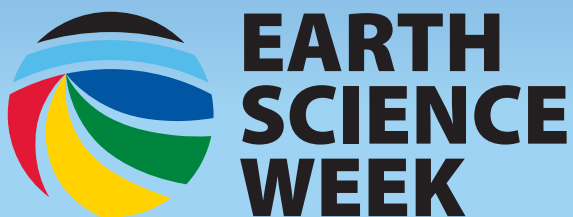


Earth Science Week 2019: Geoscience Is for Everyone

October 13-19, 2019
Highlights Report



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American Geosciences Institute.
ISBN: 979-8619088496

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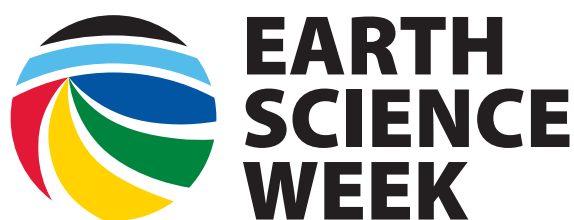
Because of the large and increasing number of news clippings citing Earth Science Week activities and resources, the print edition of the print report no longer includes clippings. To view the hundreds of press releases and news items promoting awareness of Earth Science Week each year, please visit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

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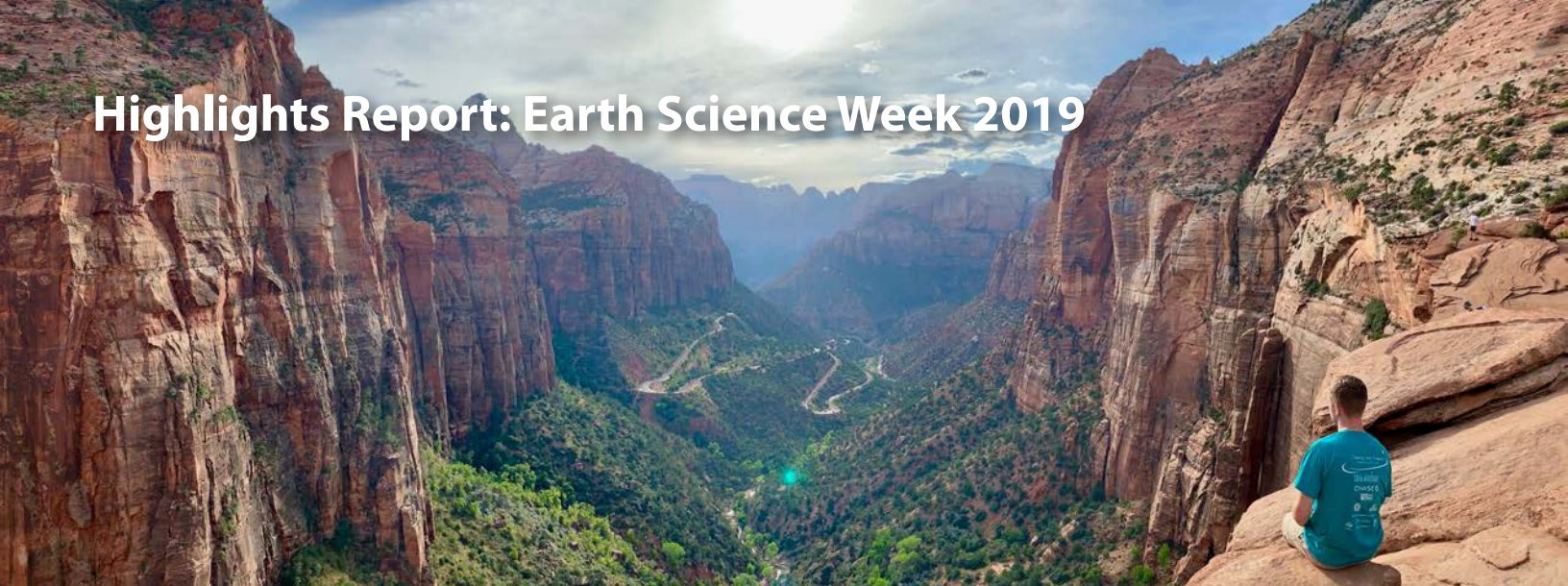
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Front cover: 2019 ESW poster design for AGI by K. Cantner.



Highlights Report: Earth Science Week 2019



A 2019 Earth Science Week Photography Contest finalist entry by Erika Komp.

Introduction

Held October 13-19, 2019, the 22nd annual **Earth Science Week** celebrated the theme of “**Geoscience Is for Everyone.**” The 2019 event emphasized both the inclusive potential and the importance of the geosciences in the lives of all people. Aligned with ongoing efforts to enhance diversity, equity, inclusion, and accessibility in the sciences, the program encouraged individuals of all backgrounds, ages, and abilities to engage with the geosciences in various ways, from geoscience professional activities to civic engagement.

AGI organizes Earth Science Week as a service to member societies, with generous help from partners that provide funding, donate materials, organize events, and publicize the event. Funding partners in 2019 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); IF/THEN (Lyda Hill Philanthropies); Keystone Policy Center; Nautilus; Schlumberger; Society for Mining, Metallurgy and Exploration (SME); Society of Exploration Geophysicists; AmericaView; Water Footprint Calculator/Grace Communications Foundation; ExxonMobil; Energy Day (CEEf/CEA); and the Geothermal Resources Council.

Earth Science Week **participation remained strong**. People in all 50 states and more than 26 countries participated in events and activities. The Earth Science Week website received over 489,000 page views in 2019. In addition, hundreds of people nationwide actively participated in the program’s visual arts, video, essay, and photography contests.

Earth Science Week events ranged from educators teaching Earth science activities in their classrooms to public

outreach events with local artists. A detailed list of events from across the country and around the world can be found in the second half of this report. This list represents only events reported directly to AGI, so please notify Earth Science Week staff if you know of events that could be added.

Additional events are highlighted on the Earth Science Week website (www.earthsciweek.org/highlights), which features press releases and other items by members of the geoscience community, as well as news media promoting Earth Science Week. Television and radio news programs covered Earth Science Week on local stations in several states. Each year, web, print, and broadcast media coverage of Earth Science Week, along with direct outreach by AGI, reach more than **50 million people**.

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 2019 events and publicity inspires you to develop your own Earth Science Week activities. Please visit www.earthsciweek.org for guidance on event planning, materials, resources, and support. Contact Earth Science Week staff at info@earthsciweek.org for assistance in planning for Earth Science Week.

Because of the large number of news clips citing Earth Science Week activities and resources, the print edition of this report no longer includes such clips. To view the many press releases and news items promoting awareness of Earth Science Week each year, please visit online at www.earthsciweek.org/highlights. Thank you for helping us in our efforts to conserve resources and protect the environment.



The winning entry in the 2019 ESW Photography Contest by Tonya Boone.

Key Partnerships and Efforts

Earth Science Week's success depends on the collaboration of key partners. In 2019, AGI pursued signature initiatives and forged partnerships with numerous organizations (listed alphabetically):

Educators seeking teaching resources and other support were directed by AGI to the **American Association of Petroleum Geologists** (AAPG) and the AAPG Foundation, both longstanding supporters of Earth Science Week. In addition, Earth Science Week promoted awareness of AAPG's Distinguished Lecturer and Teacher of the Year programs. AAPG Student Chapters received kits. Program participants were encouraged to read and use "Visiting Geoscientists: An Outreach Guide for Geoscience Professionals," a handbook co-produced by AGI and AAPG's Youth Education Activities Committee. Program participants were encouraged to attend AAPG's Annual Convention and Exhibition. AAPG's "Using Energy Resources Wisely" activity was featured in the Earth Science Week 2019 activity calendar.

The **American Geophysical Union** (AGU) continued its role as a supporting program partner in 2019 with the contribution of funds as well as expertise. To gear up for Earth Science Week's 2019 theme of "Geoscience Is for Everyone," participants were invited to take part in an AGI webinar on science careers and the LGBTQ community. The educator kit included an AGU poster celebrating women in Earth and space science over the past century. Earth Science Week's 2019 activity calendar featured AGU's "Predict the Flow" classroom activity. AGU's annual meetings, professional development workshops, programs for college students, print and electronic resources, and GIFT (Geoscience Information for Teachers) workshops were promoted through the Earth Science Week e-newsletter, website, and activity calendar.

Earth Science Week 2019 promoted awareness of the **American Institute of Professional Geologists** (AIPG), an AGI member society that advocates for geologists and certifies their credentials. AIPG offers several PowerPoint presentations online for free download, presenting career information for young, newly graduated geoscientists. AIPG also provided a geologic-timescale bookmark for the educator kit. The activity calendar featured AIPG's "Shoebox Geologist" education activity.

The **American Meteorological Society** (AMS) promoted two teacher professional development programs focusing on the atmosphere and oceans in 2020. Project Atmosphere offers comprehensive teacher professional development program based on studies in the atmospheric sciences. Project Ocean provides teacher professional development focusing on studies of the physical foundations of oceanography. AMS also provided a bookmark for the educator kit, connecting program participants with information about K–12 teacher professional development and related resources.

AmericaView, a longtime Earth Science Week partner and financial supporter, provided a "Geoscience Is Everywhere" poster for the 2019 educator kit. The poster, supported by USGS and NASA, touched on topics including Landsat satellites and Earth Observation Day.

The **Archaeological Institute of America** (AIA), a continuing Earth Science Week partner and supporter, provided a classroom activity on "The Interconnected Ancient World" for the program's 2019 activity calendar. In addition, the program promoted awareness of and participation in AIA's International Archaeology Day, which takes place annually on the final day of Earth Science Week.

Earth Science Week directed participants' attention to the **Association of American Geographers** (AAG), an AGI

member society that offers an array of web resources for K–12 and college-level instruction. For example, AAG’s Center for Global Geography Education offers online modules for undergraduate courses in geography and related social and environmental sciences. GeoSTART helps middle- and high-school students develop geography, Earth science, and spatial thinking skills using NASA Earth Observing Missions remote sensing imagery and related data.

The **Association of American State Geologists** partnered with AGI and the USGS to support Geologic Map Day during Earth Science Week 2019. State geologists nationwide made geologic maps of their states available on their websites for students to use in classroom activities on Geologic Map Day.

Program participants learned about resources offered by the **Association of Environmental and Engineering Geologists** (AEG). Resources include technical publications, section and chapter meetings, and special educator sessions at the annual meeting. Opportunities for professional geologists to speak to classes are also available, as well as resume writing workshops and scholarships for students.

Earth Science Week promoted awareness of a website of great value to educators, AGI’s **Center for Geoscience & Society**. Largely through its Education GeoSource database, the center enhances geoscience awareness across all sectors of society by generating new approaches to building geoscience knowledge, engaging the widest possible range of stakeholders, and creatively promoting existing and new resources and programs. The Critical Issues Program also provides a portal to decision-relevant, impartial geoscience information relevant to classroom discussions.

Program participants learned about three online videos by the **Center for Ocean Sciences Education Excellence** (COSEE) depicting dramatic changes in Alaska’s marine ecosystems through interviews with scientists. The videos were produced by COSEE Alaska in cooperation with other geoscience organizations.

As promoted by Earth Science Week, the **Climate Literacy and Energy Awareness Network** (CLEAN) online portal curates a major collection of climate and energy science educational resources and supports a community of professionals committed to improving climate and energy literacy. Key components include the CLEAN collection of climate and energy science resources, CLEAN guidance and professional development webinars for teaching climate and energy science, and the CLEAN network of professionals committed to

improving climate and energy literacy. For this year’s Earth Science Week Toolkit, CLEAN provided a bookmark featuring a link to key resources.

Earth Science Week staff traveled to Houston to exhibit at the Energy Day festival hosted by program partner **Consumer Energy Alliance**, an advocacy organization that provides consumers with unbiased information on energy issues. AGI staff shared geoscience-based energy information with thousands of students, teachers, and other community members.

Program participants were invited to take part in a survey conducted by a longstanding Earth Science Week partner, the **Cooperative Institute for Research in Environmental Sciences** at the University of Colorado Boulder. Findings informed development of educational resources and activities on polar topics for K–12 students.

The **Critical Zone Observatories (CZO)** provided an informational flyer on education and outreach resources, featuring a “Make Your Own Landslide” activity, for the Earth Science Week Toolkit in 2019. Earth Science Week participants also learned how to access resources on CZO’s K–12 Education web page.

Earth Science Week participants were encouraged to celebrate **Earth Day** in April 2019 with classroom activities, experiments, and investigations exploring the science behind how the world works. Because Earth Science Week offers education materials, information, and tools throughout the year, school audiences were urged to make use of tools highlighting the theme of “Geoscience Is for Everyone.”

For this year’s Earth Science Week Toolkit, **EarthScope** provided an informational sticker promoting the program’s educational “Mapping Earth Science Mysteries” website.

ExxonMobil, a continuing Earth Science Week partner, continued its support of the program. During summer 2019, ExxonMobil Exploration and AGI partnered to hold a five-day Earth Science/STEM Teacher Leadership Academy in Houston. The academy provided K–8 teachers with Earth science content, hands-on activities, resources and field experiences for them to use with their students in the classroom and with their colleagues in professional development settings. In addition, the activity calendar included in the Earth Science Week 2019 Toolkit featured a “Geoscience Reading Is for Everyone” activity, courtesy of ExxonMobil.

For the Earth Science Week 2019 Toolkit, the **Gemological Institute of America** provided a GemKids poster

exploring what a gem is, how they are formed, how they are found, and how they are processed.

