in Missoula invited guests to gather in the Tyrannosaurus rex exhibit for a reception. Lectures, music, tours, and activities for children were provided.

Nebraska

- The Omaha Children’s Museum hosted a dinosaur exhibit during National Fossil Day on October 12 as part of its Paleo Plunge Program.
- The University of Nebraska State Museum hosted a fossil-themed “Sunday with a Scientist” on October 16. The museum’s vertebrate paleontology staff presented and identified fossils.
- Agate Fossil Beds National Monument welcomed Dr. Robert Hunt, emeritus curator and professor, from the Division of Vertebrate Paleontology of the University of Nebraska State Museum. Dr. Hunt and his wife, Ellen Stepleton, were guest speakers on Saturday, October 8. They explained the recent preparation of a small slab from the Agate bonebed that appeared to have come from the edge of the prehistoric waterhole. The Agate Fossil Beds also offered ranger-led walks and Junior Paleontologist Badges for young people.

Nevada

- The governor of Nevada issued a perpetual proclamation of Earth Science Week.
- The Protectors of Tule Springs conducted a free mammoth fossil and endangered bearpoppy plant walk on October 22 in North Las Vegas.
- The Las Vegas Natural History Museum celebrated National Fossil Day on October 8 by offering free activities with paid admission. Junior Paleontologists unearthed fossils in the hands-on room’s dig site and learned about fossil formation by making a fossil sandwich. Guests wandered through the museum, got a glimpse of Nevada’s state fossil (the Ichthyosaur), and observed Jurassic dinosaur tracks and Ice Age fossils, including a Rhynchotherium skull and Columbian Mammoth teeth and tusks.

New Hampshire

- The New Hampshire Geological Survey distributed 50 Earth Science Week 2011 Toolkits to educators throughout the state.

New Jersey

- The New Jersey governor declared October 9-15 to be Earth Science Week.
- The New Jersey State Museum celebrated National Fossil Day with an “unveiling” of dinosaurs and other spectacular specimens from the museum’s collection. Other activities included sea monster shows, discussions with New Jersey State Museum paleontologists, demonstrations from paleontological societies, and special performances from science troubadour Leigh Russ.

New Mexico

- The New Mexico governor declared October 9-15 to be Earth Science Week.
- To celebrate Earth Science Week, the New Mexico Museum of Natural History and Science sponsored a lecture on Triassic Amphibians and various interactive activities.

New York

- On October 10, the Buffalo Museum of Science offered fun hands-on activities to encourage visitors to learn about fossils.
- Vassar College's Warthin Museum of Geology and Natural History offered a special National Fossil Day lecture on October 12. Paleontologist Allison Tumarkin-Deratzian of Temple University gave a public talk titled "Life from Old Bones: Dinosaur Bones as Revealed by Fossil Microstructure." She discussed two projects she was currently undertaking: one involving polar dinosaurs from Alaska, and the other dealing with bone pathology and reproductive signals in dinosaurs.

North Carolina

- The North Carolina governor declared October 9-15 to be Earth Science Week.
- In honor of National Fossil Day, the North Carolina Museum of Natural Science allowed visitors to meet live animals and learn about how they are linked to fossil ancestors. The museum also offered other animal programs and story time about "Ancient Animals."
- The Discovery Place in Charlotte celebrated National Fossil Day on October 15 with collectors from the North Carolina Fossil Club. Other activities included fossil crafts, fossil digs, and presentations on archaeology.
- The Aurora Fossil Museum hosted a lecture on October 12. Michael Morris presented "Anthropology and its Link to Pleistocene Fossils."

North Dakota

- The governor of North Dakota issued a perpetual proclamation of Earth Science Week.
- The Dakota Science Center celebrated Earth Science Week by enabling visitors to be a geoscientist on the Greater Grand Forks Greenway. Participants learned about many geosciences jobs and earned an Earth Science Week certificate.
- To celebrate National Fossil Day, the Fargo Public Library featured Jessie Rock, a geologist from North Dakota State University. Young people handled fossils from millions of years ago, then made one of their own.
- The North Dakota Geological Survey and the State Historical Society of North Dakota celebrated the diversity found in fossils. Event participants brought fossils for identification and spoke with paleontologists.

Ohio

- The Ohio governor declared October 9-15 to be Earth Science Week.
- The Ohio Statehouse of Columbus presented an Earth Science Week Fossil Tour on October 14. Ohio State University experts led a geologic tour and discussed "Building Stones of Capitol Square."
- Kent State University held a departmental open house on October 15. There were displays for the public, "make your own fossil" activities for children, scavenger hunts, an Em-River river simulator, a Geo-Wall, and labs.

Oklahoma

- The governor of Oklahoma issued a perpetual proclamation of Earth Science Week.
- The Tulsa Geoscience Center-SEG held its 14th Annual Earth Science Week with the Tulsa Children's Museum by hosting a two-day event with fossil activities using fossil collections, a fluorescent rock room, a petroleum Chemistry Wizardry Lab, and a recyclable art activity.

