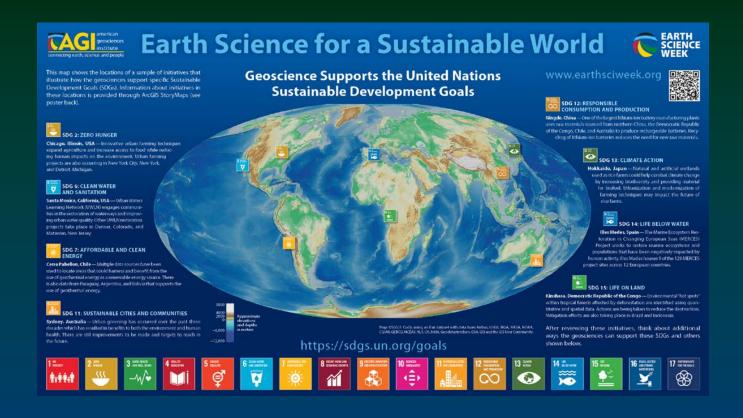
Earth Science Week 2022:

Earth Science for a Sustainable World

October 9-15, 2022 Highlights Report







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See Our News Coverage

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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Front cover: 2022 ESW poster design by the American Geosciences Institute.





Highlights Report: Earth Science Week 2022

Earth Science Week 2022 Photography Contest winning entry by Litzia Galvan. (Cropped portion of original artwork shown above.)

Introduction

Held October 9–15, 2022, the 25th annual Earth Science Week celebrated the theme of "Earth Science for a Sustainable World." The 2022 event emphasized the essential role of Earth science in helping people make decisions that maintain and strengthen the planet's ability to support thriving life. Earth Science Week 2022 learning resources and activities engaged young people and others in exploring the many ways that Earth science can and does help promote a sustainable world. Individuals of all backgrounds, ages, and abilities were invited to enhance their understanding of geoscience — including the professions, technologies, and practices that contribute to the sustainability of the Earth, society, and all of life.

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. Sponsors in 2022 included:

- U.S. Geological Survey (USGS);
- American Association of Petroleum Geologists (AAPG) Foundation;
- National Aeronautics and Space Administration (NASA);
- National Park Service;
- Natural Resources Conservation Service (NRCS);
- Geological Society of America (GSA);
- AmericaView;
- American Geophysical Union (AGU);

- Society for Mining, Metallurgy and Exploration (SME);
- Society of Exploration Geophysicists;
- Water Footprint Calculator (Grace Communications Foundation);
- Real World Globes;
- CLEAN (Climate Literacy and Energy Awareness Network); and
- American Meteorological Society.

In addition, Earth Science Week 2022 had two Global Sponsors:

- International Raw Materials Observatory; and
- ExxonMobil.



Earth Science Week 2022 Photography Contest finalist entry by Michael J. Sipos. (Cropped portion of original artwork shown above.)

Earth Science Week participation remained strong through 2022. People in all 50 states and the District of Columbia and 20 additional countries participated in events and activities. The Earth Science Week website received more than 390,000 page views in 2022. In addition, more than 300 people across the country and around the globe actively participated in the program's visual arts, video, essay, and photography contests.

Earth Science Week 2022 included online events as well as in-person events in which educators taught Earth science activities in their classrooms and public outreach events in settings like parks, museums, and science centers. A detailed list of events can be found in the second half of this report; this list represents only events reported directly to and discovered by AGI, so please notify Earth Science Week staff if your event or participation is not listed.

Events also 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, Earth Science Week media in web, print, and broadcast coverage, along with direct outreach by AGI, reach thousands of people through hundreds of organizations across the country and around the world.

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 2022 events and publicity inspires you to develop your own activities for this upcoming Earth Science Week. Please visit www.earthsciweek.org for event planning, materials, resources, and support. Contact Earth Science Week staff at info@earthsciweek.org for assistance in planning for Earth Science Week.

Because of the large number of news clippings citing Earth Science Week activities and resources, this report does not include such clips. 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 build geoscience awareness, conserve resources, and protect the environment.

Models of Earth Science Week Participation

Earth Science Week provides a catalyst for events that build collaboration in communities, promote formal and informal educational opportunities, and foster outreach by geoscience-based organizations. Here, we highlight three examples of organizations or individuals that have built long-standing programs that celebrate Earth Science Week and the ways in which they promote participation.

Fort Hays State University (FHSU), U.S., Hays, Kansas

Since the early 2000s, FHSU has celebrated Earth Science Week by hosting a variety of events throughout the week. This year's events included many interactive virtual activities including geocaching (**Geocaching.com**) and a mapping challenge through MapRoulette (https://maproulette.org/) to celebrate International EarthCache Day and Geologic Map Day, respectively. A hybrid event hosted two guest speakers who discussed watersheds and how human activity affects water quality. Following the speakers, a community clean-up event where volunteers collected nearly 140 pounds of trash from Chetolah Creek in Hays, Kansas. On Wednesday of Earth Science Week, FHSU's Geosciences Club had a table where club members taught other students about sustainable practices and the club's ongoing recycling challenge. On "Geoscience for Everyone Day," FHSU hosted a meet and greet with Jay Kalbas, the Director of the Kansas Geological Survey, where students and visitors could learn about careers in the geosciences and related fields.

These events were planned and funded by FHSU's Geosciences Department, with planning beginning at the start of the fall semester. The city of Hays helped with contributions for the community-based events. The department includes their students in the planning and aims to host a range of events to maximize participation. They estimate that about 15-20 individuals were involved in the planning and around 100 people attended this year's in-person events. All events were designed to appeal to students and community members and were highly advertised on the Fort Hays campus, as well as on their website and social media platforms. FHSU also promoted other local and national events, such as the Sternberg Museum's National Fossil Day celebration, lectures hosted by the Archaeological Institute of America, AGI's Earth Science Week webinar series and contests, as well as the National Fossil Day Art Contest run by the National Parks Service.

Japan Geoscience Union (JpGU) Tokyo, Japan

Earth Science Week Japan celebrated its fifth year by involving various universities and research institutes in presentations, field trips, and hands-on activities to engage the public with Earth science research, the geology of Japan, and disaster prevention. Most events were held at the Fujinokuni Museum of Global Environmental History and the Shizuoka Science Museum Ru-Ku-Ru throughout the month of October. Lectures and webinars were also accessible online, including an invited talk given by Dr. Futoshi Nakamura on his important work in the conservation and restoration of the Kushiro Wetlands, which was part of the annual Earth Science Week webinar series organized by AGI.

Earth Science Week Japan held in-person events for all ages but were especially focused on students gaining experience with Earth science concepts. Many handson experiences engaged students with model-making, including fossil replicas, 3D maps, and volcanoes. One of the largest events included a geological tour of the gold mines in Minobu, where middle and high school students gained field experience while learning about the cultural relevance of the area around Minobu. Student researchers did poster presentations about their scientific work at the autumn part of the Natural History Shizuoka Festival, building upon this long-standing celebration of the culture and history of the area.



Earth Science Week 2022 Visual Arts Contest entry by Kendra Schirckel.

Old Donation School, U.S., Virginia Beach, Virginia

For the past 4 years, Chris Woods, Ellis Pawson, and Josh Whitlinger, eighth-grade teachers at Old Donation School, have been encouraging their students to participate in the annual Earth Science Week (ESW) essay contest. Their predecessor, Diana McDowell, had been using the essay contest for many years before that as a way to engage students in Earth Science Week. Now, the Earth Science team at Old Donation School introduces the essay contest early in their 8th Grade Earth Science course as a way to start discussing Earth's systems. The teachers create a formal assignment around the essay prompt that is posted on the AGI contest website; the rubric they develop focuses on the prompt as well as how it can be interpreted in terms of Earth Systems, a recurring theme in their course. The class spends approximately the first three weeks of school on the essay, which helps to establish classroom expectations and norms for student work throughout the year. Starting with an introduction to the rubric, students complete a graphic organizer to outline their ideas. The second week is for feedback and an initial draft, and the third week is for anonymous peer review where students evaluate other students' essays using the rubric. Work on the essays ends near the essay contest deadline, which is the Friday of ESW.

All eighth-graders complete the essay and are encouraged to enter the official ESW contest; Mr. Woods, Mr. Pawson, and Mr. Whitlinger facilitate the process for any student who wishes to enter their essay. This year, 140 students from Old Donation School submitted essays to the contest. Both the teachers and the students see many benefits to entering the contest, regardless of whether they win. Knowing that the contest judges will read the essays provides a sense of having a valid audience for the writing. Mr. Woods stated that students feel "prestige" in winning or even placing," when that does happen, such as for the 2022 Contest, when students from Old Donation High School included the contest winner and three finalists. Mr. Woods also encourages students to participate in the ESW Photography Contest. Students can use participation in either contest as a highlight on their High School Academy Application to help them get into advanced and subject-specific programs, such as Environmental Studies or the Mathematics and Science Academy hosted by various high schools in Virginia Beach.