Through Earth Science Week, participants learned about educational resources and programs of the **Geological Society of America (GSA)**, a longtime program partner. Featured education and outreach programs included the GeoTeacher program and Teacher GeoVenture trips. GSA also organized International EarthCache Day at the start of Earth Science Week 2019 and contributed as an active partner in the Geologic Map Day initiative. Earth Science Week's 2019 activity calendar included GSA's "3D Geology" activity.

Program participants were directed to **Geology.com**, an Earth Science Week partner that provides a variety of geoscience materials including daily Earth science news, maps, an online dictionary of Earth science terms, and information on geoscience careers, as well as resources for teachers, including links to lesson plans from major Earth science organizations. Geology.com, in turn, covered Earth Science Week announcements, programs, and activities throughout the year.

The **Geothermal Resources Council** provided an informational poster detailing the history, forms, and uses of geothermal energy (in both English and Spanish).

Through the Global Learning and Observations to Benefit the Environment (GLOBE) program, Earth Science Week participants learned how to take part in **GLOBE Observer**, an international network of professional scientists and citizen scientists collaborating to promote education about environment and climate.

To help teachers and students delve into the science behind current events, Earth Science Week continued to direct them to the **Incorporated Research Institutions for Seismology (IRIS)** website. IRIS provides educational resources including PowerPoint presentations, animations, and visualizations, as well as links to Spanish-language materials and USGS data that deal with current events such as earthquakes. For the 2019 educator kit, IRIS also provided a flyer detailing a number of free educational resources, including a mobile-device app for exploring earthquake data online.

Lyda Hill Philanthropies became a major Earth Science Week partner in 2019, supporting the launch of an initiative to share the inspiring stories of four leading women geoscientists recently named IF/THEN Ambassadors. To encourage the participation of young women in science, technology, engineering, and math (STEM) fields, Earth Science Week launched a new website featuring profiles

of IF/THEN Ambassadors and educational activities linked to their work as geoscientists.

Earth Science Week participants were invited to celebrate the centennial of program partner **Mineralogical Society of America (MSA)**. A two-day event featured a symposium at the Carnegie Institution for Science in Washington, D.C. More than a dozen sessions explored exciting new directions in mineralogy, geochemistry, and petrology.

The **Minerals Education Coalition (MEC)** of the **Society for Mining, Metallurgy, and Exploration**, an AGI member society, supported Earth Science Week in 2019. MEC provided a "Grown or Mined Game" postcard for the educator kit, as well as a 2019 calendar activity entitled "Rocks Ahoy!"

The **MOSAIC (Multidisciplinary drifting Observatory for the Study of Arctic Climate)** expedition invited educators to connect students to one of the most extensive Arctic research expeditions ever conducted. From September 2019 through October 2020, more than 500 scientists from over 19 nations are spending a year in the Arctic ice to collect important data on the Arctic climate system. Through the MOSAIC Monday program, students tracked the expedition in real time on a map, graphed Arctic oceanographic data from the ship, watched video interviews with scientists and crewmembers, and engaged in short Arctic-related engagements that support a Next Generation Science Standards curriculum.

Earth Science Week directed participants' attention to a joint effort by AGI and the **National Association of Geoscience Teachers (NAGT)** to strengthen implementation of the Next Generation Science Standards (NGSS) at the state level. Science educators have regularly participated in free webinars and joined discussions online since the 2015 NGSS Summit. Earth Science Week participants have been invited to take advantage of NAGT offerings including online lessons, NAGT's Outstanding Earth Science Teacher Awards, the Dorothy Stout Professional Development Grants, and the Journal of Geoscience Education.

NASA, a founding partner of Earth Science Week, provided materials in the Earth Science Week 2019 Toolkit (and online) designed to frame phenomena-based student investigations. NASA included five resources in the educator kit: an Earth Observatory Kids ruler; an Earth Observatory Kids booklet; an InSight poster on exploring Mars; a Kepler Mission poster; and a GLOBE Program flyer. Earth Science Week's 2019 activity calendar also featured a "GLOBE Program" classroom activity from NASA. Throughout the year, Earth Science Week

SUMMARY OF ACTIVITIES

• KEY PARTNERSHIPS AND EFFORTS

promoted awareness of NASA's online offerings, such as the Diversity & Inclusion Leadership Video Series, EO Kids, NASA Educator Toolkit, National Parks from Space, Earth Wheel, NASA Earth Observatory, Mapping Our World Interactive, and NASA Wavelength.

The **National Cave and Karst Research Institute** (NCKRI), an Earth Science Week partner, provided a flyer for the educator kit, detailing a "Make Your Own Speleothem" activity for students.

The **National Earth Science Teachers Association** (NESTA), a longstanding Earth Science Week partner, continued its vital role in helping AGI promote excellence in geoscience education. At the National Science Teaching Association Annual Conference, 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. NESTA members also received copies of the Earth Science Week 2019 poster in their association newsletter. Included in the 2019 educator kit was a postcard connecting program participants with The MEL Project, an education initiative on "connecting models and evidence" in geoscience. NESTA also provided a sticker for the educator kit, connecting program participants with the Earth, space, and environmental education resources of the Concord Consortium.

Earth Science Week raised awareness of **National Environmental Education Week** (EE Week), the nation's largest environmental education event. Focusing largely on STEM topics, EE Week connected educators with resources to promote K–12 students' understanding of the environment.

Educators were invited to apply for the 2020 Grosvenor Teacher Fellowship program organized by the **National Geographic Society** with Lindblad Expeditions. This program recognizes pre-K–12 classroom teachers and informal educators who show dedication to geographic education.

Earth Science Week promoted the **National Groundwater Association's** (NGWA) Groundwater Awareness Week in March 2019. The AGI member society offers Groundwater Adventures, a website providing educational activities for young people.

In the Earth Science Week 2019 Toolkit, the **National Oceanic and Atmospheric Administration** (NOAA) provided a booklet for educators on climate literacy, detailing "essential principles of climate science." In addition, Earth Science Week 2019 directed participants to NOAA's online multimedia education resources, including lesson plans, real-world data, instructional games, videos, and more.



Mark Orzabal and family at the National Fossil Day event at the Grand Canyon in 2019.

Image credit: AGI, background by NPS/Diana Boudreau

A continuing Earth Science Week partner, the **National Park Service** (NPS) continued for the 10th 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, once again reached millions of people. AGI staff supported the National Fossil Day event at Grand Canyon National Park with Earth Science Week's Fossil Photo Booth. Earth Science Week promoted awareness of NPS's interactive Web Ranger program, which helps people of all ages learn about the national parks. Program participants also learned about the NPS National Natural Landmarks program, which recognizes and encourages the conservation of sites that contain outstanding biological and geological resources. NPS videos on climate change were made available to program participants. A flyer described the geodiversity of our national parks, and a postcard promoted the National Fossil Day event taking place at Grand Canyon National Park. Earth Science Week's 2019 activity calendar also featured a classroom activity on "Growing Speleothems."

Earth Science Week partnered with the **National Science Teaching Association** (NSTA) again in 2019, reaching science educators nationwide. Program participants learned about "Freebies for Science Teachers" on the NSTA website. Also, AGI participated once again at the NSTA Annual National Conference in St. Louis, Missouri, sharing Earth Science Week and other education material for science teachers.



The 2019 NSTA National Conference in St. Louis.

Credit: AGI/S. McGee

Earth Science Week participants learned about K–12 soil resources offered online by the **Natural Resource Conservation Service** (NRCS). Resources for the elementary level include frequently asked questions even soil songs. Middle and high school level resources include soil facts, health and quality, and state-specific soil information. Lesson plans and other resources are also accompanied by links to other websites.

Earth Science Week partnered with **Nautilus**, a respected science magazine, to advance the 2019 theme. Nautilus, which hosts AGI's EARTH online news channel, published a special edition of its magazine. The special edition, featured in the Earth Science Week 2019 Toolkit and distributed at events, focuses on geoscientist author Hope Jahren and introduces a new website designed to promote the inspiring stories of women geoscientists and offer related educational activities.

The **Nutrients for Life Foundation** provided a flyer on educational resources dealing with the role that crop nutrients play in feeding populations worldwide, including information on soil science and plant science.

Gearing up for National Fossil Day, Earth Science Week directed program partners' attention to the **Paleontological Research Institution** (PRI), an AGI member society providing education materials and opportunities for science teachers and students at all grade levels. The online Teacher Friendly Guide, for example, gives brief geologic histories of every region of the United States.



Participant Maria Rodriguez at the National Fossil Day event at the Grand Canyon in 2019.

Image credit: AGI, background by NPS

For National Fossil Day, AGI collaborated with NPS partners and other geoscience organizations to conduct a National Fossil Day event at Grand Canyon National Park. AGI educated and entertained visitors with a green screen-equipped "Paleontology Play Space" photo booth, funded by the **Paleontological Society**, at the Grand Canyon Visitor Center.

Longtime program partner **Partners in Resource Education** (PRE) provided activities focusing on the geoscience of conservation. The 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 2019, PRE collaborated to promote awareness of Earth Science Week, and vice versa.

Science Friday, the popular weekly call-in talk show broadcasted on public radio, continued its partnership with Earth Science Week in 2019. The activity calendar included in the educator kit featured an "Earth's Magnetic Field" activity, courtesy of Science Friday.

Schlumberger Excellence in Educational Development (SEED) is a nonprofit education program that empowers educators to share their passion for learning and science with students. In addition to promoting awareness of SEED and other resources, AGI has partnered with the program to provide geoscience education resources in both Spanish and English since 2010.

For teachers aiming to "shake up" education, Earth Science Week shone a spotlight on the **Seismological Society of America** (SSA). SSA's website provided seismic eruption models, wave animations, plate tectonics simulations, information on tsunamis, and more. SSA also offered publications, information on seismology careers, a distinguished lecturer series, and an electronic encyclopedia of earthquakes.

Program participants received information about **Smithsonian Education**, which offers a fascinating exploration of Earth's soil with its "Dig It! The Secrets of Soil" exhibition. Information, videos, expert instruction, and activity sheets are available online.

Earth Science Week participants were encouraged to take advantage of offerings of the **Society of Exploration Geophysicists** (SEG), which provides programs for educators and students. For example, the distinguished lecturer series and honorary lecturer series both enabled students to meet professional geophysicists, learn about groundbreaking research in the field of seismic research, and obtain valuable career information.

Advanced by the **Society of Petroleum Engineers** (SPE), the Energy4Me program offers teachers a collection of tools for teaching about oil, gas, and other energy sources, including classroom activities, experiments, and presentations, as well as teacher workshops and energy education materials for the classroom.

The **Soil Science Society of America** (SSSA), a long-standing program partner, provides lessons, activities, fun facts, sites of interest, and soil definitions for the novice soil scientist online. These resources were promoted by the October event. For the Earth Science Week 2019 Toolkit, SSSA provided a “State Soil” fact sheet, which also included information on soil science careers. Earth Science Week’s 2019 activity calendar also featured a “State Soil Investigation” classroom activity courtesy of SSSA.

SWITCH Energy Alliance provided an informational flyer on this video-based energy education project, including online resources, for the Earth Science Week 2019 Toolkit.

TERC, an Earth Science Week partner, provided a flyer for the educator kit, featuring information on EarthLabs, a free online curriculum resource.

For the Earth Science Week 2019 Toolkit, **UNAVCO** provided an “I Want to Be a Geoscientist” flyer profiling professional geoscientists (in both English and Spanish) as well as a UNAVCO ruler including information on plate boundaries and motions.

The **U.S. Bureau of Land Management** (BLM), a continuing Earth Science Week partner, provided a flyer including a dinosaur activity sheet for the 2019 educator kit. BLM also was the subject of Earth Science Week promotions, including its Classroom Investigation Series online.

The **U.S. Department of Energy** (DOE) invited educators to explore DOE’s websites for the National Renewable Energy Laboratory. Earth Science Week participants were made aware that AGI’s Center for Geoscience & Society produced education materials, including videos in English and Spanish, education guides, a “quick start” guide to energy literacy, lesson connections, and guidance on aligning energy literacy lessons with the **Next Generation Science Standards**. Essential Principles and Fundamental Concepts for Energy Education resources were made available on the DOE website.

Earth Science Week also promoted awareness of the **U.S. Environmental Protection Agency**’s collection of free resources to enhance middle school students’ understanding of climate change impacts on the United States’ wildlife and ecosystems. The online toolkit includes case studies, activities, and videos based on climate science, environmental education, and stewardship information.

Overlapping Earth Science Week 2019, National Wildlife Refuge Week was held October 13-19. The event,

celebrating the richness of the 550 units that make up America’s National Wildlife Refuge System, was sponsored once again by the **U.S. Fish and Wildlife Service** (FWS), an Earth Science Week partner. Participants were encouraged to explore geoscience at a wildlife refuge.

Earth Science Week participants learned about online education resources offered by the **U.S. Geological Survey** (USGS), a continuing Earth Science Week partner and supporter, as well as the thousands of free images and over 69,000 searchable publications such as maps, books, and charts provided online by the agency. Participants learned about the USGS partnership with West Virginia University and the West Virginia Geological and Economic Survey to host the second annual Appalachian Geoscience GeoCamp, which hosted high school students in Morgantown, W.Va., in June 2019. Geoscience faculty conducting research or teaching geologic mapping were encouraged to submit EDMAP Program proposals focusing on geologic mapping to support upper-level undergraduate and graduate students at their colleges or universities. Earth Science Week’s 2019 activity calendar included a “Find a Feature Challenge” activity courtesy of USGS. Also, USGS continued its leadership role as a founding partner of Geologic Map Day in 2019, providing support as well as its National Geologic Map Database’s MapView, which offers a mosaic view of published geologic maps.

