



# Earth Science Week 2017

“Earth and Human Activity”

October 8-14, 2017

## Highlights Report Executive Summary

The American Geosciences Institute’s 20th annual Earth Science Week celebrated the theme of **“Earth and Human Activity.”** Focusing on a key concern that many people share today, the program promoted public awareness of what geoscience says about human interaction with the planet’s natural systems and processes.

“The geosciences are essential,” said AGI Outreach Manager Geoff Camphire, “for understanding how we can make the most of opportunities and manage challenges in areas such as energy, technology, climate change, the environment, natural disasters, industry, agriculture, recreation, and tourism.”

### Reaching People

Earth Science Week 2017 reached more than **50 million people** with programs, information, education resources, and activities relating to the geosciences, mostly through direct outreach and coverage in news media online. The program’s reach remained widespread, as people in every U.S. state and more than 16 countries directly participated in events and activities.

Earth Science Week offered a way to participate for virtually anyone. Millions of K-12 students are estimated to have taken part in hands-on, investigative learning activities as part of Earth Science Week, based on usage of the Earth Science Week Toolkit and the program website ([www.earthsciweek.org](http://www.earthsciweek.org)). Many people learned about geoscience in universities, government agency facilities, parks, museums, science centers, and other settings. Hundreds actively participated in the program’s long-running visual arts, video, essay, and photography contests. And many more engaged with Earth Science Week through program innovations that only first emerged in 2017.

### Program Innovations

Earth Science Week 2017 provided the occasion for several program “firsts”:

- Earth Science Week made a big noise about geoscience with the help of National Public Radio’s popular call-in talk show, **Science Friday**. Award-winning host Ira Flatow kicked off a Science Friday Science Club inviting listeners to share their favorite rocks online in a “Neat Rock Challenge.” AGI geoscientists chatted with people nationwide who shared their #neatrock and learned about geoscience. The Science Club connected participants with informative articles, scientific expertise, and an AGI webinar on rocks. Science Friday’s Earth Science Week effort reached an estimated 4.5 million people by radio, website, and social media.
- AGI staff exhibited at **Energy Day** festivals in Houston and Denver as part of a new collaboration with Consumer Energy Alliance. In Denver, AGI staff also exhibited at **Educator Night** at the Denver Museum



## AGI's Geoff Camphire and Juliet Crowell help celebrate Earth science at Denver's Energy Day event.

AGI/Juliet Crowell

of Nature and Science. Tens of thousands of educators and others received Earth Science Week materials through these free events.

- AGI produced a brief video honoring the winner of the **Edward C. Roy, Jr. Award for Excellence in K-8 Earth Science Teaching** and promoting the importance of high-quality education in the geosciences. The 2017 award went to M.J. Tykoski, an exceptional eighth-grade teacher at Cooper Junior High School in Wylie, Texas.
- At the main celebration of the eighth annual National Fossil Day on the National Mall in Washington, D.C., AGI staff educated and entertained visitors with a greenscreen-equipped **"Paleontology Play Space"** photo booth, which was funded by the Paleontological Society. Visitors, who had their pictures taken virtually amid spectacular fossil finds, received photo souvenirs of the day.
- To celebrate the sixth annual Geologic Map Day, the U.S. Geological Survey and AGI held a **"Geologic Open House"** at Great Falls Park in Virginia. Attendees learned about the natural forces that shaped this landscape over billions of years, explored the park's rocky terrain, waterfalls, and took part in guided tours led by USGS geoscientists.
- In a display of bipartisanship, members of the **U.S. House of Representatives** came together to introduce a resolution expressing support for designation of the week of October 8-14, 2017, as Earth Science Week. Representative Jared Polis (D-Colorado) submitted House Resolution 556, on behalf of himself and Representatives Barbara Comstock (R-Virginia) and Dan Lipinski (D-Illinois).
- For the first time, the popular Earth Science Week school-year calendar's classroom investigations featured notations explaining how each activity aligns with the **Next Generation Science Standards**. Teachers consistently report that they look for classroom activities, and this innovation makes activities more relevant than ever.

- New to the Earth Science Week 2017 Photo Contest, AGI debuted an online resource, the **"Earth and Human Activity Here" Photo Map**. Select photo entries are featured on the map, linked to the location of origin. This innovation serves as a powerful educational resource, fueling classroom discussions with eye-catching examples.
- Earth Science Week staged its first-ever exhibit of photos from the program's 2017 photo contest. The **"Earth and Human Activity Here" Photo Exhibit** took place at Washington, D.C.'s Union Station, one of the country's busiest train stations, with some 100,000 passengers visiting daily.
- The new **Earth Science Week Event Registry** enabled participants to promote their events more effectively than ever. All registered events were listed on Earth Science Week's Events In Your Area site.