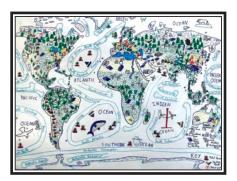


Week by attending, planning, and/or hosting events; entering the Earth Science Week Contests; and participating in our annual Earth Science Week webinar series. For more information on each of these topics, visit the following sites:

- Plan an Earth Science Week event: https://www.earthsciweek.org/ event-planning
- 2023 Earth Science Week Contests: https://www.earthsciweek.org/contests
- Past Earth Science Week Webinar Series: https://www.earthsciweek.org/content/ earth-science-week-webinar-series

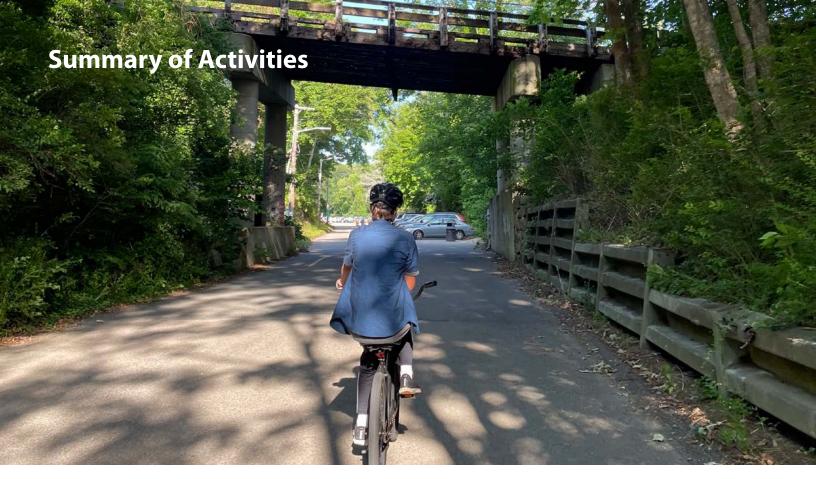


Earth Science Week 2022 Visual Arts Contest entry by Maxwell Wernicki.



Earth Science Week 2022 Visual Arts Contest entry by Nathan Xu.

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Earth Science Week 2022 Photography Contest entry by Eva Nichter. (Cropped portion of original artwork shown above.)

Key Partnerships and Efforts

Earth Science Week's success depends on the collaboration of key partners. In 2022, 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 longtime supporters of Earth Science Week. In addition, Earth Science Week promoted awareness of AAPG's Distinguished Lecturer and Teacher of the Year programs, plus AAPG's Teacher of the Year competition. AAPG's "Solar Updraft Tower" activity was featured in the Earth Science Week 2022 activity calendar. Subscribers to AAPG Explorer received copies of the Earth Science Week 2022 poster in the magazine along with an article provided by AGI titled "Earth Science Eyes Sustainability."

The American Geophysical Union (AGU) continued its role as a supporting program partner in 2022 with the contribution of funds as well as expertise. For this year's educator kit, AGI provided a flyer on its new ENGAGE (Eos News: Geoscience and Global Events) program enabling teachers and students to build science

literacy while exploring select articles from AGU's Eos publication and related education resources. Earth Science Week's 2022 activity calendar featured AGU's "Maintaining Soil Moisture" classroom activity. AGU's annual meetings, professional development workshops, programs for college students, print and electronic resources, and Eos magazine were promoted through the Earth Science Week e-newsletter, website, and activity calendar.

Earth Science Week 2022 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 provided a geologic timescale bookmark for the educator kit. AIPG's website also promoted AGI's Earth Science Week webinar series.

The American Meteorological Society (AMS) promoted two teacher professional development programs focusing on the atmosphere and oceans. Project Atmosphere offered comprehensive teacher professional development program based on studies in the atmospheric

sciences. Project Ocean provided teacher professional development focusing on studies of the physical foundations of oceanography. In addition, AMS promoted its DataStreme professional development courses in weather, ocean, and climate science. AMS also provided a bookmark for the educator kit, connecting program participants with information about its Certified AMS Teacher professional development and related resources.

AmericaView, a longtime Earth Science Week partner, provided a "Landsat: Sustainability of a Mission" poster, including information collected by Landsat and a link to the Landsat Change-Over-Time Game, for the 2022 educator kit. Supported by USGS and NASA, this material offered an educational and fun way for young people and others to explore topics around Earth Observation Day. Earth Observation Day, established by America-View, is a focus day during Earth Science Week.

The Archaeological Institute of America (AIA) promoted awareness of and participation in AIA's International Archaeology Day, which takes place annually on the final day of Earth Science Week.

Program participants were introduced to the Association for the Sciences of Limnology and Oceanography (ASLO), an AGI member society that offers an extensive collection of free-access, peer-reviewed, up-to-date content for education about limnology and oceanography. ASLO offers e-Lectures written and reviewed by expert scientists, online virtual items that pull articles from various ASLO journals under a common theme, and tools and resources for science communication and policy. Materials are designed to be used from upper-level high school to graduate courses in aquatic science.

For the Earth Science Week 2022 Toolkit, the **Association for Women Geoscientists** provided a mini-flyer featuring links to information and videos about geoscience and sustainability. The flyer also included information on steps people can take to conserve resources and energy.

The Association of American State Geologists partnered with AGI to support Geologic Map Day during Earth Science Week 2022. State geologists nationwide made geologic maps of their states available on their websites for students and others to use in learning activities on Geologic Map Day.

Program participants learned about resources offered by the **Association of Environmental and Engineering Geologists** (AEG). Resources include publications, section and chapter meetings, and special educator sessions at the AEG 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 AGI's **Education GeoSource** database, which provides information about and access to classroom activities, professional development opportunities, visual resources, and more.

Program participants were informed 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 stewards a collection of climate and energy science education resources and supports 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, as well as CLEAN webinars throughout the year. Program participants also were invited to take part in a Summer Institute for Climate Change Education. For the Earth Science Week Toolkit, CLEAN provided a flyer on CLEAN education resources and a flyer on the CrowdMag citizen science program mapping variations in Earth's geomagnetic field.

A new program partner, **CMB-S4**, provided a postcard for the Earth Science Week Toolkit featuring information and links to activities about this ground-based cosmic microwave experiment, using telescopes around the world inform physics, cosmology, astrophysics, and astronomy.

For the 2022 educator kit, the **Consortium of Universities for the Advancement of Hydraulic Science** (CUAHSI) provided a flyer including a cut-out Secchi disk and instructions for a related learning activity, plus a "Life in the Critical Zone" mini-poster on water science.

Earth Science Week participants were encouraged to celebrate Earth Day in April 2022 with educational 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 "Earth Science for a Sustainable World."

Program participants were notified of the eighth annual Earth Educators' Rendezvous, facilitated by the National Association of Geoscience Teachers, which took place in July 2022. Workshops, oral and poster sessions, teaching demonstrations, panel discussions, and plenary talks were tailored to appeal to those working in Earth education, including college faculty, graduate students, K–12 teachers, informal educators, practitioners, administrators, and researchers.

Earth Science Week's 2022 activity calendar featured an **Earth Science Information Partners** classroom activity titled "Climate Change and Resilience."

ExxonMobil, a longtime Earth Science Week partner, continued its support of the program. During summer 2022, ExxonMobil Exploration and AGI partnered to hold their 14th annual Earth Science/STEM Teacher Leadership Academy. The academy provided K–8 teachers with Earth science content, hands-on activities, resources, and field experiences for them to use with their students and with their colleagues in professional development settings. ExxonMobil also supported Earth Science Week 2022 activities as a Global Sponsor.

For the Earth Science Week 2022 Toolkit, the **Gemological Institute of America** provided a GemKids poster exploring what gems are, 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. Six teacher workshops were offered during Earth Science Week, covering topics such as geoheritage and climate change. GSA also organized International EarthCache Day at the start of Earth Science Week 2022 and contributed as an active partner in the Geologic Map Day initiative. Earth Science Week's 2022 activity calendar included GSA's "Composting Materials and Rates" activity. Subscribers to the GSA Today magazine received copies of the Earth Science Week 2022 poster in the publication.

The **Geological Society of London** (GSL), an international Earth Science Week partner, offers a pair of online resources for learning about key geoscience topics. Electronic map-based resources are the focus of GSL's Plate Tectonics page. In addition, a site was launched to accompany GSL's Rock Cycle online module.

Program participants were directed to **Geology.com**, an Earth Science Week partner that provides a variety of geoscience materials 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 through the year.

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 directed 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 2022 educator kit, IRIS also provided a flyer detailing a number of free educational resources, including earthquake and seismology lessons, animations, videos, and more.

The International Raw Materials Observatory supported Earth Science Week 2022 as a Global Sponsor.

Program participants were encouraged to explore water science through the **International Year of Caves and Karst** (IYCK) in 2022. IYCK resources helped educators and others learn, teach, and plan events around the event.

Earth Science Week participants tapped the educational offerings of program partner **Mineralogical Society of America** (MSA), especially in celebrating the third annual Minerals Day on the Monday of Earth Science Week 2022. An MSA Minerals Day webinar series covered topics such as gem science and mineral photography. To help program participants prepare for the October celebration of Minerals Day, the September page of Earth Science Week's 2022 activity calendar featured a "Sources of Minerals" learning activity courtesy of MSA.

The Minerals Education Coalition (MEC) of the Society for Mining, Metallurgy, and Exploration, an AGI member society, supported Earth Science Week in 2022. MEC provided a "Getting the Metal Out" postcard for the educator kit, as well as a calendar activity entitled "Iron Minerals on the Moon."