Education resources of the **Water Environment Federation** (WEF) were promoted among Earth Science Week participants, especially during World Water Day in March. Program participants learned about clean water and real-life professionals who keep water resources safe. WEF is a nonprofit association that provides technical education and training for water quality professionals.

Earth Science Week 2019 helped participants estimate their water-usage habits with the GRACE Communications Foundation’s **Water Footprint Calculator**. This online tool illustrates how people’s actions impact water use, asking a series of questions about daily activities calculating the number of gallons used after each question. The educator kit also featured a postcard promoting the program.

Earth Science Week continued promoting awareness of **Windows on Earth**, an online educational project that features photographs taken by astronauts on the International Space Station. The site is operated by TERC, an educational non-profit, in collaboration with the Association of Space Explorers (the professional association of flown astronauts and cosmonauts), the Virtual High School, and CASIS (Center for Advancement of

Science in Space). The images help show Earth from a global perspective.

Earth Science Week promoted PLAN!T NOW's **Young Meteorologist Program** taking students on a severe weather preparedness adventure. The program was

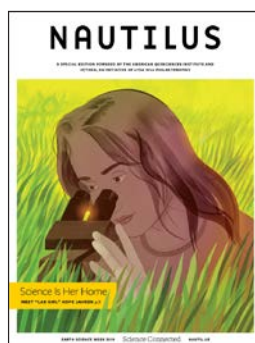
developed in partnership with NOAA's National Weather Service and the National Education Association. Young Meteorologists were given opportunities to put their knowledge to work in hands-on activities and community service projects, learning about severe weather science and safety.

Earth Science Week Toolkits

AGI assembled some **10,000 Earth Science Week Toolkits**, virtually all of which were distributed to teachers and geoscientists before the end of 2019. Fifteen AGI member societies requested complimentary Earth Science Week Toolkits for distribution, and 25 state geological surveys requested complimentary kits for distribution.

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 and around the world. The 2019 toolkit 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.

The Earth Science Week 2019 Toolkit featured a special edition of the science magazine Nautilus profiling geoscientist author Hope Jahren and introducing an educational initiative built on the work of four of the leading women geoscientists recently named **IF/THEN Ambassadors** by Lyda Hill Philanthropies. IF/THEN, an initiative created and



funded by Lyda Hill Philanthropies, aims to encourage the participation of girls and women in science, technology, engineering, and math (STEM) fields. Highlighting the theme of "Geoscience Is for Everyone," the special edition promoted the launch of a new website featuring the profiles of selected IF/THEN Ambassadors and educational activities based on their work in geoscience. AGI and its partners also disseminated IF/THEN materials through the Earth Science Week website, the Nautilus Women in Science and Engineering Channel, and the AGI/Nautilus EARTH channel, as well as additional events and online outlets.

Continuing recent years' trend, the 2019-20 school-year calendar's classroom investigations featured notations explaining to educators exactly how each activity aligns with expectations outlined in the **Next Generation Science Standards**. Additionally, program partners' contributions, many of which also included activities aligned with the standards, made the Earth Science Week 2019 Toolkit one of the richest in recent years.

The **Online Toolkit** was included downloadable resources available from past Earth Science Week celebrations. Users can browse resources by theme/year, type of resource, and Next Generation Science Standards (NGSS) topics. The Online Toolkit houses resources dating back to 2014 and is a feasible option to organizations that want to lower their paper use, as well as users who are limited by shipping and printing costs.

Web Resources

According to Google Analytics, the **Earth Science Week website** was accessed by users in **220 nations, territories, and regions** worldwide in 2019. The program website (www.earthsciweek.org) delivers essential resources for educators throughout the year. As in past years, the Earth Science Week website was updated regularly to reflect the new theme, contests, proclamations, events, initiatives, and classroom activities for 2019. The entire site received more than 489,000 page views. Within the

site, Classroom Activities pages received over 329,000 views. Contests pages received over 26,000 views. Big Ideas Activities pages received over 8,000 views.

Promoting high-quality learning activities that stimulate experiential learning and mobilize conceptual thinking in the geosciences, Earth Science Week 2019 advanced the theme "Geoscience Is for Everyone" by launching its new **Diversity, Equity, and Inclusion Strategies** page

for educators online. The page shows how inclusive activities can be geared to serve the needs of all learners — regardless of age, background, or identity — allowing them to participate fully in the learning process. A selection of strategies designed to support inclusive activities is organized under headings given in Appendix D of the Next Generation Science Standards. Each strategy is also accompanied by an example of a related geoscience-focused learning experiences.

In addition, program participants were invited to take part in a free webinar titled “**Operationalizing the Earth Science Week Theme in K–12: Geoscience Is for Everyone!**” On October 8, the NGSS-ESS (Next Generation Science Standards–Earth System Science) Working Group showcased efforts around diversity and inclusion in the geosciences, with an emphasis on K–12 connections and resources. The webinar, as with other NGSS-ESS Working Group webinars, was posted online.

Program participants hosting events during Earth Science Week 2019 were invited to let people know about it at **Events in Your Area**. This web page provided information on events taking place through program partners in each state, such as exhibits, tours, lectures, and open houses. The **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.

In addition, participating groups could be listed in **Earth Science Organizations**, an online map that offers clickable links to Earth Science Week events taking place at parks, museums, science and technology centers, university geology departments, local geological societies, and other nearby locations.

Promoted through various online channels, AGI’s **Earth Science Week promotional video** trumpeted the importance of the geosciences and the celebration’s role in promoting public awareness. This brief, exciting, eye-popping video answers key questions: Why is Earth science a big deal? How does Earth Science Week help promote learning and teaching about the subject? And what can students, educators, community partners, and others do to get involved?

While exploring the Earth Science Week theme of “Geoscience Is for Everyone,” science teachers and students were invited to consider the ways that people showcase and access information on Earth systems in a variety of forums. The **Our Shared Geoheritage** and **Visualizing Earth Systems** pages on the Earth Science Week website continue to be popular resources on the Earth Science Week website. Our Geological Heritage features

educational material on this heritage and links users to recommended resources, including downloadable reports, articles, blogs, geoheritage locations, and learning activities. The page also features geoheritage-related classroom activities and links to information on geoheritage in every state. Visualizing Earth Systems links users to dozens of recommended visualizations dealing with energy, climate, minerals, water, hazards, and other topics. In addition, the page links users to overviews of these topics provided by AGI’s Critical Issues Program.

Once again AGI offered four quarterly **Earth Science Week Webcasts** in 2019, expanding the program’s use of online formats and media for public outreach. The free webcasts provided lively overviews of Focus Days (spring), Contests (summer), the Toolkit (autumn), and the Roy Award (winter). Each roughly five-minute tutorial includes a wealth of online links, which viewers can click during the narrated presentation to review available resources.

Program participants were encouraged to visit the continually updated Earth Science Week **Classroom Activities** page for more than 200 free learning activities, most of them contributed by leading geoscience agencies and groups. Activities are organized and searchable by various criteria, including specific Earth science topics. To find the perfect activity for a lesson, teachers can search by grade level and science education standard. Maybe most useful, they also can search among 17 categories of Earth science topics, from energy and environment to plate tectonics and weathering.

AGI provided a set of free online videos and other electronic resources to help students, educators, and others explore the “big ideas” of Earth science during Earth Science Week 2019 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. The videos are available on YouTube and TeacherTube. The Earth Science Week website also provides dozens of classroom activities linked to the “big ideas.”

A page dedicated to **Geoscience Career, Scholarship, and Internship Resources** remains on the program website. Another page of links includes external connections to sites featuring resources on key topics such as chemistry, climate, drought, earthquakes, energy, floods, hurricanes, landslides, sinkholes, soil, tornadoes, tsunamis, volcanoes, and wilderness fires.

Finally, Earth Science Week makes ample use of 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**. Tweets are sent frequently, whenever there is valuable news or information to share. The number of people learning about Earth Science Week through social media remained impressive in 2019, with the program attracting more than 3,300 Facebook followers and over 226,000 Twitter impressions.

Contests

AGI held contests in connection with Earth Science Week for the 19th consecutive year. 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. Earth Science Week continued expanded eligibility for its photo contest to allow international members of **AGI Member Societies** and **AGI International Affiliates** to participate.

Four contests continued to provide ways for many people to participate in Earth Science Week. Photos, art, videos, and essays were submitted by hundreds of people. Each first-place winner received \$300 and a copy of AGI's *The Geoscience Handbook*. Entries submitted by winners and finalists were posted online.

Elizabeth Xu of Sugar Hill, Georgia, won first place in the visual arts contest with a creative and colorful drawing of a young person discovering the natural world. Finalists were Emre Anderson, Ares Bandebo-Cambra, Emily Oglesby, and Justin Xu. Students in grades K–5 made two-dimensional artworks illustrating the theme **"Earth Science and Me."** Tonya Boone of Williamsburg, Virginia, won first place in the photo contest with an image of her family hiking the Sólheimajökull glacier in Iceland. Finalists were Kristen Carpio, Erika Komp, Sophia Lissin, and Sharon Zhou. Submissions illustrated the theme **"Exploring Earth Science."** Vedika Amin of Mumbai, Maharashtra, won first place in the essay contest with a paper on **"Why Earth Science Is for Everyone."** Finalists were Hope Gantt, Ghena Kubba, Evelyn Rousseau, and Amanda Von St. Paul. Students in grades six through nine wrote essays of up to 300 words addressing why it is important for Earth science to be accessible,

Newsletter

The monthly **Earth Science Week Update** newsletter reached some 5,000 teacher, student, and geoscientist subscribers in the past year. The 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. Besides highlighting worthwhile resources, these monthly e-mail updates reinforce the belief that geoscience education is a priority throughout the year, not only for one week each October.



The winning entry in the 2019 Earth Science Week Visual Arts Contest, by Elizabeth Xu.



Sharon Zhou's Photography Contest entry.

SUMMARY OF ACTIVITIES

• CONTESTS

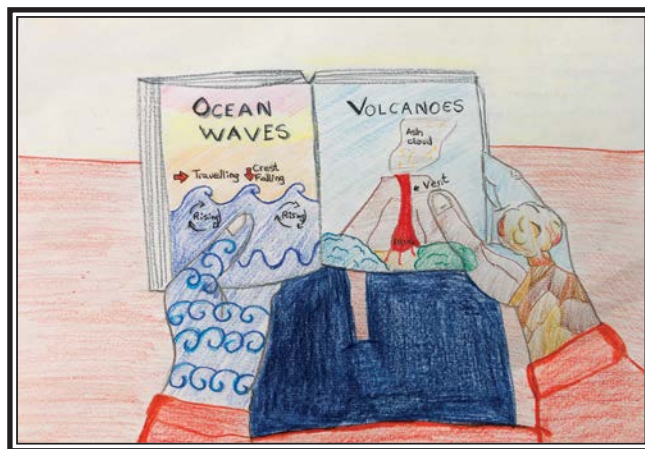
inclusive, diverse, and equitable. Anish Aradhey won first place in the video contest with an animation and song on “Earth Science Unity: Why Earth Science is for Everyone.” Finalists were Brooke Laine, and the team of Elyas Masrouh and Abdullah Nauman. Individuals and teams created brief, original videos telling viewers how people of various backgrounds contribute to make Earth science happen through “Many Paths to Earth Science.”



A finalist entry by Kristen Carpio for the Photography Contest.



Emre Anderson's ESW Visual Arts Contest entry.



A Visual Arts Contest entry by Ares Bandebo-Cambra.

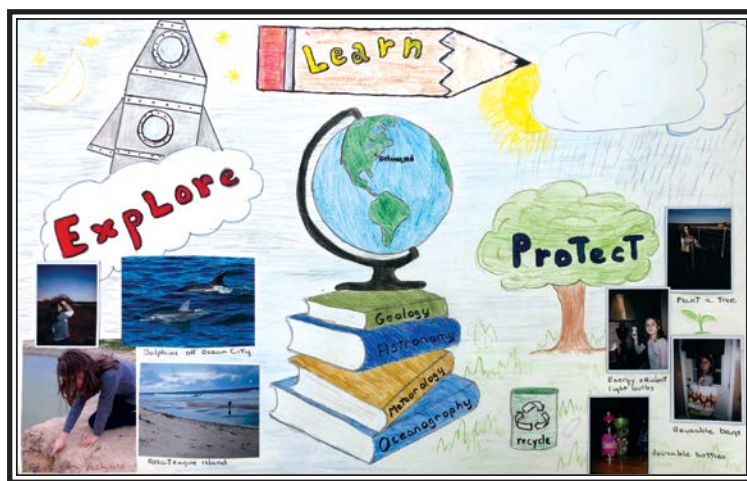


A finalist entry by Justin Xu for the ESW Visual Arts Contest.



Sophia Lissin's finalist entry to the ESW Photography Contest.

Emily Oglesby's finalist entry for the Visual Arts Contest.