Oregon

- The Oregon governor declared October 9-15 to be Earth Science Week.
- John Day Fossil Beds National Monument celebrated National Fossil Day with an open house at the Thomas Condon Paleontology Center on October 12. The center taught about Oregon's past with hands-on activities for young and old alike.

Pennsylvania

- A Fossil Dig at Bonehunters Quarry allowed participants to experience the thrill of hands-on excavation at the Carnegie Museum of Natural History. Participants used tools just like paleontologists do in the field and scraped away simulated earth and rock to reveal realistic fossil mammal and dinosaur casts.
- The Pennsylvania State Museum and Monroe County Historical Society marked National Fossil Day with public tours of the special paleontology exhibit "Life Through Time," featuring the recently restored Marshall's Creek mastodon.

Puerto Rico

- To celebrate Earth Science Week, the University of Puerto Rico at Mayagüez partnered with the Puerto Rico Seismic Network to host a day-long expo on campus. The event allowed participants to learn about geology, earthquakes, tsunamis, and other geoscience topics.

Rhode Island

- The Museum of Natural History in Roger Williams Park celebrated National Fossil Day with special fossil events and activities on October 10. Activity stations throughout the museum allowed visitors to view fossils. Fossil-themed scavenger hunts and craft activities were also available. Visitors brought fossils to be identified by the museum's paleontology curator.

South Carolina

- The South Carolina State Museum invited visitors to see how fossils are prepared for display. The museum organized a dedicated lab in the natural history gallery for demonstration.

South Dakota

- The governor of South Dakota issued a perpetual proclamation of Earth Science Week.
- The Mammoth Site of Hot Springs offered activities on October 12 for National Fossil Day. The activities included an "Ice Age" coloring and art contest, a prehistoric antique road show, lectures, and other activities.

Tennessee

- The Tennessee governor declared October 9-15 to be Earth Science Week.
- The Big South Fork National River and Recreation Area featured a display of fossils common to the Cumberland Plateau. Park Rangers at the Bandy Creek Visitor Center presented a special program about fossils on October 15. Children earned Junior Paleontologist Badges and made their own “fossils.” Visitors to the Blue Heron Mining Community learned about the important role that coal, a true fossil fuel, played in the history of the Big South Fork.

Texas

- The Chihuahuan Desert Research Institute in Fort Davis held the 6th Annual Earth Rocks Science Field Day for fourth- and fifth-graders on October 13. There were hands-on activities, exhibits, and guided tours to introduce and reinforce important concepts in geology, biology, energy, and Earth science. All activities were designed around TEKS/STAR guidelines to improve understanding and retention and support science teachers’ lesson plans.
- The Houston Geological Society (HGS) held various events to celebrate Earth Science Week. The annual Family Energy Festival at the Houston Museum of Natural Science featured a “passport” program that took visitors through hands-on demonstrations, special presentations, and Boy Scout badge activities.
- The Museum of Texas Tech University in Lubbock celebrated on October 15. Event participants saw the museum’s exhibition, galleries, and collection.
- The Witte Museum in San Antonio hosted Family Fossil Day on November 5. Visitors brought fossils for identification. Other activities included excavating a miniature dinosaur and learning how to handle fossils in the field.
- The Heard Natural Science Museum & Wildlife Sanctuary in McKinney collaborated with the Dallas Paleo Society to celebrate National Fossil Day on October 15. Speakers included Ed Swiatovy, paleontological advisor to the Sherman Museum and co-author of “A Fossil Collector’s Guide to the North Sulphur River,” and Roger Farish, co-author of “The Collector’s Guide to Fossil Sharks and Rays from the Cretaceous of Texas.” Activities included demonstrations on preparing recovered fossil remains and a “seeded” fossil sand pit with specimens for children to find.
- Big Bend National Park hosted the event “Fossils of Big Bend National Park: A Lost World Revealed” for National Fossil Day on October 9. A special evening program welcomed back Dr. Thomas Lehman, vertebrate paleontologist from Texas Tech University and longtime researcher of Big Bend’s Cretaceous-age fauna. Dr. Lehman provided an overview of the dinosaurs and environments of the Cretaceous Big Bend. Park Paleontological Technician Steve Wick was on hand to present a life-sized skull cast of the duck-billed dinosaur *Kritosaurus*.
- The Waco Mammoth Site combined National Fossil Day activities with its Fall Festival on October 22. The event included fossil activities for children, an art contest, education stations, face painting, a pumpkin patch, a costume contest, and “Tusk or Treat.”

Utah

- On October 12, the St. George Dinosaur Discovery Site Museum at Johnson Farm held a fossil preparation lab demonstration for visitors. There were also guides for tours and discussions of the world-famous Early Jurassic track site. This site now houses the only Scelidosaurus replica in the Americas.
- Earth Science Education and the Utah Geological Survey celebrated Teachers Trilobite day on October 8. Genevieve Atwood, former state geologist, and other Earth scientists discussed geology.
- The Cleveland-Lloyd Dinosaur Quarry celebrated National Fossil Day on August 29, the final day of the season for public access to the quarry.
- The Utah Geological Survey celebrated Earth Science Week by inviting visitors to observe paleontologists at work in the survey's paleontological lab. Visitors learned about Utah's dinosaurs.
- On October 15, Zion National Park provided two volunteers from St. George Dinosaur Discovery Site to talk about local fossils and show how they are prepared.