Science teachers were invited to apply to free Earth and Environmental Science Educators' Institutes that the **Model-Evidence Link (MEL) Project** hosted in conjunction with the National Science Teaching Association's National Conference in Chicago, including pre-institute homework, a webinar, and full participation in the institute and evaluations.

Earth Science Week directed participants' attention to the National Association of Geoscience Teachers (NAGT) including free webinars and joined discussions. 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. NAGT also provided a bookmark for the kit, promoting awareness of its instructional resources relating to sustainability.

The National Cave & Karst Institute provided a postcard about caves and karst, including an activity and a link for more information, in this year's educator kit.

NASA, a founding partner of Earth Science Week, provided materials in the Earth Science Week 2022 Toolkit as well as online. NASA included multiple resources in the educator kit, including an EO Kids "The Shape of Farming: Water for Crops" four-page flyer, a "Climate Kids" flyer on climate change. For this year's kit, NASA also collaborated with USGS and AmericaView to provide a "Landsat: Sustainability of a Mission" poster. Earth Science Week's 2022 activity calendar also featured a "Collecting Real World Data" classroom activity from NASA. Throughout the year, Earth Science Week promoted awareness of NASA's online offerings, such as the Diversity & Inclusion Leadership Video Series, EO Kids, NASA Educator Toolkit, National Parks from Space, NASA Earth Observatory, Mapping Our World Interactive, NASA Wavelength, and NASA STEM Engagement. Teachers and students were urged to explore water science through NASA's Global Precipitation Measurement Mission (GPM), which uses satellites to measure Earth's rain and snowfall. Launched by NASA and the Japan Aerospace Exploration Agency in 2014, GPM uses a network of satellites to provide high-quality estimates of precipitation every 30 minutes. NASA also continued to serve as an active partner in Geologic Map Day.

The National Earth Science Teaching Association (NESTA), a longtime Earth Science Week partner, continued its vital role in helping AGI promote excellence in geoscience education. In connection with 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 also provided a postcard promoting sustainability science activities for this year's educator kit. NESTA members also received a special edition of their association publication, The Earth Scientist, featuring content provided by Earth Science Week staff including an article about the 2022 celebration titled "Science for Sustainability."

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. In 2022, EE Week changed from an April event to a year-round celebration.

Earth Science Week promoted the **National Ground-water Association**'s (NGWA) Groundwater Awareness Week in March 2022. NGWA offers Groundwater Fundamentals, a website providing water facts.

Earth Science Week's 2022 activity calendar also featured an "Exploring Your Community" learning activity from the National Oceanic and Atmospheric Administration (NOAA). This year's kit featured a NOAA "Climate Resilience in Your Community" activity book enabling young people to explore ways they can help address climate challenges and environmental hazards. In addition, Earth Science Week 2022 directed participants to NOAA's online multimedia education resources, including lesson plans, real-world data, instructional games, videos, and more. The kickoff of NOAA's GeoMagnetism Data Collection Challenge occurred during Earth Science Week.

A longtime Earth Science Week partner, the National Park Service (NPS) continued for the 13th 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. The NPS National Fossil Day art contest engaged students and others. Earth Science Week participants learned about unique online resources launched by NPS, including the National Fossil Day Poster featuring plants and animals that would have been found in Yellowstone National Park during the early Eocene Epoch, in celebration of Yellowstone's 150th Anniversary as a national park. Program participants also learned about "Virtual Field Trip: Air Quality at Shenandoah National Park," an online resource launched by NPS in partnership with AGI which incorporates interactive features allowing visitors to virtually explore the park, learning about scientific contributions that the park makes to our understanding of air quality. 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. A postcard detailing National Fossil Day was included in the Earth Science Week Toolkit. Earth Science Week's 2022 activity calendar also featured an NPS classroom activity titled "Discover Park Strategies for Sustainability." NPS also was an ongoing partner in Geologic Map Day activities.

For the Earth Science Week 2022 Toolkit, the **National Science Foundation** provided a "Soil Sleuth" flyer featuring a learning activity for grades fourth through 12.

Earth Science Week partnered with the National Science Teaching Association (NSTA) again in 2022, reaching science educators nationwide. Program participants learned about "Freebies for Science Teachers" on the NSTA website. Also, AGI presented once again at the NSTA National Conference, sharing Earth Science Week and other education materials for science teachers.

Earth Science Week participants learned about K–12 science resources offered online by the **Natural Resource Conservation Service** (NRCS) through a flyer included in this year's kit. A new searchable database allows educators to easily find classroom-ready lessons, background information on soil, and educator-guides for high school and introductory college lessons. Teachers can request a copy of a free poster "Dig It!" that explains soil basics, and educators who work with grades 3–5 can access a full curriculum guide to accompany the poster. NRCS also served as an active partner in Geologic Map Day and supplied two maps featured on the poster.

As the organizer of Earth Science Week, AGI collaborating with the NGSS-ESS Working Group to promote a number of free webinars available for enrichment among geoscience educators throughout the year. Webinars such as one titled "Why Is 'If It Can't Be Grown, It Must Be Mined' Important in Your ESS Classroom?" provided teachers with support in instruction dealing with the Next Generation Science Standards (NGSS) in Earth System Science (ESS).

For the Earth Science Week 2022 Toolkit, the **Nutrients for Life Foundation** provided a flyer on available resources, videos, and student engagement opportunities relating to crop nutrients.

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. PRI also provided a geologic timescale bookmark, including a link to online paleontology resources, for this year's educator kit. The bookmark featured a link to Earth@Home, a site that houses Regional Guides to Earth Science, virtual fieldwork experiences and collections, and workshop registration information and resources for educators.

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 2022, PRE collaborated to promote awareness of Earth Science Week, and vice versa.

For the Earth Science Week 2022 Toolkit, **Real World Globes** provided a flyer with a high-school level learning activity on the Coriolis Effect, along with a related cut-out Icosahedron globe ornament and online links.

Education resources of the Seismological Society of America (SSA), the international scientific association devoted to advancing seismology and applications in imaging Earth's structure and understanding and mitigating earthquake hazards, were recommended to program participants. SSA offers links to educational websites, including geoscience activities related to seismic science and earthquakes. Sponsored by Purdue University, SSA's site features seismic eruption models, wave animations, plate tectonics simulations, information on tsunamis, and more.

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. SEG's "What Do Geophysicists Do?" site promoted awareness of ways that geophysicists make a difference with innovations addressing energy, water, and climate. Earth Science Week encouraged participants to take part in a webinar titled "Geo-hazard Early Warning Systems to Protect Vulnerable Populations," which discussed two humanitarian projects of Geoscientists without Borders[®], an SEG program that brings geoscientists together with communities to solve their problems. For this year's educator kit, SEG provided three "Geoscience Can Help" worksheets (on land-based natural hazards, coastal natural hazards, and volcanoes), detailing connections to SEG's Geoscientists Without Borders® (GWB) program and the United Nations' Sustainable Development Goals. Highlighting insights inspired by GWB, the Earth Science Week 2022 activity calendar featured a "Seeding Growth" classroom activity. Subscribers to SEG's The Leading Edge found an Earth Science Week 2022 article titled "Earth Science for a Sustainable World" written by AGI staff in the magazine.

The **Soil Science Society of America** (SSSA), a longtime 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 2022 Toolkit, SSSA provided a flyer with information and links to educational resources on soil science. Earth Science Week's 2022 activity calendar also featured a "Sustaining Living Soil With Composting" classroom activity courtesy of SSSA. SSSA also served as an active partner in Geologic Map Day by providing guidance and resources for the poster.

SWITCH Energy Alliance provided a flyer about its energy science curriculum, videos, and other resources for the Earth Science Week 2022 Toolkit. Program participants also learned about "Switch On," a film featuring Dr. Scott Tinker available to stream online.

For the Earth Science Week 2022 Toolkit, **UNAVCO** provided a "Geodesy Tools for Societal Issues (GETSI) Course Modules" flyer. Students and others explored about geodesy, the science of Earth's shape, measuring changes in its surface, gravitational field, and rotation, as well as available resources.

The **U.S. Bureau of Land Management** (BLM), a continuing Earth Science Week partner, provided a flyer including a dinosaur activity sheet for the 2022 educator kit. Earth Science Week also promoted BLM's Classroom Investigation Series online. In addition, BLM has created an app called the BLM's Junior Ranger Mission: Discover Dinosaurs.

The U.S. Department of Energy (DOE) invited educators to explore DOE's websites for the National Renewable Energy Laboratory. College students were invited to be part of the free, semester-long DOE Geothermal Collegiate Competition. 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 students' understanding of climate change impacts on the United States' wildlife and ecosystems. The online kit includes case studies, activities, and videos based on climate science, environmental education, and stewardship information.

For the Earth Science Week 2022 Toolkit, the **U.S. Forest Service** provided a "Groundwater Dependent

Ecosystems" flyer featuring a colorful diagram and linking users to additional resources online. Online links to "Stories in Stone," a story map enabling visitors to learn about geologic resources in national forests and grasslands.