Earth Science Teacher Award

For the 12th consecutive year, AGI and the AGI Foundation offered the **Edward C. Roy Jr. Award for Excellence in K–8 Earth Science Teaching**. The 2019 award went to Sergio de Alba, a sixth-grade teacher at R.M. Miano Elementary School in Los Banos, California. In addition to teaching, de Alba is highly involved in community projects geared towards science inquiry and multi-cultural involvement in science. He has developed school-wide programs on the importance of science education, as well as gained funding through grants and donations for classroom programs benefiting students.

De Alba received a \$2,500 prize and an additional grant of \$1,000 to enable him to attend the National Science Teaching Association 2019 National Conference to accept the award during a reception hosted by the National Earth Science Teachers Association. Finalists for the award were Joseph C. Perry of Palmyra-Macedon Middle School in Palmyra, New York, and Jill A. Weaver of Valley View Junior High School in Farmersville, Ohio.

AGI's Ed Robeck and 2019 Ed Roy Award winner Sergio de Alba.
Image credit: AGI/E.C. Robeck



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. 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.

Focus Days

Earth Science Week 2019 kicked off on Sunday, October 13, with the 12th annual **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 14, educators and young people were encouraged to explore "big ideas" as part of **Earth Science Literacy Day**. The AGI "Big Ideas of Earth Science" videos provided on YouTube and TeacherTube outline 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, the Earth Science Week website 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 2019, students and educators nationwide were invited to take part on the Tuesday of Earth Science Week, October 15. AGI's online NCLI Day Guide provided everything needed to plan a local NCLI Day event. The free guide provided 17 outdoor activities, as well as detailed recommendations for creating partnerships, planning logistics, reaching out to the local media, and following up in the classroom.

Also on the Tuesday of Earth Science Week 2019, participants were invited to take part in **Earth Observation Day**. Previously celebrated at other times of the year, this October 15 event aimed to engage students and teachers in remote sensing as an exciting and powerful educational tool. The event was a STEM educational outreach event of AmericaView and its partners. AmericaView is a nationwide partnership of remote sensing scientists who support the use of Landsat and other public domain remotely sensed satellite data through applied remote sensing research, K–12 and higher STEM education, workforce development, and technology transfer. Participants made use of lessons and activities by AmericaView and other organizations, as well as additional Earth Observation Day resources, online.

Earth Science featured the return of a popular event, **National Fossil Day**. In partnership with the National Park Service (NPS), AGI helped conduct the 10th annual event, officially on Wednesday, October 16, 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 website 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. Finally, AGI collaborated with NPS partners and other geoscience organizations to conduct a National Fossil Day event at Grand Canyon National Park. Fossil enthusiasts attended the event, where AGI educated visitors with a green screen-equipped "Paleontology Play Space" photo booth.

Program participants were invited to join the Earth Science Week team in encouraging everyone — including women, minorities, and people with a range of abilities — to explore geoscience careers on **Geoscience for Everyone Day**, Thursday, October 17. Educators welcomed geoscientists into the classroom to speak. Geoscientists visited schools and volunteered at science centers. Others organized scout events, led field trips,

and held special "Take Your Child to Work Day" events. The aim was to open a young person's eyes to the world of Earth science. Doing so, participants supported the efforts of AGI member societies such as the Association for Women Geoscientists and the National Association of Black Geoscientists in raising awareness of the remarkable opportunities available to all young people in the Earth sciences. The program website directed participants to "Visiting Geoscientists: An Outreach Guide for Geoscience Professionals," a handbook co-produced by AGI and the American Association of Petroleum Geologists' Youth Education Activities Committee.

The eighth annual **Geologic Map Day** held on Friday, October 18, 2019, promoted awareness of the study, uses, and importance of geologic mapping for education, science, business, and a variety of public policy concerns. The final event for the school week of Earth Science Week 2019 was hosted by the U.S. Geological Survey and the Association of American State Geologists in partnership with AGI, along with additional partners including the National Park Service, the Geological Society of America, and NASA. Students, teachers, and the wider public tapped into the various educational activities, print materials, online resources, and public outreach opportunities for active participation. The Earth Science Week 2019 Toolkit contained a Geologic Map Day poster that provided geologic maps, plus step-by-step instructions for a related classroom activity dealing with color blindness and geologic mapping. Additional resources for learning about geologic maps were featured on the Geologic Map Day web page of the Earth Science Week site. Activities nationwide, many led by state geologic surveys, spurred learning in schools.

Earth Science Week 2019 reached its climax with **International Archaeology Day** on Saturday, October 19. The event was a celebration of archaeology and the thrill of discovery. Every October, archaeological programs and activities for people of all ages and interests are presented by the Archaeological Institute of America and archaeological organizations across the United States, Canada, and elsewhere. Programs included activities such as a family-friendly archaeology fair, a guided tour of a local archaeological site, a simulated dig, and a lecture or a classroom visit from an archaeologist. In every case, interactive, hands-on International Archaeology Day programs provided the chance for participants to indulge their inner "Indiana Jones."

Special Events

AGI staff exhibited at the **Energy Day Houston** festival as part of its new collaboration with Consumer Energy Alliance. Earth Science Week shared geoscience-oriented STEM materials with the many of people who visited its booth at this free outdoor event, which for years has showcased education technologies and innovations. Organizers estimated over 25,000 people attended the event.

Get Your Park ON — the second annual amateur radio, or “ham” radio, operating event — was held October 12-20, 2019, in celebration of Earth Science Week. The event, engaging amateur radio operators worldwide and sponsored by the U.S. affiliate of World Wide Flora and Fauna, invites radio hams to operate their radio stations in geological and nature centers such as parks, forests, and nature habitats.

AGI Promotions

Earth Science Week promoted awareness of numerous AGI programs and resources of interest to Earth science educators, students, and enthusiasts, including AGI’s Center for Geoscience & Society, the AGI Geoscience Workforce program, Geoscience Currents, the William L. Fisher Congressional Geoscience Fellowship, AGI’s NGSS Education Webinars, the Pulse of Earth Science website, the Visiting Geoscientists guide, AGI’s Critical Issues Program, Geoscience in Your State Factsheets, the Earth Science Organizations website, the Faces of Earth DVD, the EARTH Channel on Nautilus magazine online, AGI Information Services (such as GeoRef), the award-winning Why Earth Science video, AGI’s newly renovated headquarters facility, and AGI’s and the National Park Service’s jointly published *America’s Geologic Heritage: An Invitation to Leadership*.

State Proclamations

Seven states have demonstrated outstanding science-literacy leadership by issuing “**perpetual proclamations**” of Earth Science Week, ensuring recognition every year: Alaska, Delaware, Illinois, Nevada, North Dakota, Oklahoma, and South Dakota.

Governors also issued single-year proclamations in nine additional states — Alabama, Arkansas, Indiana, Missouri, New Mexico, Oregon, Pennsylvania, Tennessee, and Virginia — bringing the total number of states with proclamations of recognizing Earth Science Week 2019 to 16, up from 13 in 2018.

Publicity and Media Coverage

AGI enlisted the support of a wide range of media in promoting awareness of Earth Science Week, resulting in exceptional reach for promotional activities in 2019 and helping to lay a foundation for more coverage in years to come. Because of the large number of news clips citing Earth Science Week activities and resources, the print edition of this report no longer includes such clips. To view the many news items dealing with Earth Science Week, please visit online at www.earthsciweek.org/highlights.

Earth Science Week 2019 news, events, programs, and resources were covered by **national news organizations** such as AARP; About Bone; App.com, part of the

USA Today Network; American Geophysical Union, Archaeological Institute of America; *AAPG Explorer*; Benzinga; CBS News; Cision PRWeb; EBooks; *Eos Earth & Space Science News* of the American Geophysical Union; Evensi; EventBrite; Facebook; Fooshya; FossilEra; GeoCaching.com; Geological Society of America; iHeart Radio; Kids Out and About.com; NASA; National Park Service; National Parks Traveler; National Science Collections Alliance; Newstral; NPR National Public Radio; Paleontological Society; PoalTube; Public Library of Science PLOS Blogs; Serendeputy; Society of Exploration Geophysicists; TeachersFirst; Tech Deeps; TF-Prototype; Think GeoEnergy; WiredFocus Tech News; and Yahoo News.

Additionally, the event was covered by **international news organizations** including Agenparl in Italy; Before It's News of the United Kingdom; Big Stamp of Approval in England; *Bharath Gyan* of India; Biotechnika Blog of Biotechnika Edulabs, Bangalore, Noida, Pune, Kolkata & Chennai, India; Bishop's University of Quebec, Canada; *The Daily Mirror* of the United Kingdom; Diamond of Oxfordshire, England; Earth Science Week Japan in Shizuoka; Geological Society of London; *Ghana Business News*; Ghana News Agency; Government of Saint Vincent and the Grenadines; *The Guardian* of Great Britain; *Iran Front Page* of Iran; *Isle of Wight Observer* of the United Kingdom; *Mirage News* of Australia; *The National Tribune* of Australia; News Locker; The University of British Columbia in Canada; and Wikipedia.

Throughout the United States, coverage of Earth Science Week programs and activities was provided by **local news organizations** such as *The Advocate & Democrat* of Tennessee; Alabama Museum of Natural History at the University of Alabama; *Albuquerque Journal* of New Mexico; Allevvents.In in Albuquerque, New Mexico, in Boston, Massachusetts, in Cambridge, Massachusetts, in Chicago, Illinois, in Colts Neck, New Jersey, in Eugene, Oregon, in Las Cruces, New Mexico, in Lawrenceville, New Jersey, in Montrose, Colorado, in Phoenix, Arizona, in Roseville, California, and in Wilmington, Delaware; Ames Convention & Visitors Bureau at Iowa State University; *Anchorage Daily News* of Anchorage, Alaska; *Argus Observer* of Ontario, Oregon; *Arizona Daily Sun* of Arizona; *Arkansas Democrat Gazette* of Arkansas; *Augusta Free Press* of Virginia; Bay Area Science Festival of San Francisco, California; Baylor University in Texas; Beyond the Creek in California; Bishop Museum of Science and Nature in Bradenton, Florida; Boca Beacon of Boca Grande, Florida; Bollinger County Museum of Natural History in Missouri; The Boston Calendar in Massachusetts; Bowers Museum in Santa Ana, California; California Oil Museum in Santa Paula, California; CASE News of Florida International University; Casper College in Casper, Wyoming; *Casper Star Tribune* in Casper, Wyoming; Centennial Park Conservancy in Nashville, Tennessee; CentralMaine.com; Charleston County Public Library in Charleston, South Carolina; *Chillicothe Gazette* of Chillicothe, Ohio; ClarksvilleNow.com of Clarksville, Tennessee; Clarksville Online of Clarksville, Tennessee; Cleveland Museum of Natural History in Ohio; Collin County Guide in Texas; The Complete Martha's Vineyard Calendar in Massachusetts; The Concord Consortium in Massachusetts; Connecticut Science Center; Connection Newspapers in Virginia; Cool Cleveland in Ohio; Cosley Zoo in Wheaton, Illinois; County 10 in Wyoming; *The Courier* of Missouri; *Courier Tribune* of Liberty, Missouri; Cumberland Valley Pennsylvania; *Daily Independent* in Phoenix, Arizona; Dallas

Paleontological Society in Texas; The Daily Jeff in Ohio; Daily Star Journal Now.com in Missouri; The Decorah Newspapers in Iowa; Delaware.gov of Delaware; *The Denver Post* in Colorado; Depauville Free Library in New York; *Deseret News* in Utah; Dickinson, The Western Edge, of North Dakota; Discovery Museum in Acton, Massachusetts; Do317 of Indianapolis, Indiana; Do512 of Austin, Texas; Dp617 of Boston, Massachusetts; *Downtown Indy* of Indianapolis, Indiana; Drexel University's Academy of Natural Sciences in Philadelphia, Pennsylvania; ERO Resources in Denver, Colorado; ESCONI, Earth Science Club of Northern Illinois; ET Online of East Tennessee State University; ETSU Museum of Natural History in East Tennessee State University; *Eugene Weekly* of Eugene, Oregon; Eventful in Orange County, California; Family Friendly Calendar.com in Phoenix, Arizona; Field Museum of Chicago, Illinois; Florida State Parks; Garden of the Gods Visitor & Nature Center in Colorado Springs, Colorado; *The Gazette* in Colorado Springs, Colorado Glacier County Montana; Greater Lansing, Michigan Convention & Visitors Bureau; GreenSource DFW of Texas; The Globe of New Mexico; Har.com of Texas; Harvard in the Community of Cambridge, Massachusetts; Harvard Museums of Science & Culture of Cambridge, Massachusetts; Harvard University of Cambridge, Massachusetts; *Hays Fun* of Hays, Kansas; Heard Natural Science Museum & Wildlife Sanctuary in McKinney, Texas; HeraldNet of Everett, Washington; *Herald-Tribune* in Sarasota, Florida; History Colorado; Houston Geological Society; Houston Museum of Natural Science; Idaho State Journal; I Love Memphis blog of Memphis, Tennessee; Imagination Station Science & History Museum in Wilson, North Carolina; *Indy Arts Guide* of Indianapolis, Indiana; *Indy Parks & Recreation* of Indianapolis, Indiana; InlandEmpire.US of California; *The Intelligencer: Wheeling News-Register* of West Virginia; I Want a Buzz of Jacksonville, Florida; *The Ithaca Journal* of New York; Jana Gana Mana in Texas; *Johnson City Press* in Tennessee; *Journal Standard* of Illinois; *Knox News* of Knoxville, Tennessee; Ladonia Fossil Park in Texas; Lansing Family Fun of Michigan; *The Lantern* of Andover, Massachusetts; *Leavenworth Times* of Kansas; *Los Alamos Daily Post* of New Mexico; *Los Alamos Reporter* of New Mexico; Magoffin County High School in Kentucky; Marin Mommies of Marin County, California; McWane Science Center in Birmingham, Alabama; Michigan State University; Minnesota Discovery Center in Chisholm, Minnesota; Mississippi State University; Missoula Events.net of Montana; *Moapa Valley Progress* of Moapa Valley, Nevada; Mommy Poppins of Chicago, Illinois; Montana State Parks; *Moultrie News* of South Carolina; Museum of Arts & Sciences in Daytona Beach, Florida; Museum of the Rockies of Bozeman, Montana; *MV Times* of Martha's Vineyard, Massachusetts; My Mountain Town of Littleton, Colorado;