M.J. Tykoski (left), 2017 winner of the Edward C. Roy, Jr. Award and AGI Earth Science Education Ambassador Sally Jewell (right) at AGI's "Earth as Inspiration" event in Alexandria, Virginia.

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- Earth Science Week finished 2017 with a major event to kick off the next year's program theme, "Earth as Inspiration." AGI welcomed hundreds of educators, students, and others to explore connections between the geosciences and the arts during **"The Late Shift: STEAM-Powered December"** at the Torpedo Factory Art Center in AGI's headquarters city of Alexandria, Virginia. The free event included hands-on activities, demonstrations linking art and geoscience, musical performances, and opportunities to craft "take home" artworks based in Earth science. A highlight of the evening was an address on the importance of geoscience by **AGI Earth Science Education Ambassador and former U.S. Secretary of the Interior Sally Jewell**.





2017 entry by Visual Arts Contest finalist Ian Lee.

## Connections Online

Receiving over 633,000 page views in 2017, the **Earth Science Week website** was accessed by users in 213 countries, territories, and regions worldwide in 2017, according to Google Analytics. Within the site, Classroom Activities pages received over 427,000 views. Classroom Activities remained one of the program's most popular online offerings, with 94 percent of survey respondents rating it as "useful" or "very useful." The Earth Science Week website features resources too numerous to list, including Big Ideas Videos, a national clickable map of Earth Science Organizations, and the program's promotional video and quarterly webcasts.

The monthly **Earth Science Week Update e-newsletter** reached some 6,000 teacher, student, and geoscientist subscribers. The newsletter kept planners and participants up to date on program planning at the national level, encouraged participation in local areas, and provided news on geoscience topics of interest to participants.

Finally, Earth Science Week uses online social networking to reach new audiences, especially young people. The program's presence on **Facebook**, the Internet's most popular networking site, includes an Earth Science Week Fan Page. In addition, web surfers are invited to receive geoscience news, resources, and opportunities by following Earth Science Week on **Twitter**. The number of people learning about Earth Science Week through social media remained impressive in 2017, as more than 155,000 people received program information from AGI and program partners through Facebook, Twitter, and pages maintained by program enthusiasts on **Pinterest**.

**Visual Arts Contest winner David De Costa (center) and others at AGI's "Earth as Inspiration" event.**

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2017 entry by Photo Contest finalist Jill Holz.

## Print Materials

Even in today's high-tech learning environments, educators also repeatedly report that they need print materials to use with students. AGI answered this need once again by distributing some **14,000 Earth Science Week Toolkits** to teachers and geoscientists in 2017. The kit featured AGI's traditional Earth Science Week poster, education and outreach flyer, and school-year calendar showcasing geoscience classroom investigations and important dates of Earth science events. Additionally, program partners' contributions made the 2017 kit one of the richest in recent years, containing more than 30 educational items on a wide variety of geoscience topics.

Program partners assisted in distribution. The number of AGI member societies requesting complimentary Earth Science Week Toolkits for distribution was 18, and the number of state geological surveys requesting complimentary kits for distribution was 29. 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 a number of countries overseas.







2017 Earth Science Week poster by Angela Terry Design.

## Evaluation Findings

Following the event, AGI secured an independent contractor, PS International, to complete a formal external evaluation of Earth Science Week 2017, as it has in past years. Participants were invited to participate in a survey in the closing months of 2017, with a valid response rate of 6.5 percent. Results were overwhelmingly positive:

- Comparing participation last year and plans for next year, 81 percent of survey respondents said they anticipate either increasing or maintaining level participation. Eighty-six percent of respondents rated the program's overall usefulness as "excellent" or "good."
- A large majority (89 percent) said Earth Science Week offers opportunities for teaching and promoting Earth science that they would not have otherwise. Similarly, 92 percent said program resources and activities are very or somewhat important to educating students about geoscience.
- Participants said they were active during Earth Science Week. Many reported specific activities that were highly active. For example, 95 percent reported activities categorized as "most active" (e.g., field trips and outside lessons), "active" (e.g., external speakers and open house discussions), or "somewhat active" (e.g., lesson plans and kit distribution).

## Geoscience Community

AGI organizes Earth Science Week as a service to member societies, with generous help from partners that provide funding, contribute materials, organize events, and publicize the program.

Funding partners in 2017 included the U.S. Geological Survey (USGS); American Association of Petroleum Geologists (AAPG) Foundation; National Park Service; National Aeronautics and Space Administration (NASA); American Geophysical Union (AGU); Geological Society of America (GSA); Association of American State Geologists (AASG); Society for Mining, Metallurgy and Exploration (SME); AmericaView; Archaeological Institute of America (AIA); and Howard Hughes Medical Institute.

*For additional details, please see the full Earth Science Week 2017 Highlights Report, visit online at [www.earthsciweek.org](http://www.earthsciweek.org), or contact staff at [info@earthsciweek.org](mailto:info@earthsciweek.org).*

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