Earth Science Week participants learned about online education resources offered by the U.S. Geological Survey (USGS), a longtime 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. For this year's kit, USGS collaborated with NASA and AmericaView to provide a "Landsat: Sustainability of a Mission" poster. Earth Science Week's 2022 activity calendar included a "Wetland in a Water Bottle" activity courtesy of USGS. For Minerals Day, AGI hosted a webinar, "The Global Supply of Critical Minerals: Assessing and Tracking Critical Mineral Commodities," featuring USGS scientist Nedal Nassar. For Geoscience for Everyone Day, the USGS Water Science School held a virtual party to celebrate the release of a new Water Cycle Diagram in English and Spanish. Also, USGS continued its leadership role as a founding partner of Geologic Map Day, providing support as well as its National Geologic Map Database's MapView, which offers a mosaic view of published geologic maps, and EDMAP, part of the National Cooperative Geologic Program.

Participants were invited to explore the Earth Science Week 2022 sustainability theme with the "Climate Change, Wildlife and Wildlands Toolkit for Formal and Informal Educators" of the U.S. Global Change Research **Program.** The kit updates and expands the program's award-winning and popular kit, first published nearly 20 years ago. Designed for classroom teachers as well as informal educators in settings such as parks, refuges, forest lands, nature centers, zoos, aquariums, and science centers, the kit targets the middle school grade level. The U.S. Environmental Protection Agency, in partnership with six other federal agencies — National Park Service, U.S. Fish and Wildlife Service, NOAA, NASA, U.S. Forest Service, and Bureau of Land Management — developed the kit to aid educators in teaching how climate change affects the nation's wildlife and public lands, and how all Americans can become climate stewards.

Earth Science Week 2022 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 and calculating the number of gallons used after each question. The educator kit also featured a postcard promoting the program as well as related lesson plans.

EARTH SCIENCE WEEK TOOLKITS

Program participants learned about the **William T. Pecora Award**, presented annually to individuals or groups that have made outstanding contributions toward understanding the Earth by means of remote sensing. The award is sponsored by the U.S. Department of the Interior and NASA.

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 participants were encouraged to celebrate the **World Water Day** theme of "Groundwater, Making the Invisible Visible," on March 22, 2022. In addition to building understanding of water science through educational activities, World Water Day 2022 worked to inspire action toward U.N. Sustainable Development Goal 6: Water and sanitation for all by 2030.

Earth Science Week Toolkits



@AGI

AGI assembled and distributed more than **8,200 Earth Science Week Toolkits**, the majority of which were distributed to teachers and geoscientists before the end of 2022. Seventeen AGI member societies requested

complimentary Earth Science Week Toolkits for distribution, and 33 state geological surveys requested complimentary kits for distribution.

As in past years, thousands of kits also were **distributed to and through program partners** including USGS and NASA. Toolkits also were shared with Fairfax County (Virginia) Public Schools, Minnesota Earth Science Teachers Association, Ohio Earth Science Teachers Association, Earth Science Week Survey participants, and Teacher Leadership Academy participants. The 2022 toolkit featured AGI's traditional Earth Science Week poster, education and outreach flyers, and school-year calendar showcasing geoscience classroom investigations and important dates of Earth science events.

Continuing a practice of recent years, the 2022–23 school-year calendar's classroom investigations featured notations explaining to educators 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 2022 Toolkit one of the richest ever.

Web Resources

According to Google Analytics, the Earth Science Week website was accessed by users in 212 nations, territories, and regions worldwide in 2022. 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 2022. The entire site received 391,308 page views. Within the site, all

searches made in 2022 related to specific pages totaled 239,531 for Classroom Activities pages; 21,490 for Contests pages; 8,354 for Big Ideas Activities pages; and 1,336 for Focus Days pages.

In collaboration with partners, AGI hosted the "Earth Science for a Sustainable World" Webinar Series, available during Earth Science Week 2022 and afterward via recordings. Aimed at the general public and education

WEB RESOURCES

community, webinars remain available online. Presenters covered an array of thought-provoking, timely topics:

- "Working Toward a Sustainable World: Geoscience Projects Related to the Sustainable Development Goals (SDGs)," Mr. Carlos Martinez, Ms. Renée Mazurek, Mr. Max Brouwers, Dr. Futoshi Nakamura, and Dr. E. Sahle-Demessie, Dr. Matt Hansen. Six presentations explored case studies and associated ArcGIS StoryMaps.
- "Working to Promote Earth Science for a Sustainable World," Mr. Gabriel do Nascimento Cardoso and Dr. Kirsten Nicholson. Speakers discussed three Geoscientists Without Borders® projects.
- "The Science of Keeping Materials in the Loop," Dr. Ola Isaksson, Dr. Federico Magalini, and Dr. Luis Tercero Espinoza. Talks addressed urban mining/anthropogenic raw materials and concepts of and design for circular economy.
- "Updating Soil Survey to Meet Dynamic New Challenges, and Sustainable Soils for a Sustainable Planet," Dr. Tiffany Carter and Dr. Skye Wills. Speakers examined soil science through the lens of sustainability.

The Earth Science Week Online Toolkit, formally introduced in 2021, includes downloadable, highly visual, resources available from past program celebrations. Resources addressing the Earth Science Week 2022 theme of "Earth Science for a Sustainable World" were added, such as the ESW poster and Geologic Map Day poster. Users can search by type of resource, theme, year, language, disciplinary core ideas, cross-cutting concepts, science and engineering practices, and more. The Online Toolkit is a useful option for partners that want to lower their paper use, as well as users who are limited by shipping and printing costs.

Program participants hosting events during Earth Science Week 2022 were invited to let people know about it at **Events Near You**. 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.

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.

Once again AGI offered four quarterly **Earth Science Week Webcasts** in 2022, 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 Edward C. Roy Jr. Award (winter). Each roughly five-minute tutorial includes a wealth of online links, on 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 contributed by leading geoscience agencies and groups. To find an activity corresponding to a lesson, teachers can search by Earth science topic, grade level, and science education standard.

Finally, Earth Science Week makes ample use of online social networking to reach new audiences, especially young people. The program's presence on **Facebook** includes an Earth Science Week Fan Page. In addition, posts on Twitter provide geoscience news, resources, and opportunities following Earth Science Week. The number of people learning about Earth Science Week through social media remained impressive in 2022, with the program reaching 8,010 followers on Facebook and recording 84,300 impressions on Twitter.

Newsletter

The monthly Earth Science Week Update newsletter reached more than 3,300 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 that geoscience education is a priority throughout the year, not only for one week each October.

Contests

AGI held contests in connection with Earth Science Week for the 22nd 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 and again invited international submissions to the video contest.

Hundreds of submissions were received. Each first-place winner received \$300 and an AGI publication. Entries submitted by winners and finalists were posted online.

Evelyn MacMichael of Oakland, California, won first place in the visual arts contest. Finalists were Owen Holt of Youngstown, Ohio; Kendra Schirckel of Poland, Ohio; Maxwell Wernicki of Poland, Ohio; Nathan Xu of Clyde Hill, Washington. Students in grades K–5 made two-dimensional artworks illustrating how land, water, air, and living things interact in a sustainable world.



Earth Science Week 2022 Visual Arts Contest entry by Owen Holt.



Earth Science Week 2022 Photography Contest entry by Vera Hsiang.



Earth Science Week 2022 Photography Contest entry by Taia Saurer.

The Cost

by Aislynn M. Carroll, for the 2022 ESW Essay Contest

Currently, 40,000 species are at risk of extinction because of humans. Not many people understand that the biosphere, hydrosphere, geosphere, and atmosphere are all connected, and everything we do impacts them; whether it is overhunting or just letting the sink run. Everything connects, and there is nothing we can do about that. However, there is something we can do about protecting life on land.

Earth is home to millions of creatures, plants and animals combined. Within the biosphere, everything is dependent on each other in some way. Interrelationships between animals are alive everywhere. Every animal needs some sort of water supply. It could be a pond, where otters and beavers make homes, or for larger animals to receive the water they need to survive. Many desert-dwelling animals, especially reptiles, use rocks to find shade and bury under the sand during daytime to escape the heat. Plants use photosynthesis to take carbon dioxide from the atmosphere and turn it into the oxygen that allows us to live on this planet.

Read the rest of this essay on the **ESW website**.

EARTH SCIENCE TEACHING AWARD

Litzia Galvan of Placentia, California, won first place in the photo contest. Finalists were Audrey Collins of Cullowhee, North Carolina; Vera Hsiang of Corpus Christi, Texas; Taia Saurer of Mission Viejo, California; Michael Sipos of Naples, Florida. Submissions illustrated the ways geoscience informs local efforts to build a sustainable world.

Aislynn Carroll of Virginia Beach, Virginia, won first place in the essay contest. Finalists were Sophia Altinok of Virginia Beach; Kimberly Bolanos of Nyack, New York; Raizel Dino of Virginia Beach; Arijus Knasas of Virginia Beach. Students in grades 6–9 wrote essays of up to 300 words exploring how the Earth sciences can

help achieve the United Nations' Sustainable Development Goals in areas such as poverty, nutrition, education, equality, ecosystems, climate change, and/or industrial innovation.

Grace Yan of Morgantown, West Virginia, won first place in the video contest. Finalists were Zainab Bie of Delhi, India; Maggie Rose of El Granada, California; Malia Tapp of San Mateo, California; Ashna Tumuluri of Redwood City, California. Individuals and teams created brief, original videos exploring the many ways people are using the Earth sciences to make decisions that maintain and strengthen the planet's ability to support thriving life.