Nevada Bureau of Mines and Geology; Nevada State Parks; *Nevada Today* of the University of Nevada, Reno; New Jersey Family; New Mexico Bureau of Geology & Mineral Resources; New Mexico Department of Cultural Affairs; New Mexico Museum of Natural History & Science; New Mexico State University; NNY 360 of the *Watertown Daily Times* and Northern New York Newspapers; North Texas e-News; *The Northern Light* of Blaine, Washington; *Northwest Arkansas Democrat Gazette* of Arkansas; Now Playing Utah; Oak Bluffs Public Library of Massachusetts; NYMetroParents; Ohio Department of Natural Resources; Ohio State University; Oil City News in Wyoming; *Omaha World Herald* of Omaha, Nebraska; *The Oneida Dispatch* of New York; Orange County Breeze in California; Ozobot; *The Paris News* of Texas; *Patch* of Waltham, Massachusetts; *The Penn* of Indiana University of Pennsylvania; *Penn Museum* of the University of Pennsylvania Museum of Archaeology and Anthropology; Pennsylvania Pressroom; *The Philadelphia Inquirer* in Pennsylvania; Philly Fun Guide of Philadelphia, Pennsylvania; City of Phoenix, Arizona; *The Pike County News Watchman* in Ohio; *Pine Bluffs Post* in Wyoming; *Pittsburgh Post-Gazette* in Pennsylvania; *Press-Republican* of New York; *The Progress Review* of Waterloo, New York; *Rapid City Journal* of Rapid City, South Dakota; Realize Bradenton of Bradenton, Florida; *Record Herald* of Columbus, Ohio; *Red Tricycle* of San Francisco, California; Riverside DECA of Virginia; Ronnie's Awesome List of California; Sam Noble Museum of Norman, Oklahoma; San Francisco State University; *Sarasota Magazine* in Florida; Scott Family Amazeum of Bentonville, Arkansas; *Seaside Signal* of Seaside, Oregon; Semo Events in Montana; Serendeputy; sNEWSi; *Sidney Herald* of Montana; SoIn of Indiana; *Southeast Missourian* of Missouri; *The Southeast Sun* of Enterprise, Alabama; *Spencer Evening World* in Indiana; *SRQ Magazine* in Sarasota, Florida; *The Standard* of Waukon, Iowa; *Star-Herald* of Scottsbluff, Nebraska; St. George Dinosaur Discovery Site in Utah; *The St. John Source* of the U.S. Virgin Islands; St. Mary Now.com of Louisiana; The Sun Times News.com in Chelsea, Michigan; *Telegraph Herald* of Dubuque, Iowa; Texas Master Naturalist; *Times-Standard* of California; *Tribune Chronicle* in Warren, Ohio; University of Alabama; University of Arizona; University of Arkansas; University of Colorado, Boulder; University of Iowa; University of Michigan; University of Nevada, Reno; University of New Mexico; University of Oregon; University of Pennsylvania Almanac; University of Texas at Austin; University of Wyoming; *Upper Cumberland Business Journal* in Tennessee; Utah Division of State History; *The Village Reporter* in Columbus, Ohio; *Vineyard Gazette* in Martha's Vineyard, Massachusetts; Virginia.gov; Visit Montrose, Colorado; Visit Knoxville, Tennessee; *Waco Tribune-Herald* of Texas; *The Walla Walla Union-Bulletin* in Washington; The Webb Schools in Claremont,

California; *West Plains Daily Quill* of Missouri; Westword in Denver, Colorado; William & Mary in Virginia; *Williams News* of Arizona; Woodbridge Town News in Connecticut; *Wooster* of The College of Wooster, Ohio; *Wyoming Tribune-Eagle* of Wyoming; and *Zebra* in Alexandria, Virginia.

Earth Science Week also was covered by **television and radio stations** across the country, including ABC Fox Montana; CBS 4 Denver; Fox 44 News of Waco, Texas; FOX47 News of Lansing, Michigan; iHeart Radio; KALW San Francisco Local Public Radio of California; Kick 104 Radio of Rapid City, South Dakota; 90.3 KEDM Public Radio of Louisiana; KMZU 100.7 FM in Carrollton, Missouri; KUNM of the University of New Mexico; My Stateline WTVO 17 ABC News of Rockford, Illinois; NPR National Public Radio; Super Talk WFHG FM 92.9 in Tennessee; TV 6 NBC Upper Michigan Source; 103.3 Waco Public Radio KWBU in Texas; WBIR-TV 10 News in Knoxville, Tennessee; WGNS news Radio FM 100.5 FM in Tennessee; 23 WIFR of Illinois; WLIO Hometown Stations of Lima, Ohio; WFMZ-TV 69 News of Allentown, Pennsylvania; WILX 10 News in Michigan; and WKRN News in Nashville, Tennessee.

AGI distributed **press releases** to hundreds of newspapers, magazines, and other print media outlets. The articles highlighted Earth Science Week activities and the program theme. Press releases about Earth Science Week activities were also released by the American Institute of Professional Geologists, the City of Las Cruces, and the New Mexico Department of Cultural Affairs.

Copies of the **Earth Science Week 2019 poster**, featuring a geoscience learning activity in addition to promotional content, were distributed as inserts in publications carrying articles about the event, such as NESTA's *The Earth Scientist*, *GSA Today*, *AAPG Explorer*, and one of the final issues of AGI's *Earth* magazine. In addition, the poster image appeared in the Society of Exploration Geophysicists' *The Leading Edge* and *Nautilus* magazine.

Earth Science Week Sponsors

Each year, many organizations provide generous financial support to make Earth Science Week possible, often in addition to contributions of materials, events, and other forms of assistance. Sponsors of the 2019 celebration were:

United States Geological Survey	AmericaView	Nautilus
National Aeronautics and Space Administration	Association of American State Geologists	Schlumberger
National Park Service	Energy Day (CEEf/CEA)	Society for Mining, Metallurgy, and Exploration
American Association of Petroleum Geologists Foundation	Geological Society of America	Society of Exploration Geophysicists
ExxonMobil	Geothermal Resources Council	Water Footprint Calculator/Grace Communications Foundation
American Geophysical Union	IF/THEN (Lyda Hill Philanthropies)	
	Keystone Policy Center	

Earth Science Week Program Partners

Earth Science Week counts among its partners the many organizations that provide materials, host events, and help get the word out. Some of these are also sponsors (see above). Program Partners in 2019 included:

American Association of Petroleum Geologists	EarthScope	Society for Mining, Metallurgy, and Exploration
American Association of Petroleum Geologists Foundation	Energy Day (CEEf/CEA)	Society of Exploration Geophysicists
American Geophysical Union	ExxonMobil	Soil Science Society of America
American Geosciences Institute	Geological Society of America	TERC
American Institute of Professional Geologists	Geothermal Resources Council	UNAVCO
American Meteorological Society	IF/THEN (Lyda Hill Philanthropies)	U.S. Bureau of Land Management
AmericaView	Incorporated Research Institutions for Seismology	U.S. Geological Survey
Archaeological Institute of America	Keystone Policy Center	U.S. National Aeronautics and Space Administration
Association for Women Geoscientists	Minerals Education Coalition	U.S. National Oceanographic and Atmospheric Administration
Association of American State Geologists	National Earth Science Teachers Association	U.S. National Park Service
CLEAN (Climate Literacy and Energy Awareness Network)	Nautilus	U.S. National Weather Service
Critical Zones Observatories	Nutrients for Life Foundation	Water Footprint Calculator/Grace Communications Foundation
	Schlumberger	
	Science Friday (National Public Radio)	

Earth Science Week 2019 Events by State and Territory

AGI makes every effort to track Earth Science Week activities across the United States. If you know of events not listed here, please let us hear from you. The major activities across the country that AGI is aware of included:

Alabama

- The governor of Alabama issued a proclamation for Earth Science Week 2019.
- The National Speleological Society distributed complimentary Earth Science Week Toolkits to science educators for use in the classroom.
- The Geological Survey of Alabama and University of West Alabama hosted a field workshop, primarily for K–12 teachers, in which participants were invited to learn about paleontology. During the event, participants picked through a collection of Miocene marine fossils, identified the fossils, figured out the environment of deposition, and acquired collections to take back to their schools.
- The University of South Alabama Archaeology Museum welcomed visitors of all ages to participate in International Archaeology Day on October 19. The event offered a variety of indoor and outdoor hands-on activities for visitors.
- The University of Alabama's Smith Hall Museum of Natural History hosted a National Fossil Day event celebrating fossil appreciation and stewardship. The public was invited to meet a paleontologist and view fossils.
- The North Alabama Society sponsored an Archaeology Fair at the University of Alabama in Huntsville.

- The Geological Survey of Alabama, University of West Alabama, Black Belt Museum, Discovering Alabama, Birmingham Paleontological Society, Alabama Geological Society, University of West Alabama, and Black Belt Museum cosponsored "Fossils of the Black Belt 20" a hands-on field workshop on paleontology for educators.

Alaska

- The governor of Alaska issued a perpetual proclamation of Earth Science Week.
- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by the U.S. Permafrost Association.
- The Alaska Geologic Materials Center hosted a National Fossil Day celebration. Visitors were invited to see Alaska's fossil shells, plants, dinosaurs, and more.
- The Bureau of Land Management and its partners celebrated International Archaeology Day at the Campbell Creek Science Center. Visitors learned about archaeology with a variety of indoor and outdoor activity stations.
- During the University of Alaska Museum of the North's "Ask an Archaeologist," visitors met with museum archaeologists in the lobby on October 18.

Arizona

- Grand Canyon National Park hosted multiple events over the weekend for the 10th annual National Fossil Day celebration as well as the 100th anniversary of the Grand Canyon

National Park. Activities included ranger-led hikes exploring geologic time and paleontology lectures. Partner organizations included the National Park Service, the American Geosciences Institute, Museum of Northern Arizona, Southwestern Paleontological Society, and more.

- International Archaeology Day was celebrated at Phoenix's largest preserved archaeological site, Pueblo Grande Museum, with a full day of fun.
- The Museum of Northern Arizona hosted a "Digging Dinosaurs" National Fossil Day celebration. Visitors were invited to touch fossils, handle tools and hear how paleontologists find, excavate, remove, and prepare dinosaur bones.
- There was a celebration for National Fossil Day at Petrified Forest National Park in a unique Triassic style. Activities included watching fossil preparation, touring museum collections, creating plaster fossil casts, and talking with paleontologists.
- For National Fossil Day, the Arizona Museum of Natural History hosted its annual 21+ fundraiser on October 18.
- The Pueblo Grande Museum in Phoenix hosted an International Archeology Day event in collaboration with the Central Arizona Society of the Archeological Institute of America that featured archeological demonstrations, children's activities, tours, and more.
- Verde Valley Archaeology Center's annual International Archaeology Day gala featured a talk by British-born and Cambridge University-educated Brian Fagan.

- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by the National Earth Science Teachers Association and the Geoscience Information Society.

Arkansas

- The Arkansas Geological Survey promoted Earth Science Week among teachers and citizens with the distribution of related instructional materials.
- The governor of Arkansas issued a proclamation for Earth Science Week 2019.
- Teams of four to five nonprofessional archeology fans were invited to use their avocational skills to compete in an Arkansas Archaeolympics event hosted by the Arkansas Archeological Survey and the University of Arkansas, Little Rock. Throughout the day, participants enjoyed many ways of expanding and demonstrating their archeology knowledge.
- Guests were invited to dig in for a day of fossil fun during National Fossil Day at the Scott Family Amazeum. Visitors became junior paleontologists as they excavated, created, and got a closer look at trace fossils and replica dinosaur bones with interactive and hands-on activities. There was also an evening Community Spotlight with the University of Arkansas Museum for further exploration with students.

California

- Finalists in the Earth Science Week visual arts contest included Ares Bando-Cambra of San Francisco, California.
- The California Geological Survey distributed Earth Science Week Toolkits to educators.
- Throughout the month of October, California's Skirball Cultural Center held archaeology-themed events with demonstrations and drop-in activities. Attendees discovered

how people of the past interacted with their surrounding resources.

- The Geothermal Resources Council promoted Earth Science Week 2019 on its website.
- Finalists in the Earth Science Week photography contest included Kristen Carpio and Sophia Lissin of Redwood City.
- The Joshua Tree National Park Association and the Desert Institute at Joshua Tree National Park hosted an International Archaeology Day event at Joshua Tree National Park's Research Museum.
- The Western Science Center celebrated International Archaeology Day during "Science Saturday" with hands-on activities inside the museum.
- San Diego Natural History Museum held a celebration of all things prehistoric for National Fossil Day, including show-and-tell and mini-tours.
- The Natural History Museum of Los Angeles County hosted a two-day festival celebrating dinosaurs for its fourth annual Dino Fest for National Fossil Day.
- Hundreds of people attended the International Archaeology Day and California Archaeology Month Expo held in Riverside. The archaeology fair included more than 20 exhibitors from academic, government, and private groups. Attendees threw atlatl darts, identified artifacts, learned about ancient Rome, experienced archaeological sites in virtual reality, and more.