Vermont

- The University of Vermont's Department of Geology and the Isle La Motte Preservation Trust hosted an open house at the site of the "World's Oldest Coral Reef." There were guided tours, and the museum at the preserve was opened.

Virginia

- The Virginia Museum of Natural History took part in the second National Fossil Day by hosting an event on October 13.
- Amanda Hackett of Virginia Beach won the Earth Science Week Essay Contest.

Washington

- The Washington governor declared October 9-15 to be Earth Science Week.
- On National Fossil Day, the Burke Museum of Natural History and Culture offered a special day of hands-on activities with real fossils led by geology staff and museum educators for explorers of all ages. The museum offered an outstanding exhibit on Washington's rich geological history and an in-door fossil dig.
- Ginkgo Petrified Forest State Park offered young people activities for National Fossil Day. Programs included Junior Fossil Hunters In Training, Junior Fossil Hunters, Fossil Hunters, and Scavenger Hunts designed to take children and families through the Interpretive Center.
- The Stonerose Interpretive Center and Eocene Fossil Site offered National Fossil Day activities throughout Earth Science Week. Activities included free scheduled field trips for local schools, staff and scientists for classroom visits, presentations, and guest speakers.
- The Washington Geology Library hosted a silent Rock Auction on October 13, raising more than \$1,900 for the library. There was also an educational fossil exhibit for the Rotunda of the Natural Resources Building in Olympia, featuring fossils found in Washington.

West Virginia

- The Clay Center for the Arts and Sciences of West Virginia became a museum partner of National Fossil Day.

Wisconsin

- The Milwaukee Public Museum celebrated National Fossil Day on October 12 with four interactive stops in its Third Planet Exhibit. Interpreters provided instruction at the Torosaur exhibit. Visitors learned about ancient reefs and Earth's oldest fossils.

Wyoming

- Fossil Butte National Monument hosted several events and activities for National Fossil Day. Visitors were invited to learn the art of fossil preparation. Park staff trained participants in the use of a microscope, air scribe, and an air abrasive tool.
- The Lincoln County Library in Kemmerer held a "Storytime" event in which young people sang the National Fossil Song, played a fossilization game, and listened to Ranger Marcia read "Fossils Tell of Long Ago" by Alikei.
- Tate Geological Museum at Casper College hosted a "Fossil Road Show" in which a geologist helped participants identify rocks and fossils. The museum also offered activities such as make-and-take fossil casts, an in-house coloring contest, a fossil fish giveaway, tours, and treats. Children and adults also participated in the Junior Paleontologist program to earn official Junior Paleontologist Badges.
- The University of Wyoming Geological Museum hosted National Fossil Day activities at the Geological Museum on October 12. Experts compared modern bird and animal specimens with fossils, showed a "behind the scenes" look at fossils, and offered various touch carts. Two exciting programs for young people, the Junior Geologist and Geologist-in-Training, were offered.

International Events

Australia

- Geoscience Australia and the Australian Science Teachers Association hosted the 2011 Geologi short film competition to celebrate Earth Science Week. All Australian primary and secondary schools were invited to submit films on “Geology and You.”
- Geoscience Australia hosted the Top GeoShots Photo Competition. Entrants submitted photographs that captured the essence of Earth science. Top Geoshot takes place before and during Earth Science Week. All Australians were invited.
- The Hunter Earth Sciences Discussion Group held its October meeting to coincide with Earth Science Week on October 11 at Customs House, Newcastle. Dr. Silvia Frisia of the University of Newcastle presented a talk titled “From Icehouse to Greenhouse to Icehouse: What Is ‘Normal’ in Earth’s Climate?” The talk covered changes in CO₂ concentrations in the atmosphere from the carbonate record from the Neoproterozoic to the present.

India

- Students of Banaras Hindu University celebrated Geology Day on October 13.

Trinidad and Tobago

- The University of the West Indies Seismic Research Centre (SRC) hosted a public photo exhibit under the global theme “Our Ever-Changing Earth.” The exhibit, held at the National Academy for the Performing Arts in the capital Port of Spain, displayed a range of photos covering the themes of Earthquakes, Volcanoes and Tsunamis and the role of the SRC. The exhibit addressed the global dilemma of coping with geological hazards and disasters they can bring for humans.

United Kingdom

- The Geological Society of London organized “Poetry and Geology: A Celebration,” a special event coinciding with Earth Science Week and National Poetry Day on October 10. The event celebrated links between geology, landforms, and poetry. The event included talks, performances, discussions, and readings by poets.

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NOTE: Because of the large and increasing number of news items citing Earth Science Week activities and resources, the print edition of this report will no longer include clippings. To view the hundreds of press releases and news items promoting awareness of Earth Science Week each year, please go online to www.earthsciweek.org/highlights. Thank you for helping us in our efforts to conserve resources and protect the environment.