Earth Science Teaching Award

For the 15th consecutive year, AGI and the AGI Foundation offered the Edward C. Roy Jr. Award for Excellence in K–8 Earth Science Teaching. The 2022 award went to David Amidon, a science teacher at LaFayette Junior/Senior High School in LaFayette, New York. Amidon's approach to Earth science education combines passion, innovation, investigative and cross-curricular techniques, continual professional development, and attention to building understanding of Earth systems and human impacts on them.

Amidon received a \$2,500 prize and an additional grant of \$1,000 to enable him to undertake professional development activities. Amidon was presented with the award during a reception hosted by the National Earth Science Teachers Association during the annual conference of the National Science Teaching Association.

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.



Photo courtesy of David Amidon

Focus Days

Earth Science Week 2022 kicked off on Sunday, October 9, with the 15th 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. 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 Earth Science Week program partner.

On Monday, October 10, educators, young people, and mineral enthusiasts of all ages were encouraged to take part in **Minerals Day.** AGI and the Mineralogical Society of America (MSA) launched Minerals Day to raise awareness of and appreciation for minerals among the general public as well as students and teachers of all ages and at all levels. Minerals Day introduced participants to a host of educational resources and activities focusing on the role of raw materials in the lives of individuals and in society. AGI's and MSA's Minerals Day web pages provided educational resources. To help program participants prepare for the October celebration

FOCUS DAYS

of Minerals Day, the September spread of Earth Science Week's 2022 activity calendar included a "Sources of Minerals" learning activity by MSA. MSA's Minerals Day website featured resources on the science, value, and beauty of minerals.

On the Tuesday of Earth Science Week 2022, participants were invited to take part in Earth Observation Day. The October 11 event, a STEM educational outreach event of AmericaView and its partners, engaged students and teachers in remote sensing as an exciting and powerful educational tool. 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 online lessons and activities by AmericaView and other organizations, as well as additional Earth Observation Day resources, online.

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 (2008) engaged some 500 students in outdoor learning activities and received coverage by news media from NBC to NPR. In 2022, students and educators nationwide were encouraged to engage in safe, educational activities outdoors on the Tuesday of Earth Science Week, October 11. AGI's online NCLI Day Guide provided everything needed to plan a local NCLI Day event. The free guide provides 17 outdoor activities, as well as detailed recommendations for creating partnerships, planning logistics, reaching out to the local media, and following up in instruction.

Earth Science featured the return of a popular event, **National Fossil Day**. In partnership with the National Park Service (NPS), AGI helped conduct the 13th annual event, on Wednesday, October 12, 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 that engaged program participants. See the state and international sections of this report for the names of national and international Fossil Day partners.

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 13. 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 the "Be a Visiting Geoscientist" page on the AGI website, designed to inspire geoscience professionals to engage with the public and provide Earth science enrichment for students. Also on the Earth Science Week website is a selection of instructional strategies designed to support inclusive educational activities, organized under headings given in the Next Generation Science Standards.

The 11th annual Geologic Map Day held on Friday, October 14, 2022, 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 2022 was hosted by the U.S. Geological Survey, the Association of American State Geologists, the National Park Service, the Natural Resources Conservation Service, the Geological Society of America, the Soil Science Society of America, and NASA, in partnership with AGI. 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 2022 Toolkit contained a Geologic Map Day poster that provided geologic maps, plus step-by-step instructions for related classroom activities dealing with soil science. Additional resources for learning about geologic maps were featured on the Geologic Map Day web page of the Earth Science Week site.

Earth Science Week 2022 reached its finale with International Archaeology Day on Saturday, October 15. 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. Activities provided the chance for participants to indulge their inner "Indiana Jones."

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, AGI's Geoscience Job Center, AGI Scholarly Information (including GeoRef), AGI's Teacher Leadership Academy, Geoscience Currents, the William L. Fisher Congressional Geoscience Fellowship, AGI's NGSS Education Webinars, the Visiting Geoscientists guide, AGI's Critical Issues Program, Geoscience in Your State Factsheets, the Earth Science Organizations website, the Faces of Earth four-part film

series, the award-winning Why Earth Science video, and the Why Earth Science brochure.

To assist geoscience students, educators, and other professionals, AGI announced the availability of several electronic resources for free or at reduced prices, including AGI's Education GeoSource, Glossary of Geology, Geoscience Handbook, Status of Recent Geoscience Graduates, and more. AGI alerted educators to the availability of dozens of modules in the free-to-take Geoscience Online Learning Initiative (GOLI) platform.

State Proclamations

Seven states have demonstrated outstanding scienceliteracy leadership by issuing "perpetual proclamations" of Earth Science Week, ensuring recognition every year: Alaska, Delaware, Illinois, Nevada, North Dakota, Oklahoma, and South Dakota. Governors issued single-year proclamations in six additional states — Alabama, New Mexico, Ohio, Pennsylvania, Tennessee, and Virginia — bringing the total number of states with proclamations of recognizing Earth Science Week 2022 to 13.

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 2022 and helping to lay a foundation for more coverage in years to come. To view the coverage of Earth Science Week by international, national, regional, and local organizations please visit the "Earth Science Week 2022 News Clippings" at www.earthsciweek.org/highlights.

AGI also distributed **press releases** to thousands of newspapers, magazines, media websites, and other organizations and individuals.

Copies of the Earth Science Week 2022 poster, featuring geoscience learning activities in addition to promotional content, were distributed as inserts in publications carrying articles about the event penned by AGI, including the American Association of Petroleum Geologists' Explorer. GSA Today also featured a poster insert. Articles by AGI about Earth Science Week appeared in the National Earth Science Teachers Association's The Earth Scientist and the Society of Exploration Geophysicists' The Leading Edge.



Earth Science Week 2022 Photography Contest entry by Audrey Collins. (Cropped portion of original artwork shown above.)

Earth Science Week Sponsors

U.S. Geological Survey

American Association of Petroleum Geologists Foundation

National Park Service

National Aeronautics and Space Administration

Natural Resources Conservation Service

Geological Society of America

AmericaView

American Geophysical Union

Society for Mining, Metallurgy, and Exploration

Society of

Exploration Geophysicists

Water Footprint Calculator (Grace Communications Foundation)

Real World Globes

American Meteorological Society

CLEAN (Climate Literacy and Energy Awareness Network)

Paleontological Research Institution

Global Sponsors

International Raw Materials Observatory

ExxonMobil

Earth Science Week Program Partners

American Association of Petroleum Geologists

American Association of Petroleum Geologists Foundation

American Geophysical Union

American Geosciences Institute

American Institute of Professional Geologists

American Meteorological Society

AmericaView

Association for Women Geoscientists

Association of American State Geologists

CLEAN (Climate Literacy and Energy Awareness Network)

Consortium of Universities for the Advancement of Hydrologic Science

Earth Science Information Partners

ExxonMobil

Gemological Institute of America

Geological Society of America

Incorporated Research Institutions for Seismology

International Raw Materials Observatory

Mineralogical Society of America

Minerals Education Coalition

National Association of Geoscience Teachers

National Cave and Karst Research Institute

National Earth Science Teachers Association

National Science Foundation

National Speleological Society

Nutrients for Life Foundation

Paleontological Research Institution

Real World Globes

Society for Mining, Metallurgy, and Exploration

Society of Exploration Geophysicists

Soil Science Society of America

UNAVCO

U.S. Bureau of Land Management

U.S. Forest Service

U.S. Geological Survey

U.S. National Aeronautics and Space Administration

U.S. National Oceanographic and Atmospheric Administration

U.S. National Park Service

Water Footprint Calculator/Grace Communications Foundation

Earth Science Week 2022 Events and Activities by State and Territory

While AGI is unable to track all Earth Science Week activities in the United States, major activities across the country included the following.

Alabama

- The governor of Alabama issued a proclamation for Earth Science Week 2022.
- The Geological Survey of Alabama distributed complimentary Earth Science Week Toolkits to science educators for use in the classroom.
- The Alabama Museum of Natural History hosted a free event on October 15 to celebrate National Fossil Day, the scientific and educational value of paleontology, and the importance of preserving fossils for future generations.
- The University of South Alabama's Archaeology Museum welcomed visitors of all ages to participate in International Archaeology Day activities on October 1. The event included experimental archaeology, games, and educational activities such as Native American atlatl throwing and an open house at the Archaeology Laboratory.
- For National Fossil Day, Hoover Public Library highlighted several resources.
- In October, the Third Annual Huntsville Science Festival and STEAM-FEST offered over 7,200 visitors free indoor and outdoor activities. The multi-day celebration highlighted science and technology in northern Alabama.
- The Anniston Museum, Geological Survey of Alabama, Alabama Museum of Natural History, Birmingham Paleontological Society, and Alabama Paleontological Society promoted awareness as official National Fossil Day partners.
- The McWane Science Center offered hands-on activities for young people, October 12–14.