Colorado

- Aiming to stoke student interest in STEM careers, Consumer Energy Alliance and Consumer Energy Foundation partnered with dozens of organizations to host an Energy Day Festival, featuring energy-related demonstrations and exhibits, at East High School.
- Royal Gorge Regional Museum and History Center hosted a Fossil Excavation Demonstration with

paleontologist Andrew Smith to celebrate National Fossil Day.

- The Minerals Education Coalition promoted Earth Science Week on its website.
- Colorado University Museum of Natural History invited the public to join in celebrating National Fossil Day.
- The Museums of Western Colorado held events featuring free educational activities for families across Colorado.
- Florissant Fossil Beds National Monument promoted the celebration of National Fossil Day.
- The Garden of the Gods Park and the Western Interior Paleontological Society hosted a free family fun day with partners hosting educational tables, fossil identification, hands-on demos, fossils and natural history giveaways, and free public lectures.
- Colorado's Southern Ute Indian Tribe held a weekend-long Culture Camp & Archaeological Workshop with Elders, Southern Ute Preservation team, and professional archaeologists. Attendees learned traditional crafts, archaeological survey mapping, and methods of cultural heritage site preservation.
- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by representatives of the American Institute of Professional Geologists, the Geological Society of America, and the Society for Mining, Metallurgy, and Exploration.
- An Archaeology Expo, co-sponsored by the Denver Society of the Archaeological Institute of America and Roxborough State Park, was held at Roxborough Intermediate School. The event featured professional lectures, informational booths, demonstrations, and more.

Connecticut

- A Connecticut Archaeology Fair was held at the University of Connecticut's Oak Hall in celebration

of International Archaeology Day. This event was sponsored by the university's Department of Anthropology, the state's Office of Archaeology, State Historic Preservation Office, Archaeological Society of Connecticut, Friends of the Office of State Archaeology, and Connecticut's Museum of Natural History.

- Archaeology Day at the Weir Farm National Historic Site was held on October 19. Children were invited to find their inner archaeologist with special Jr. Ranger activities, look at artifacts, dig and sift soil like a real archaeologist, and earn a special Junior Ranger Archaeologist Badge.

Delaware

- The governor of Delaware issued a perpetual proclamation of Earth Science Week.
- Erika Komp of Harbeson was selected as a finalist in the 2019 Earth Science Week photo contest.
- The Delaware Geological Survey promoted Earth Science Week and Geologic Map Day by distributing Earth Science Week Toolkits and informational materials to educators. In addition, survey promoted the celebration of Geologic Map Day on its website.

District of Columbia

- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by representatives of the American Geophysical Union and the American Association of Geographers.
- The Geological Society of America encouraged geocachers around the world to participate in International EarthCache Day during Earth Science Week.
- The Bureau of Land Management promoted the participation in Earth Science Week with emphasis on its participation in 2019 International Archaeology Day.

- The National Museum of Natural History, the Society for American Archaeology, and Archaeology in the Community hosted a family-friendly event celebrating International Archaeology Day. Visitors talked to archaeologists, honed their archaeology skills, explored collections, and received free resources.

Florida

- The Florida Geological Survey promoted Earth Science Week by distributing educational materials.
- The sixth annual Archaeologists for Autism was held in celebration of National Fossil Day and International Archaeology Day. This event allowed children and young adults with autism spectrum disorders and their families a chance to experience archaeology and paleontology in a fun, low-stress environment. Featured activities included fossil displays as well as a fossil "excavation pit."
- Florida Public Archaeology Network hosted a lecture on archaeology in Florida State Parks. This lecture emphasized visitation of the many local parks that feature archaeology interpreted for the public.
- The Florida Geological Survey held an Earth Science Week Open House and promoted the 2019 Earth Science Week Essay and Visual Arts contests.
- Florida's Bishop Museum of Science and Nature hosted a National Fossil Day event where visitors practiced their paleontology skills, learned about Florida's fossil history, and enjoyed various activities for all ages.
- The Florida Public Archaeology Network's Archaeology Lab, which is open to volunteers throughout the year, hosted a series of volunteer days in honor of International Archaeology Day. During the events, volunteers helped "rough sort" artifacts recovered from local

archaeological sites. No prior experience was needed, and all volunteers were given a brief orientation by a professional archaeologist on their first day.

Georgia

- Elizabeth Xu of Sugar Hill, Georgia, won first place in the visual arts contest with a creative and colorful mixed-media drawing of a young person discovering the natural world.
- Members of the public joined the Kennesaw State Anthropology Program at the Peachtree Road Farmer's Market to celebrate International Archaeology Day with educational games and activities.
- Justin Xu was recognized as a finalist in Earth Science Week's visual arts contest.
- The Augusta Museum of History and the Augusta Archaeological Society presented an Archaeology Day event at the 1797 Ezekiel Harris House. Guests joined a team of archaeologists from The Augusta Archaeological Society as they identified and classified prehistoric and historic artifacts and collections, as well as demonstrated flint knapping and primitive weapons use.
- The American Association of Stratigraphic Palynologists promoted Earth Science Week and distributed kits among educators in the state.

Hawaii

- GEOetc offered a field trip to Hawaii's active volcanoes for STEM and geography teachers.
- Earth Science Week educational materials were distributed by the Commission on Water Resource Management.
- The 2019 Society for Historical Archaeology Conference, held October 21-27, was the capstone event for Archaeology Week in Hawaii.

Idaho

- Idaho Museum of Natural History celebrated Earth Science Week and International Archaeology Day by sponsoring a day of hands-on, family-friendly archaeology activities.
- A celebration of National Fossil Day and Earth Science Week was held at the Idaho Museum of Mining and Geology in collaboration with the Orma J. Smith Museum of Natural History. Visitors explored activities about Idaho's geology, fossils, and dinosaurs.
- The Idaho Geological Survey distributed Earth Science Week educational materials.

Illinois

- The governor of Illinois issued a perpetual proclamation of Earth Science Week.
- Burpee Museum's National Fossil Day programs included local fossil collectors and various exhibitors' hands-on fossil activities.
- The Earth Science Club of Northern Illinois promoted participation in National Fossil Day on its website.
- The Lauer Foundation and Cosley Zoo hosted a National Fossil Day event on Saturday, October 19. Guests were invited to see some of Illinois' famous Mazon Creek fossils and learn about paleontology and geology.
- Finalists in the Earth Science Week photography contest included Sharon Zhou of Chicago.

Indiana

- The governor of Indiana issued a proclamation recognizing October 13-19 as Earth Science Week 2019.
- On October 19, the Children's Museum of Indianapolis observed International Archaeology Day with an afternoon of fun and educational archaeology activities.
- Fossil Day at Holiday Park included the exploration of Indiana fossils with Indiana State Museum presenters, discussion of what fossils

are and how they form, and crafts and a fossil display in the nature center lobby.

- Falls of the Ohio Foundation welcomed guests celebrating National Fossil Day at the Falls of the Ohio State Park.

Iowa

- The University of Northern Iowa and BMC Aggregates partnered for a "Sunday at the Quarry" event in Waterloo, offering the public opportunities to do rock, fossil, and mineral collecting with the Gem and Mineral Society, take a Geology Tour of the Quarry, and more.
- Iowa's Archeological Society celebrated Iowa Archaeology Month by hosting a day of presentations on archaeology at its annual fall meeting.
- In honor of 60 years of archaeological exploration and preservation in Iowa, the Iowa Office of the State Archaeologist hosted an open house on October 4. The event, held on the University of Iowa campus, included ancient technology demonstrations, self-guided tours of the facility, artifact displays, and more.
- Fontana Park held a Fossil Fun Day on October 16 for National Fossil Day where guests learned how fossils form, where to find fossils, how to make their own "fossil."

Kansas

- The Kansas Geological Survey and the Society of Independent Professional Earth Scientists distributed Earth Science Week Toolkits for educators.
- El Quartejejo Museum in Scott City celebrated National Fossil Day with a week of inspiring activities for all ages.
- The University of Kansas' Wilcox Classical Museum and the Natural History Museum Archaeological Division opened their collections to visitors on October 18 for International Archaeology Day.

- National Fossil Day at the Sternberg Museum of Natural History invited guests to join them as they explored the Ice Age of Kansas.
- The Wichita Public Schools and Wichita Public Libraries partnered on a "Big Read," a citywide shared reading program focusing on *Lab Girl* by Hope Jahren. The initiative involved a whole community in the work of AGI's partnership with Lyda Hill Philanthropies and Nautilus on the IF/THEN initiative, which promotes the participation of girls and women in STEM.
- Fort Hays State University's Department of Geosciences hosted events and contests throughout the month of October in celebration of Earth Science Week.

Kentucky

- The Kentucky Geological Survey hosted its annual Open House to celebrate Earth Science Week. Attendees received free kits and browsed rock and fossil collections under microscopes, observe demonstrations, and more.
- Kentucky Archaeological Survey, Living Archaeology Weekend, and Kentucky Transportation Cabinet invited the public to spend International Archaeology Day at Riverside. Visitors experienced a public archaeology dig, artifact identification and processing, a behind-the-scenes tour of the Farnsley-Moremen House, demonstrations, and presenters.

Louisiana

- On October 12, visitors to Poverty Point World Heritage Site took part in a ranger-led hike showcasing the mounds, earthworks, and nature found in the park. In addition, Poverty Point World Heritage Site in Pioneer hosted activities for International Archeology Day, including a guided tram tour with the station archaeologist, a demonstration of prehistoric tools, and more.

Maine

- Students in grades 6-9 wrote short essays addressing why it is important for Earth science to be accessible, inclusive, diverse, and equitable. Of the hundreds of submissions, Evelyn Rousseau was selected as one of the finalists in this year's Earth Science Week essay contest.
- Visitors had fun exploring fossils from the L.C. Bates Museum collection, taking part in a scavenger hunt, making fossil molds, and learning about fossils.

Maryland

- Emily Oglesby of Delmar was selected as a finalist of Earth Science Week's visual arts contest.
- The Maryland Geological Survey distributed kits among educators in celebration of Earth Science Week.
- Chesapeake Children's Museum hosted Dinosaur Day, an all-day event of dinosaur facts and fun.
- Children were invited to be paleontologists for the day at the Calvert Marine Museum. Activities included digging for "dinosaur bones" in the Discovery Room sandbox, a scavenger hunt filled with dinosaur facts, and making a dinosaur hat.
- Later that week, the Calvert Marine Museum hosted a "Fossil Field Experience" event in celebration of National Fossil Day. Visitors, age eight and up, explored the fossils of Cove Point with a trained museum educator.

Massachusetts

- The Oak Bluffs Library held a National Fossil Day event for Earth Science Week. Attendees shared their fossils with collectors and listened to presentations.
- As part of its 50th anniversary celebration, University of Massachusetts' Amherst Department of Anthropology invited colleagues and collaborators, current students

and alumni, faculty past and present, and scholars, practitioners, and activists near and far to join them for a four day conference at the University of Massachusetts Amherst.

- In honor of Archaeology Month, Gore Place offered a series of archaeology-themed backpacking events as part of a "Take a Walk" activity.
- In celebration of National Fossil Day, the Harvard Museum of Natural History hosted visitors to meet Harvard paleontologists and learn about the amazing prehistoric animals on exhibit.
- Robbins Museum of Archaeology displayed thousands of artifacts during its open house.

Michigan

- The Fernwood Botanical Garden and Nature Preserve hosted an event in celebration of International Earthcache Day. Guests joined local geocachers to learn about this fun and addictive activity, have experts help them find geocaches, and explore Fernwood.
- The Michigan State University Museum celebrated National Fossil Day on October 6 with a fossil dig and sift, a Junior Paleontologist hunt, fossil augmented reality, and more.
- Michigan Technological University hosted an Energy/Construction/Civil Day event in September as part of its CareerFEST. Students learned about geoscience-related career opportunities.
- Michigan Archaeology Day 2019 included demonstrations, presentations, artifact displays, hands-on activities, and more.

Minnesota

- Winona State University celebrated National Fossil Day with an interactive fossil display on October 16. The display, held in the Science Laboratory Center, was sponsored by the Geoscience Department.

Visitors touched bones and fossils, including dinosaur and mammoth preservations.

- Carleton College promoted Earth Science Week on its SERC-Carlton website.
- The Science Museum of Minnesota hosted an inaugural Dino Fest event with various dinosaur-related stations throughout the museum.
- The Minnesota Geological Survey promoted Earth Science Week among teachers and citizens.

Mississippi

- A "Fossil Extravaganza" open house and an annual "Creative Art & Story Competition" were sponsored by Dunn-Seiler Museum and the Department of Geosciences at Mississippi State University with tours, family activities, free fossils, and refreshments.
- Invited by the Mississippi National River and Recreation Area and Mississippi Park Connection, visitors joined paleontologist Justin Tweet for walks around Coldwater Spring in search of fossils. A park ranger swore in Junior Rangers with the official National Park Service Fossil Badge.