Alaska

- Alaska's Division of Geological and Geophysical Surveys, the Alaska Museum of Natural History, and the University of Alaska Museum of the North were official National Fossil Day partners in 2022.
- Alaska's Department of Natural Resources, Geological and Geophysical Surveys Education Outreach department promoted Earth Science Week online.
- The Bureau of Land Management's Campbell Creek Science Center joined with the National Park Service, Alaska Consortium of Zooarchaeologists, and other partners to celebrate International Archaeology Day. At the free event, the public was invited to throw a spear with an atlatl, unravel the mysteries of old bones, and learn to move like a mammoth.
- Alaska is among the seven states to have issued a perpetual proclamation of Earth Science Week.

Arizona

- Grand Canyon National Park celebrated National Fossil Day on social media, highlighting the work of park paleontologists and the history buried in the canyon's rock layers.
- The Arizona Geological Survey distributed Earth Science Week Toolkits.
- The National Informal STEM Education Network promoted Earth Science Week and sustainabilityrelated resources on its website.

- For National Fossil Day, Painted Desert Visitor Center hosted a Museum Demonstration Lab. Activities included seeing one-ofa-kind fossils being prepared by paleontologists, watching a live microscope feed as paleontologists remove rock from fossil bone, and chatting with scientists via a twoway speaker.
- To coincide with International Archaeology Day, Mesa Grande Cultural Park celebrated its seasonal reopening on October 16 by hosting Lamb Spring tours and atlatl tossing.
- The Arizona Geological Survey, Arizona Museum of Natural History, Arizona Science Center, Museum of Northern Arizona, and Southwest Paleontological Society were National Fossil Day partners.
- The Arizona Sonora Desert Museum celebrated geoscience throughout the week with "Earth Science Week: Earth Science for a Sustainable World"-themed events.
- Painted Desert Visitor Center hosted a Ranger Programs and Activity Table. Participants were offered coloring pages, stickers, Junior Ranger or Paleontologist booklets, and 30-minute guided fossil-themed activities.
- Rainbow Forest Museum hosted a Paleontology Talk about park paleontology with Petrified Forest's lead paleontologist Adam Marsh.
- For International Archaeology Day, Pueblo Grande Museum and Archaeological Park held events including games, lectures, and mudslinging on October 15.

Arkansas

- The Arkansas Geological Survey promoted awareness of Earth Science Week by distributing educational materials.
- Hot Springs National Park, along with the Arkansas Archaeological Society and archaeologists from Ouachita National Forest, sponsored a family-focused event highlighting the importance of archeology in parks with hands-on activities, demonstrations, crafts, and guided hikes.
- Crop, Soil, and Environmental Sciences at the University of Arkansas promoted Earth Science Week on social media.
- For International Archaeology Day, the Arkansas Archaeological Survey hosted the ArcheOlympics on Petit Jean Mountain, where competitors underwent obstacles simulating stages of field work done by archaeologists.
- The Arkansas Geological Survey, Arkansas Museum of Discovery, and Pratt Museum were National Fossil Day partners.

California

- Litzia Galvan of Placentia won first place in the Earth Science Week photo contest with an image of female scientists contributing to an environmental assessment for restoring and protecting productive ecosystems.
- Taia Saurer of Mission Viejo was among the finalists in this year's Earth Science Week photo contest.
- The National Park Service, California State Parks, and Western National Parks Association partnered to host Archaeology Day at the Santa Monica Mountains in the King Gillette Ranch Visitor Center. The day featured stories and songs of the area, workshops, demonstrations, and hands-on activities.
- The Presidio Trust celebrated International Archaeology Day with family-friendly activities that uncovered the layered history of this national park site.

- During October, special exhibits, lectures, and events were held throughout the state in recognition of California Archaeology Month.
- Evelyn MacMichael of Oakland won first place in the visual arts contest with a colorful self-portrait that included examples of ways that she could play a positive role in caring for the planet.
- The San Diego County Archaeological Society hosted "Arch in the Park," a celebration of California Archaeology Month and International Archaeology Day. The event educated the public about archaeology and provided information on career and volunteer opportunities with more than 30 local archaeological companies, museums, universities, and organizations.
- For International Archaeology Day, the San Luis Obispo County Archaeological Society held an event with games, interactive mock excavations, and presentations by local archaeologists.
- Maggie Rose of El Granada, Malia Tapp of San Mateo, and Ashna Tumuluri of Redwood City were finalists in this year's video contest.
- The California Geological Survey distributed Earth Science Week Toolkits.
- The Society for California Archaeology advertised Archaeology Day and Month events for many organizations on social media pages.
- The Desert Institute at Joshua Tree National Park Association presented "Archaeopalooza" with interactive activities and presentations aimed at teaching families about local archaeological digs.
- The Pacific Coast Archaeological Society and the Ventura County Archaeological Society hosted multiple virtual lectures throughout October to celebrate California Archaeology Month.
- The Western Science Center celebrated National Fossil Day by hosting "The Science of Paleontology" for a Science Saturday in October.

- The California Geological Survey, Anza-Borrego Desert State Park, Children's Discovery Museum of San Jose, Fossil Discovery Center of Madera County, Western Science Center, University of California Museum of Paleontology, John D. Cooper Archaeological and Paleontological Center, San Bernardino County Museum, San Diego Museum of Natural History, Page Museum at La Brea Tar Pits, Raymond M. Alf Museum of Paleontology, Natural History Museum of Los Angeles County, and additional organizations raised awareness as National Fossil Day partners.
- The Archaeological Institute of America sponsored virtual International Archaeology Day events including Tweetathons, a lecture by Alaka Wali, Archaeology Abridged, and "Diving for the Clotilda."
- The University of California-Los Angeles' Cotsen Institute of Archaeology celebrated archaeology throughout October by hosting virtual lectures.
- The California Academy of Sciences celebrated National Fossil Day by hosting a special presentation of its megafauna fossil collection from the Bay Area.
- Desert USA promoted National Fossil Day on its website, encouraging readers to attend events that celebrate the scientific and educational value of paleontology.

Colorado

- The American Institute of Professional Geologists issued a press release promoting Earth Science Week 2022.
- The 11th annual 2022 International Archaeology Day Expo in Littleton on October 15 offered a lecture series, hands-on activities, demonstrations, interactive discussions, and visits to archaeological sites at Roxborough State Park, Garden of the Gods Visitor & Nature Center, Lamb Spring Archaeology Preserve, and the Ken-Caryl Ranch Bradford House.

- The GLOBE Implementation Office highlighted Earth Science Week 2022 learning resources and activities on sustainability.
- The Museums of Western Colorado hosted a National Fossil Day virtual lecture, "Lost Giants of the Jurassic."
- For Earth Science Week 2022, the STAR Library Network provided resources, activities, and webinars on the preservation of water.
- The Minerals Education Coalition produced the "Getting the Metals Out" educational unit, which includes two new activities in the online lesson plan, as well as the "Iron Minerals on the Moon" activity in the 2022 Earth Science Week Calendar.
- Colorado's Energy Day Festival returned in 2022. Students and families learned about energy and participated in interactive demonstrations. Awards were given to winners of citywide and statewide energy-related competitions.
- The Colorado Geological Survey, Friends of Dinosaur Ridge, Garden Park Fossil Area, Denver Museum of Nature and Science, Royal Gorge Dinosaur Experience, Rocky Mountain Dinosaur Resource Center, Morrison Natural History Museum, University of Colorado Museum of Natural History, Museum of Western Colorado, Rocky Mountain Association of Geologists, and additional organizations were partners of National Fossil Day.
- Rocky Mountain National Park celebrated Earth Science Week by revisiting the geologic history of the Rocky Mountains.
- The Society of Economic Geologists distributed Earth Science Week Toolkits to educators.
- The Boulder Society of the Archaeological Society of America sponsored a hybrid lecture at University of Colorado's Museum of Natural History.

- For International Archaeology Day, Colorado National Monument hosted an event at the Visitor's Center. Staff and volunteers helped children celebrate the human history of the monument, which goes back 13,000 years, through creating pictographs, learning how to survey artifacts, throwing an atlatl, and earning a National Park Service Junior Ranger badge.
- The Geological Society of America hosted Connects 2022, during which there were many events and promotions by museums and libraries throughout Denver and Boulder.
- Earth Science Week 2022 Toolkits were distributed to students, teachers, and others by representatives of the Society for Mining, Metallurgy, and Exploration; the National Earth Science Teachers Association; and the Geological Society of America.

Connecticut

- October was Archaeology Awareness Month in Connecticut, and events were held throughout the state to celebrate.
- The Connecticut Geological Survey distributed Earth Science Week Toolkits to educators.
- International Archaeology Day was celebrated at the Institute for American Indian Studies with an Artifact ID Day where people brought in artifacts to be identified by researchers.
- The Human Relations Area Files at Yale University, in conjunction with the University of Connecticut Stamford Anthropology Society, hosted lectures in honor of International Archaeology Day.
- The Connecticut Geological Survey, Dinosaur Trackways State Park, Bruce Museum, New Haven Mineral Club, Dinosaur Fund, and Yale Peabody Museum of Natural History advanced understanding as National Fossil Day partners.

Delaware

- The state of Delaware issued a perpetual proclamation of Earth Science Week.
- The Delaware Geological Survey promoted Earth Science Week and Geologic Map Day by distributing Earth Science Week Toolkits and sharing information online.
- The Delaware Museum of Natural History, Delaware Valley Paleontological Society, and Delaware Geological Survey were partners of National Fossil Day.