Missouri

- The governor of Missouri recognized October 13-19 as Earth Science Week 2019.
- The Missouri Geological Survey promoted Earth Science Week among teachers and citizens with the distribution of educational materials.
- Visitors to the Missouri State Museum throughout Earth Science Week examined fossils in the limestone walls, floors, and stairs of the State Capitol.
- The University of Missouri Museum of Art and Archaeology celebrated International Archaeology Day, disseminating information on archaeology and related activities statewide.

- The Bollinger County Museum of Natural History held a National Fossil Day celebration in Marble Hill on October 26.
- The Missouri Department of Natural Resources promoted Earth Science Week.
- Visitors to the Ed Clark Museum of Missouri Geology received a small Crinoid fossil (the Missouri state fossil) in celebration of Earth Science Week.

Montana

- The University of Montana celebrated National Fossil Day at the university's Paleontology Center on October 18. The event featured guided tours of displays and research collections, fossil identifications, kids' activities, and more.
- Carter County Museum's annual FestiFall event celebrated National Fossil Day with kids' paleo games, arts and crafts, dinosaur-themed face painting, and more.
- Makoshika State Park, in partnership with the Glendive Dinosaur and Fossil Museum, held a National Fossil Day event.
- Guests joined the Museum of the Rockies and the Bozeman Public Library in an after-school celebration of Montana's rich fossil history.

Nebraska

- Agate Fossil Beds National Monument celebrated National Fossil Day with a day of special events.
- University of Nebraska State Museum welcomed children and families in a National Fossil Day celebration at a special paleontology-themed night at Morrill Hall. The public engaged in more than a dozen hands-on fossil activities with museum researchers.

Nevada

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

- The Nevada Bureau of Mines and Geology sponsored a field trip, "Lode and Behold! Geology and Natural Resources of the Truckee Meadows and Virginia City," in celebration of Earth Science Week.
- The Las Vegas Natural History Museum, in partnership with the Las Vegas Science & Technology Festival, Protectors of Tule Springs, and the Clark County School District School-Community Partnership Program, hosted an art contest entitled "Flora, Fauna, and Fossils in Southern Nevada" in celebration of National Fossil Day.
- Guests joined geoscientists from Nevada Bureau of Mines and Geology for a weekend of field trips in celebration of Earth Science Week and the importance of earth sciences to the people of the state of Nevada.
- The Nevada Bureau of Mines and Geology promoted awareness of Earth Science Week among residents and community members through its website.

New Hampshire

- The New Hampshire Geological Survey promoted awareness of Earth Science Week among residents and community members.
- On International Archaeology Day, The New Hampshire Archeological Society met for its Fall Meeting.

New Jersey

- The Big Brook Preserve hosted an interactive fossil hunt for all ages. Participants waded the shallow waters of Big Brook and sifted through the substrate while looking for fossils that include shark teeth.
- The New Jersey State Museum celebrated International Archaeology Day by presenting guest lecturer Dr. Patricia Hansell, providing tours of archaeological exhibitions, and showing "Raritan Landing: Road to the Past," a video about excavations at a major archaeological site in New Jersey.

- Rutgers Geology Museum's "Dinosaurs and Fossils Late Night at the Museum" allowed participants to take a step back in time to discover the different types of dinosaurs and other creatures that inhabited Earth during the Paleozoic, Mesozoic and Cenozoic Eras. Demonstrations, arts and crafts, and educational activities took place around the museum.
- During the annual meeting of the Geological Association of New Jersey, attendees discussed and viewed the geology and paleontology of Monmouth County. In addition to presentations and a field trip, a teacher's workshop and a student poster session took place.

New Mexico

- The governor of New Mexico issued a proclamation recognizing Earth Science Week.
- Continuing a decade-long tradition, the New Mexico Bureau of Geology and Mineral Resources hosted Earth Science Week podcasts for the local public radio station. On each day of Earth Science Week, a two-minute podcast aired.
- The New Mexico Museum of Natural History & Science hosted a National Fossil Day event featuring hands-on activities, special fossil displays, and giveaways. Young people were sworn in as Junior Paleontologists by the National Park Service during a special ceremony.
- The Las Cruces Museum of Nature and Science, Bureau of Land Management, and New Mexico State University celebrated National Fossil Day with an event where visitors unearthed fossil facts with hands-on activities and viewed real fossils from Las Cruces and beyond.
- The New Mexico Bureau of Geology distributed Earth Science Week educational materials.
- Visitors attended a National Fossil Day festival hosted by Mesalands Community College's Dinosaur Museum and Natural Science Laboratory.

New York

- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by the Paleontological Research Institution.
- Brooke Laine of Stony Brook was recognized as a finalist in the 2019 Earth Science Week video contest. Finalists in the video contest also included teammates Elyas Masrour and Abdullah Nauman.
- The Rochester Society of the Archaeological Institute of America hosted an event in the lobby of the Rochester Museum & Science Center featuring artifacts, crafts, and an indoor dig box.
- The American Museum of Natural History held a National Fossil Day event to help students understand how studying fossils teaches us about the history of life, past climates, and ancient landscapes. Activities included exploration of fossil formation, extinction theories, fossil diversity, and more.
- The Museum of the Earth and the Paleontological Research Institution hosted Fossil Mania, which celebrated local Devonian and Ice Age fossils found in Central New York.

North Carolina

- The North Carolina Geological Survey promoted awareness of Earth Science Week among residents and community members.
- The Aurora Fossil Museum celebrated National Fossil Day with a variety of special guests, live music, and activities. The free event is held annually through a partnership with the National Park Service.
- Celebrating International Archaeology Day, Town Creek Indian Mound offered hands-on activities showcasing techniques and skills employed by archaeologists.
- Imagination Station Science and History Museum hosted a National Fossil Day event including activities focusing on fossils.

- Environmental Education in North Carolina promoted Earth Science Week among teachers and citizens.

North Dakota

- North Dakota's governor issued a perpetual proclamation of Earth Science Week.
- In celebration of Earth Science Week, the Dakota Science Center & Grand Forks Public Library hosted "Geosciences Day" where guests could experience hands-on STEM activities.

Ohio

- The Ohio Division of Geological Survey promoted Earth Science Week and many ways to get involved on its website.
- The Ohio Department of Natural Resources Division of the Geological Survey distributed Earth Science Week Toolkits and other materials to schools.
- The Cincinnati Archaeology Fair, held annually in October, took place at the Cincinnati Art Museum. This family event introduced aspiring archaeologists of all ages to the wonders of ancient and historical worlds.
- The Ohio Division of Geological Survey celebrated Earth Science Week by leading several geologic hikes and educational events throughout the state.
- During an Archaeology Home-school Day event, students experienced the trade, tools, and discoveries of archaeologists. Hands-on activities included a mock dig, metal detecting, and more.
- The Cincinnati Museum Center hosted "Fossil Fest" in celebration of the 200th anniversary of the Museum of Natural History and Science and encouraged the public to participate in National Fossil Day.
- In celebration of National Fossil Day, Ohio State University and the Ohio Geological Survey ran

an Ohio Statehouse Fossil Tour, a geologic tour of the fossil-rich building stones of Capitol Square in Columbus.

- The Cleveland Museum of Natural History hosted a full-day celebration of Earth Science Week and International Archaeology Day, where visitors dug into archaeology, geology, mineralogy, and more.

Oklahoma

- Oklahoma's governor issued a perpetual proclamation of Earth Science Week.
- Emre Anderson of Piedmont was recognized as a finalist in the 2019 Earth Science Week visual arts contest.
- The Oklahoma Geological Survey and the Society for Sedimentary Geology distributed Earth Science Week Toolkits to educators and students.
- "Archaeology Day at the Sam Noble Museum" celebrated International Archaeology Day and included several family-oriented activities such as flintknapping and atlatl demonstrations. Visitors also excavated in sandboxes, participated in arts and crafts, and took archaeologist-led tours.

Oregon

- The Cannon Beach History Center and Museum partnered with the Archaeology Institute of America for International Archaeology Day. The museum hosted a presentation by Dr. Dennis Jenkins on groundbreaking work done at Paisley Caves.
- The governor of Oregon issued a proclamation for Earth Science Week 2019.
- The University of Oregon Museum of Natural and Cultural History celebrated National Fossil Day by digging into Oregon's amazing fossil record. Guests joined in a fossil-focused Walk & Talk through the Explore Oregon exhibit.

SUMMARY OF ACTIVITIES

• EARTH SCIENCE WEEK 2019 EVENTS BY STATE AND TERRITORY

- The Oregon Department of Geology and Mineral Industries, in cooperation with the Washington State Department of Natural Resources's Geology and Earth Resources Division, produced a map to highlight the geologic influences that converge along a river in recognition of Geologic Map Day.

Pennsylvania

- The Academy of Natural Sciences of Drexel University hosted fossil-themed shows, carts, and staff interactives during its National Fossil Day celebration in Dinosaur Hall.
- The State Museum of Pennsylvania hosted a celebration for National Fossil Day in its Paleontology Gallery. The focus was the Pleistocene and Pennsylvania.
- Earth Science Week Toolkits were distributed among science teachers statewide by the Pennsylvania Geological Survey.
- The governor of Pennsylvania declared October 13-19 to be Earth Science Week.
- The Newlin Grist Mill hosted an archaeology dig to celebrate International Archeology Day.

Puerto Rico

- Ciencia Puerto Rico promoted the celebration of Earth Science Week to the general public.
- As part of her efforts to educate community youths about how to prepare for an earthquake or tsunami, geoscience educator Lynette Alomar arranged for representatives of the Puerto Rico Seismic Network to visit the P.J. Education School of Villa Fontana in Carolina and provide informational sessions for students in all grades as well as staff.

Rhode Island

- The Roger Williams Park Museum of Natural History and Planetarium held its "Fossil Frenzy Weekend" to celebrate National Fossil Day.

Visitors viewed fossils from the museum's vaults, went on a fossil quest, did a fossil puzzle, and made their own trilobite masks.

- The Narragansett Society and Brown University's Joukowsky Institute for Archaeology hosted an active archaeological excavation. Community members spent the afternoon digging on the grounds of Moses Brown School to uncover the foundations of a 19th-century home and processing artifacts from the household.

South Carolina

- The South Carolina Geological Survey celebrated by distributing Earth Science Week Toolkits to educators.
- Environmental Education in South Carolina promoted Earth Science Week among teachers and citizens.
- The South Carolina Department of Natural Resources hosted a series of volunteer days in honor of International Archaeology Day. Volunteers helped rough sort artifacts recovered from local archaeological sites.

South Dakota

- South Dakota's governor issued a perpetual proclamation of Earth Science Week.
- Free admittance was granted to the Museum of the South Dakota State Historical Society in honor of International Archaeology Day.

Tennessee

- The governor of Tennessee declared October 13-19 to be Earth Science Week.
- The Tennessee Geological Survey distributed Earth Science Week Toolkits to educators.
- The University of Tennessee's McClung Museum of Natural History and Culture with support from the Archeological Institute of America hosted a "Can You Dig It?" event to celebrate International Archeology Day and National Fossil Day.

- Earth Science Week at Discovery Park was filled with exciting activities for all ages. Visitors made geoscience-themed crafts and listened to guest speakers. The celebration engaged visitors in a real fossil dig.
- The Shops at Main & McGrew and Alex's Rock Shop held their third annual National Fossil Day celebration on October 12.
- International Archaeology Day events were held at the Parthenon in Nashville and at the Chucalissa in Memphis.

Texas

- In partnership with the Austin Earth Science Week Consortium, the Bureau of Economic Geology held a career event for middle school students. Earth science professionals gave presentations, and students participated in hands-on activities through various exhibits. Students heard from local professionals including geologists, geophysicists, engineers, hydrologists, meteorologists, paleontologists, water conservation specialists, biologists, and aerospace engineers.
- Dinosaur Valley State Park in Glen Rose held several "Track Talks" during the month, as well as guided hikes.
- The Corpus Christi Museum of Science and History welcomed the public to the museum's Paleontology wing for exhibits and special activities.
- "Discover Earth Science," a free outdoor learning event sponsored by Texas Master Naturalist, Rio Brazos Chapter, and Acton Nature Center, featured geoscience-focused exhibits; demonstrations and presentations; activities for children; nature walks featuring geology, soils, landscape formation, and fossils; and Earth-inspired art, music, and literature.
- The Chamber of Commerce of Ladonia hosted a Fossil Day event at Fannindel High School on October 19.