District of Columbia

- Federal agencies including the U.S. Geological Survey, NASA, and the National Park Service supported Earth Science Week by highlighting Focus Days, providing materials, distributing kits, and hosting activities.
- The National Museum of Natural History celebrated National Fossil Day with activities in the museum's David H. Koch Hall of Fossils — Deep Time. Scientists and educators from the Smithsonian and the National Park Service welcomed families, school groups, and others interested in exploring Earth's deep past.
- During National Fossil Day events across the country, the National Park Service held an art contest with the theme "The Age of Mammals in our National Park and Monuments." Their website announces the winners and also hosts many fossil-related resources, such as virtual hikes through national parks and a program to become a junior paleontologist.
- The National Oceanic and Atmospheric Administration's Planet Stewards Education Program partnered with the Detroit Zoological Society to host a three-day workshop for educators, "Climate Justice: Exploring the Science of Climate Change in Your Classroom."

- The American Geophysical Union promoted Earth Science Week by distributing educational materials.
- The International Association of Hydrogeologists' U.S. National Chapter distributed Earth Science Week materials.
- NASA highlighted this year's Earth Science Week celebration in its NASA STEM Express online newsletter.
- The Smithsonian-National Museum of Natural History, American Geophysical Union, Natural Science Collections Alliance, National Environmental Education Foundation's Classroom Earth, and Geological Society of Washington were National Fossil Day partners.

Florida

- The Florida Geological Survey held its annual open house to share information about state fossils and core samples and to engage participants with geoscience-related art projects. State Geologist Harley Means also hosted a guided hike though the Leon Sinks Geological Area to discuss the local ecosystem and karst features.
- For International Archaeology Day, the Alliance for Weedon Island Archaeological Research and Education and the Central Florida Gulf Coast Archaeological Society hosted an on-site event with a showcase of pre-Columbian artifacts from the Tampa Bay region. Archaeological experts illustrated the use of tools and their importance to native populations.
- The Jacksonville Chapter of the Archaeological Institute of America and the Beaches Museum celebrated International Archaeology Day on October 15. The event featured pottery and rope-making demonstrations, identification of artifacts, a lecture, a presentation by master gardeners on how Native Americans used plants, and a simulated archaeology dig.

- The Florida Geological Survey, Florida Museum of Natural History, Jacksonville Museum of Science and History, Jacksonville Museum of Science and History, Mulberry Phosphate Museum, Orlando Science Center, South Florida Museum, Frost Museum of Science, Florida Geological Foundation, Safari Ltd, and other organizations raised awareness as National Fossil Day partners.
- The Florida Geological Survey promoted the Earth Science Week photography, video, essay, and visual arts contests on its website.
- The Archaeological Institute of America-Jacksonville Society celebrated International Archaeology Day with its annual fair at the Beaches Museum at Jacksonville Beach. Attendees learned how local Native Americans made pottery and rope from natural resources and participated in a simulated dig. Participating organizations included the University of North Florida and the Jacksonville Museum of Science and History.
- The Florida Geological Survey distributed Earth Science Week Toolkits.
- The Florida Public Archaeology Network, in partnership with the University of West Florida's College of Arts, Social Sciences, and Humanities, hosted a two-mile trek in downtown Pensacola to celebrate International Archaeology Day. Participants learned about uncovering archaeology and history.

Georgia

- Fernbank Science Center, Tellus Museum, and Georgia Southern University Museum were 2022 National Fossil Day partners.
- Jurassic Quest, a realistic "dinosaur experience," invited fans of the prehistoric era to engage on National Fossil Day 2022. Jurassic Quest dinosaur staff gave video and phone interviews to talk about dinosaurs.

Hawai'i

 The Lyman Museum and Mission House were National Fossil Day partners.

Idaho

- For Geologic Map Day, the Idaho Geological Survey shared its geologic map of the of the Degan Mountain Quadrangle in Lemhi County online. The survey also promoted awareness of Earth Science Week on its website and by distributing educational materials.
- Hagerman Fossil Beds National Monument promoted National Fossil Day 2022 through social media with a collection of fossils.
- The Idaho Museum of Natural History hosted a hands-on day of fossils at Fossil Fest on October 22 at the Pocatello campus of Idaho State University.
- National Fossil Day partners included the Idaho Museum of Natural History.

Illinois

- Illinois issued a perpetual proclamation of Earth Science Week.
- The Burpee Museum of Natural History invited members to celebrate National Fossil Day during an all-day event on October 15. Attendees touched specimens from the fossil collection while learning about their unique history to Illinois and the world. There were also make-and-take crafts and a behind-the-scenes look into the work of paleontologists at the museum.
- Visitors explored the new "Life and Afterlife in Ancient Egypt" exhibit at the Art Institute of Chicago with a special International Archaeology Day tour by curator Ashley Arico.

- Augustana College's Fryxell Geology Museum, Burpee Museum of Natural History, Children's Discovery Museum, Children's Discovery Museum, Field Museum, Illinois State Museum, Peggy Notebaert Natural History Museum, and Northern and Southern Illinois Earth Science Clubs were partners for National Fossil Day.
- The Forest Preserve District of Cook County hosted "Earth Science Week: Soils, the Roots of the Prairie," a live online event, via the Sagawau Environmental Learning Center Facebook page.
- The Earth Science Club of Northern Illinois promoted participation in National Fossil Day on its website.

Indiana

- The Indiana Geological Survey, Falls of the Ohio State Park, Children's Museum of Indianapolis, Indiana State Museum, Joseph Moore Museum of Natural History, WonderLab Museum of Science-Health and Technology, Indiana's Earth Science Teachers Association, and others promoted understanding as National Fossil Day partners.
- The Anthropology Department at Indiana University of Pennsylvania held its annual Archaeology Open House on October 15. All archaeology laboratories (including faunal, botanical, and geophysical labs) hosted tours.
- The Indiana Geological & Water Survey promoted awareness of Earth Science Week among community members through its website and by distributing educational materials.
- Monroe Lake offered a week of geoscience-themed programming in celebration of Earth Science Week.
- Falls of the Ohio Foundation celebrated National Fossil Day at the Falls of the Ohio State Park with fossil bed hikes, reduced admission for the Interpretive Center, guides on collecting piles, and children's activities.

- A collaboration between Allen County Parks, Hanson Aggregates, and the nonprofit Speaks for Trees and More resulted in a National Fossil Day event at Hanson Quarry Observation Deck on October 11.
- In celebration of Earth Science Week, Batesville Memorial Public Library conducted kid-friendly events.
- Allen County Public Library hosted online trivia for National Fossil Day.

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- Mayor Rob Green of Cedar Falls approved a proclamation recognizing Earth Science Week.
- BMC Aggregates' Geologist Sherm Lundy and University of Northern Iowa students Laura Speese and Lyndsey Hubbell commented and provided details on "Sunday at the Quarry" in Raymond on October 2.
- Partners for Nation Fossil Day included the Devonian Fossil Gorge, Fossil & Prairie Center, University of Iowa Museum of Natural History, Sanford Museum and Planetarium, and Mid-America Paleontology Society.

Kansas

- El Quartelejo Museum in Scott City celebrated National Fossil Day by hosting an event and recommending activities such as the National Fossil Day Art Contest.
- The Kansas Geological Survey distributed Earth Science Week Toolkits for educators.
- In celebration of National Fossil Day, the Sternberg Museum offered free special programming. This year's theme honored America's oldest national park, Yellowstone, which celebrated its 150th birthday.
- National Fossil Day partners included the Kansas Geological Survey, Fick Fossil and History Museum, Kansas University Natural History Museum, El Quartelejo Museum, Sternberg Museum of Natural History, and Prairie Oaks Nature Center.

Fort Hays State University's Department of Geosciences hosted events
throughout Earth Science Week,
including virtual presentations,
interactive challenges, and environmental events. They also promoted
AGI's Earth Science Week webinar
series and contests.

Kentucky

- The Kentucky Geological Survey at the University of Kentucky hosted an open house featuring interactive exhibits on earthquakes, stream tables, minerals, meteorites, and crystals.
- Mammoth Cave National Park celebrated the National Fossil Day theme "Age of Mammals in our National Parks" by highlighting the park's paleontology.
- The Kentucky Geological Survey distributed Earth Science Week kits among educators.
- Big Bone Lick State Park, Kentucky Geological Survey, Friends of Big Bone Lick, and Kentucky Paleontological Society promoted National Fossil Day as event partners.

Louisiana

- The Fourth International Congress on the Anthropology of Salt celebrated International Archaeology Day with a multi-day event of presentations and Q&A sessions on the production, distribution, and uses of salt at the Howe-Russell Geoscience Complex in Baton Rouge.
- For International Archaeology Day the Louisiana Archaeological Society hosted "Archaeology Day at The Lafayette Farmers and Artisans Market," where resources and activities were provided to inform the public of field work and archaeological findings in Louisiana.
- The Louisiana Geological Survey distributed Earth Science Week Toolkits.

- The Audubon Nature Institute and St Louis Science Center were official partners of National Fossil Day.
- Louisiana's Office of Cultural Development invited guests to unearth the state's past at Terrebonne Parish Main Library with International Archaeology events.