• EARTH SCIENCE WEEK 2019 EVENTS BY STATE AND TERRITORY

- The Dallas Paleontological Society hosted a National Fossil Day celebration at the Heard Natural Science Museum & Wildlife Sanctuary.
- The Texas Memorial Museum held a public event for National Fossil Day. Activities included fossil identifications and a paleontologist meet-and-greet.
- The Mineral Wells Chamber of Commerce held its annual Crazy Fossil Dig on October 19 at the Mineral Wells Fossil Park.
- Fossil Rim Wildlife Center allowed guests to join its “Fun Finding Fossils” event to find and identify fossils, learn about them, and understand how they got here.
- Locals, students, visiting scientists, fossil hunters, and enthusiasts gathered in Fannin County for a week of activities celebrating Earth Science Week.
- Wiess Energy Hall at the Houston Museum of Natural Science hosted an Earth Science Week field trip throughout the building to journey from the Big Bang to the Houston of the future.
- Baylor University’s Mayborn Museum invited people to join faculty and students of the Department of Geosciences to learn more about fossils.
- The National Park Service and Waco Parks and Recreation hosted the annual Fall Fossil Festival at Waco Mammoth National Monument during Earth Science Week.
- On October 12, Ladonia Fossil Park and the Dallas Paleontological Society hosted a tailgate fossil show with collectors displaying finds, followed by an exploration of North Sulphur River Canyon.
- The local Bois d’ Arc Chapter of Texas Master Naturalist teamed with the Dallas Paleontological Society, the Ladonia Chamber of Commerce, the City of Ladonia, the Blackland Prairie Chapter of Texas Master Naturalist, and the Ladonia Volunteer Fire Department Earth Science Week.
- The Houston Museum of Natural Science helped people join in preparing fossils during a “Fossil Tech Lab Experience.”
- The Houston Geological Society held Earth Science Week events with partners in the Houston area, including field trips and a celebration at the Houston Museum of Natural Science.
- The Houston Energy Day Festival, sponsored by about 100 businesses in Houston, brought over 25,000 people out to experience nearly 70 demonstrations, learn about energy science, and play games to compete for prizes and giveaways.
- The Just Energy Foundation awarded prizes to top-performing students of the Science and Engineering Fair of Houston during the Energy Day Festival.
- Consumer Energy Alliance partnered with the Houston Museum of Natural Science Wiess Energy Hall’s Energy & Conservation Club to host the eighth annual Art, Essay, and Media contest in Houston. Winning students and their teachers received awards and were recognized on stage at Energy Day.
- The Geology Department at Texas A&M University Kingsville kicked off a week of celebration with an open house; activities including GIS, paleontology, mineralogy, and petrology; and field geography and geophysics demonstrations. Also on display were personal collections of the faculty, including meteorites, minerals, and fossils.
- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by the Bureau of Economic Geology and the Petroleum History Institute.
- The National Park Service recognized the City of Ladonia in Fannin County as a sponsoring participant of National Fossil Day. The Dallas Paleontological Society and Ladonia Fossil Park held additional Earth Science Week activities.

Utah

- Earth Science Week Toolkits were distributed to students, teachers, and others by the Utah Geological Survey.
- Fossils of Millard County hosted an event at the Great Basin Museum where guests learned about fossils of West Central Utah.
- The fourth annual Moab Festival of Science was sponsored by organizations including the U.S. Geological Survey, Utah Department of Natural Resources, the National Park Service, the Department of Energy, and the Museum of Moab. This event served to connect and inspire citizens of Utah with the wonders of science with numerous hands-on activities and tours.

Vermont

- A celebration was held at the Montshire Museum of Science. Attendees examined artifacts in the Science Discovery Lab, watched stone tool and pottery making demonstrations, got their hands messy at the pottery workshop, threw an atlatl, and talked with local archaeologists.
- Dr. Christopher Wolff gave a lecture on his examination of the relationship between multiscalar ecological change and northern coastal hunter-gatherers, illuminating the impacts of climate change on the indigenous peoples of the Arctic and their cultural heritage, in Lafayette Hall of the University of Vermont.

Virginia

- Reinforcing the Earth Science Week 2019 theme of “Geoscience Is for Everyone,” AGI partnered with Lyda Hill Philanthropies and publisher Nautilus to highlight leading women geoscientists named as IF/THEN Ambassadors. A booklet, made available in the 2019 toolkit, highlighted the work of Dr. Hope Jahren, author *Lab Girl*. The booklet was the first installment in a

series of print and online materials profiling on female geoscientists along with educational activities. This partnership is a part of the larger IF/THEN initiative promoting girls and women in STEM (science, technology, engineering, and mathematics).

- Amanda Von St. Paul, Ghena Kubba, and Hope Gantt of Virginia Beach, Virginia, were three of the selected finalists in this year's Earth Science Week essay contest.
- Anish Aradhey won first place in the video contest with an animation and song on "Earth Science Unity: Why Earth Science is for Everyone."
- Tonya Boone of Williamsburg won first place in the photo contest with an image of her family hiking the Sólheimajökull glacier in Iceland.
- Dr. Carole Nash of James Madison University presented a free lecture to the public at the Frontier Culture Museum.
- Virginia's Department of Mines, Minerals, and Energy celebrated Earth Science Week on October 17. Geologists identified rock and mineral samples, discussed the geology and mineral resources in Virginia, and answered questions from the public.
- The governor of Virginia issued a proclamation for Earth Science Week 2019.
- Tri-County/City Soil & Water Conservation District hosted an event at the Spotsylvania Town Center Library to celebrate Earth Science Week. This celebration featured games and activities and invited guests to find their inspiration in rocks, soil, and water.
- Virginia Tech's Museum of Geosciences and Paleobiology Group allowed the public to visit labs, pick microfossils, help curate specimens, learn about the latest research, and chat with the researchers.
- Earth Science Week Toolkits were distributed to students, teachers, and others by the Virginia Department of Mines, Minerals, and Energy.

Washington

- The Washington State Department of Natural Resources' Geology and Earth Resources Division, in cooperation with the Oregon Department of Geology and Mineral Industries, produced a map to highlight the geologic influences that converge along the course of a river in recognition of Geologic Map Day.
- To celebrate Geologic Map Day, the Washington Geology Library's Natural Resources Building displayed geologic maps and geologic-themed baked goods.
- Grant County Public Utility District and the Wanapum invited members of the public to Archaeology Days 2019. The event provided an interactive experience to promote understanding about the Wanapum way of life. Those attending heard from speakers, saw demonstrations, and participated in various activities.
- For International Archaeology Day, Cowlitz County Historical Museum featured a talk on the importance of wet sites and how those of southwest Washington teach about the tribal pre-history of the Chinook, Cowlitz, and others.
- In cooperation with the Departments of Classics at the University of Washington and the University of Puget Sound, the Puget Sound Society co-sponsored an annual lecture series that introduced audiences to recent archaeological research and discoveries.
- Earth Science Week Toolkits were distributed among science teachers statewide by the Washington State Department of Natural Resources.

West Virginia

- Grave Creek Mound Archaeological Complex hosted an International Archaeology Day event filled with activities and displays such as a flint knapping demonstration, spear throwing using the atlatl, making pinch pots, and more.

Wisconsin

- Earth Science Week 2019 Toolkits were distributed to students, teachers, and others by the Wisconsin Geological & Natural History Survey as well as the Soil Science Society of America.
- On October 5, the Archaeological Institute of America's Milwaukee Society joined the Milwaukee Community Archaeology project to celebrate International Archaeology Day at the Schlitz Audubon Nature Center.

Wyoming

- The Wyoming State Geological Survey disseminated Earth Science Week Toolkits among students and educators statewide.
- Fossil Butte National Monument staff and volunteers held a celebration of National Fossil Day with various activities, including hands-on demonstrations, arts and crafts, and exhibit tours of the monument museum.
- Tate Geological Museum at Casper College hosted a National Fossil Day Open House with fun fossil activities, crafts, tours and treats.
- The Wyoming State Geological Survey and University of Wyoming Geological Museum celebrated with a geoscience event on October 19.

International Events

According to Google Analytics, the Earth Science Week website was accessed by users in 220 nations, territories, and regions in 2019. In addition, international activities included:

Australia

- Geoscience Australia's Earth Science Week 2019 celebrated the theme of "Geoscience Is for Everyone."
- Australia's Sydney Science Festival capped months of productive work across the city with staff promoting geological resources. Several new maps were featured, highlighting the diversity of work done by the Geological Survey of New South Wales (GSNSW).
- Thanks to the GSNSW, two free events were open to the public in honor of Earth Science Week. A free public tour along Newcastle's rocky coastline was led by expert geoscientists. Also, a presentation was given on the Earth's inner workings and how shifting plate tectonics shape our world and long-term climate change.
- The GSNSW also engaged the community throughout the week with science-related events and resources.

Bangladesh

- Bangladesh held its second annual Earth Science Week celebration, with over 50 schools and colleges participating.



A child receives an Earth Science Week award in Dhaka, Bangladesh.

Credit: Moshir Rahman

- Activation programs, hosted by Knowledge World: The Center for Development of Knowledge and Excellence, were held in 100 schools, October 13-19 in Dhaka, Bangladesh.
- Knowledge World also invited and encouraged local schools to participate in four contests for Earth Science Week.

Belize

- The Galen University's Anthropology Club hosted an International Archaeology Day celebration at the Welcome Center Park in the center of San Ignacio. At multiple stations, students got hands-on experience and learned about the importance of archaeology, cultural heritage, and the Ancient Maya.

Canada

- The Ontario Archaeological Society hosted its inaugural International Archaeology Day event "Heritage Protection."
- The Royal Ontario Museum celebrated International Archaeology Day with a free day of activities and exhibits. Visitors learned how researchers are using non-invasive methods involving experimental archaeology and digital technology to investigate Ontario's past.

China

- The 2019 International Olympiad of Geography (iGeo) was held in Hong Kong, engaging 43 participating countries.

Colombia

- To help disseminate scientific geographic knowledge, the student chapter of the Colombian Society of Geology, the student chapter of the Colombian Association of Petroleum Geologists and Geophysicists, and the student chapter of the American Association of Petroleum Geologists organized an international Earth Science Week event.
- The Conference on Social Appropriation of Knowledge was held in October. Student chapters of the Villa del Rosario schools took part in the Earth Science Week event, where knowledge was shared through talks and activities.

Croatia

- An International Archaeology Day celebration took place at the Osijek Archaeological Museum.

Czech Republic

- Guests spent a day at the Sazava Monastery hearing expert commentary by an archaeologist.
- An archaeological play was held at Hradek Hillfort. Visitors learned about methods of documentation and were invited to solve archaeological questions.

Greece

- Ministry of Culture and Sports' Ephorate of Antiquities of Achaia celebrated this year's International Archaeology Day with a two-session educational event on October 17-18 at the Mycenaean Archaeological Park of Voudeni, Patras.

India

- Vedika Amin of Maharashtra, India, won first place in the essay contest with a paper on “Why Earth Science Is for Everyone.”

Ireland

- Earth Science Week events in museums, libraries, schools, universities, geoparks, and other locations included urban geowalks, family activity days, talks, conservation days, and field trips.

Italy

- American University of Rome sponsored a lecture at the Auriana Auditorium.

Japan

- The second annual Earth Science Week Japan was celebrated in Shizuoka, October 14-20, mainly at Museum of Natural and Environmental History. Many events took place throughout the week, including a day at the museum and a geotour in Izu Peninsula.

Kosovo

- The Museum of Peja hosted a local celebration in honor of International Archaeology Day.

Malaysia

- To celebrate International Archaeology Day 2019, an excavation was held at the Sungai Batu archaeological site.

Malta

- The Archaeological Society Malta sponsored a talk featuring University of Malta’s Dr. Maxine Anastasi and Dr. Ing. John C. Betts as well as Heritage Malta’s Francesco Fontanelli.

Myanmar

- SST Tourism Co., Ltd. held an event entitled “Archaeological Values of Apsidal Building” at Peinnegone Village in Kawhmu Township of the Yangon Region.

Netherlands

- In celebration of Prehistoric Weekend and International Archeology Day, Hunebedcentrum organized a series of workshops on October 19-20.

Pakistan

- International Archaeology Day celebrations were held at Quaid-i-Azam University as well as the University of Sindh, Jamshoro.

Peru

- The Maria Parado de Bellido School hosted a day of activities for Earth Science Week’s International Archaeology Day.

Poland

- Archaeology of Sacrum was presented at Muzeum Górnośląskie w Bytomiu on October 19.

Russia

- Samara was one many cities worldwide where the Archeological Institute of America promoted celebrations of International Archeology Day.

Slovakia

- Múzeum mesta Bratislavy hosted a lecture event on its exhibit “Limes Romanus and Archaeological Evidence of Military Activity at Gerulata.”
- The Department of Archaeology in Bratislava held a one-day event for students, colleagues, and the public with lecturers, discussions, and presentations of archaeological work.

- During a lecture event held for International Day of Archaeology at the Museum of Gemer-Malohont, Dr. Alexander Botoš presented the latest archaeological research from the museum.

South Korea

- The 2019 International Olympiad of Earth Sciences was held at the Daegu EXCO Convention Center in Daegu, South Korea.

Sweden

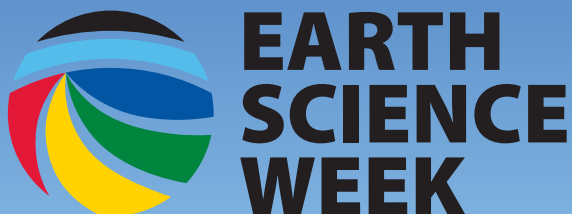
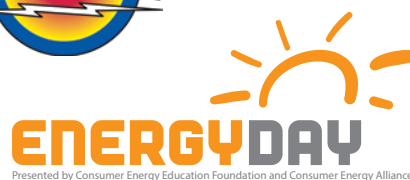
- The Symposium of Archeology and Cultural Heritage took place August 11-14 and included conferences, workshops, guided visits, a student symposium, and a poster session.

Trinidad & Tobago

- A series of American Association of Petroleum Geologists STEM sessions were held in celebration of Earth Science Week.

United Kingdom

- The Geological Society of London (GSL) supported several Earth Science Week events including geowalks, school workshops, and more.
- GSL also launched a photography competition for Earth Science Week celebrating the theme “Geoscience Is for Everyone.”
- Innovinc Organization held the inaugural “World Congress on Geology & Earth Science” in London, England, focusing on the theme of “Providing Innovative Research Methodologies for Geoscience.”



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