Maine

- The Maine Geological Survey and the L.C. Bates Museum raised awareness of National Fossil Day as program partners.
- The Maine Geological Survey distributed complimentary Earth Science Week Toolkits to science educators for use in the classroom.

Maryland

- The Natural History Society of Maryland welcomed the local community for a National Fossil Day event. Guests learned from presentations and displays by local experts and organizations, explored specimens and artifacts from natural history collections, heard about citizen science projects, talked to scientists who answered questions and guided discoveries of the natural world, and enjoyed games, art, crafts, stories, music, and drama.
- The Maryland National Capital Park and Planning Commission's Department of Parks & Recreation hosted members of the public who joined archaeologists at the American Indian Festival at Patuxent River Park.
- The Maryland Geological Survey distributed kits among educators in celebration of Earth Science Week.
- The Maryland Dinosaur Park, Calvert Marine Museum, Chesapeake Children's Museum, Maryland Science Center, and Calvert Marine Museum Fossil Club were National Fossil Day partners.
- The Maryland Geological Survey promoted Earth Science Week on its website.

Massachusetts

- 2022 National Fossil Day partners included Harvard Museum of Natural History, Museum of Science, Marine and Paleobiological Research Institute, and Port Jervis Free Library.
- Arts Boston worked with the Harvard Museums of Science and Culture and Harvard Museum of Natural History to host "More Than Dinosaurs" for National Fossil Day. The event had presentations by vertebrate and invertebrate paleontologists who shared fossils, technologies, and information about evolution.
- Buttonwoods Museum hosted its Archaeology Open House on October 22, featuring female archaeologists from New England including Thera Luce
- The Peabody Museum of Archaeology & Ethnology and Harvard Museums of Science & Culture presented "Meet an Archaeologist," an International Archaeology Day event enabling visitors to learn about archaeology with graduate students.
- On October 15, the Western Massachusetts chapter of the Archaeological Institute of America held a fair for International Archaeology Day. The University of Massachusetts event featured archaeology-themed tables showcasing research projects run by local archaeologists as well as hands-on crafts and activities.
- In their annual celebration of National Fossil Day, Oak Bluffs Public Library, Edey Foundation and Vineyard Preservation Trust welcomed visitors to Union Chapel for a free public science educational event including displays of fossils.
- Harvard Museums of Science & Culture and Peabody Museum of Archaeology and Ethnology co-presented "Rethinking Maya Heritage: Past and Present," a free lecture at the Geological Lecture Hall for International Archaeology Day.

- Cape Cod Museum of Natural History hosted community members who joined archaeologist Dan Zoto for a guided walk of Wing Island, the location of the Wing Island Archaeology Project, to learn the history of the island.
- Members of the public joined Yale Peabody Museum of Natural History for "Shiva's Ape and Brahma's Beast," a free online presentation on India's prehistoric past. Advait Jukar presented highlights from this collection and discussed it in the context of the colonial history of Indian paleontology and modern evolutionary science.
- The American Meteorological Society distributed complimentary Earth Science Week Toolkits to science educators for use in the classroom.
- For National Fossil Day, the Harvard Museum of Natural History welcomed visitors to meet members of the Stephanie E. Pierce Lab for Vertebrate Paleontology and the Ortega-Hernández Lab for Invertebrate Paleontology to see their favorite fossils, learn about their research, and ask questions.
- Lowell National Historical Park sponsored an International Archaeology Day guided tour on the archaeological history of indigenous peoples upon whose land the city and mills of Lowell were built.

Michigan

- The Marquette Regional History Center presented its annual archaeology fair in celebration of International Archaeology Day. Visitors learned about local and global archaeology through activities, demonstrations, artifacts, and interactive booths.
- The Michigan State University Museum, University of Michigan Museum of Natural History, Michigan's Mineralogical Society, and Michigan Earth Science Teachers Association raised awareness as National Fossil Day partners.

- The Michigan State University Museum hosted an evening of fossil education for students for National Fossil Day.
- Kelsey Museum of Archaeology hosted International Archaeology Day events including hands-on activities, as well as docent-led tours of galleries.
- The Michigan Geological Survey promoted awareness of Earth Science Week among residents and community members through its website and by distributing educational materials.
- Michigan Technological University hosted a series of career-day events as part of its Career FEST. Students had opportunities to learn about different job and career opportunities, including in the geosciences.

Minnesota

- The National Association of Geoscience Teachers distributed Earth Science Week Toolkits and created a "Teaching About Sustainability" webpage, providing ideas and resources for teaching about water, in support of the Earth Science Week theme of "Earth Science for a Sustainable World."
- The Minnesota Geological Survey, Duluth Children's Museum, Science Museum of Minnesota, and Geological Society of Minnesota were National Fossil Day partners.
- Minnesota Discovery Center offered a Family Discovery Day for International Archaeology Day.
- The Minnesota Geological Survey distributed Earth Science Week Toolkits.
- The Minnesota Mineral Club and the National Association of Geoscience Teachers promoted Earth Science Week among teachers and citizens.

Mississippi

- For National Fossil Day, the Lynn Meadows Discovery Center for Children hosted a special guest speaker on dinosaurs and marks left behind.
- Mississippi Petrified Forest, Dunn-Seiler Geology Museum at Mississippi State University, and Mississippi Museum of Natural Science helped build understanding of paleontology as National Fossil Day partners.
- Mississippi State's Department of Geosciences unveiled "Mississippi Fossils from the Dunn-Seiler Museum," a virtual exhibit hosted by the Mitchell Memorial Library website for National Fossil Day.

Missouri

- The Archaeological Institute of America Central Missouri held an International Archaeology Day celebration where University of Missouri graduate students presented on excavation experiences.
- The Missouri Department of Natural Resources (MoDNR) promoted participation in Earth Science Week's focus days and contests. The department website featured activities, videos, and publications related to Earth science in Missouri. MoDNR also distributed educational materials among teachers and citizens.
- The Bollinger County Museum of Natural History held an International Archaeology Day and National Fossil Day celebration in Marble Hill on October 15. The event included fossil identification, presentations, and hands-on activities for children to become Junior Paleontologists and Archaeologists.
- The Missouri State Museum celebrated Earth Science Week with special events.

- The University of Missouri-Columbia Department of Classics, Archaeology, and Religion (CAR) and the Museum of Art and Archaeology hosted an event in Ellis Library to celebrate International Archaeology Day. CAR graduate students talked about their excavation experiences.
- The Sainte Genevieve Museum Learning Center had interactive activities every Friday in October and a National Fossil Day celebration every day of Earth Science Week.
- The Missouri Division of Geology and Land Survey, Mastodon State Historic Park, Bollinger County Museum of Natural History, Edward L. Clark Museum of Missouri Geology, the Missouri Institute of Natural Science, and St. Louis Science Center were National Fossil Day partners.
- The Fourth Annual Missouri Egyptological Symposium was held at Washington University in St. Louis. The symposium included a dozen papers on ancient Egyptian religion and language, the reception of ancient Egypt, Egyptology and public history, and learning from coffins and mummified remains.
- Millions of people participated in the "Drop, Cover, and Hold On" earthquake drill on October 20 for Earth Science Week.
- The Ed Clark Museum of Missouri Geology held a celebration of Earth Science Week.

Montana

- The Fort Peck Dam Interpretive Center and Museum, Bug Creek Fossil Area, Great Plains Dinosaur Museum and Field House, Museum of the Rockies, University of Montana Paleontology Center, and Two Medicine Dinosaur Center were partners in National Fossil Day.
- University of Montana's SpectrUM Discovery Area offered hands-on lab activities related to each theme day during Earth Science Week.

 Makoshika State Park, in partnership with the Glendive Dinosaur and Fossil Museum, held a National Fossil Day event featuring a tour of the paleo lab.

Nebraska

- In collaboration with the University of Nebraska State Museum, paleontologists from the State Museum's Division of Vertebrate Paleontology conducted demonstrations and hands-on activities to help children investigate microfossils.
- The Nebraska Geological Survey distributed Earth Science Week Toolkits.
- The University of Nebraska State Museum, Omaha Children's Museum, and Ashfall Fossil Beds State Park were partners of National Fossil Day.

Nevada

- Nevada issued a perpetual proclamation of Earth Science Week.
- The Nevada Bureau of Mines and Geology (NBMG) led a free public field trip for Earth Science Week. To celebrate sustainability, the excursion was led around Fly Geyser and San Emidio geothermal area by volunteers from Friends of Black Rock-High Rock and Burning Man.
- NBMG also published a calendar featuring photos of Nevada's unique geology and dates when key events in Nevada's geologic history took place.
- Visitors at the Nevada Science Center celebrated National Fossil Day by tuning in for "Fossil Fridays" highlights from paleontologists Dr. Josh Bonde and Becky Hall. Participants learned about the history of discovery, the relevance of fossils, and what they reveal about the history of the Great Basin.
- The W. M. Keck Museum featured fossils on National Fossil Day.

- The College of Science's YouTube channel presented episodes of Mineral Monday, which showcased Keck Museum specimens.
- The Nevada Bureau of Mines and Geology promoted awareness of Earth Science Week among community members through its website and by distributing educational materials.
- Berlin Ichthyosaur State Park, Nevada Bureau of Mines and Geology, Tule Springs Ice Age Site, Las Vegas Museum of Natural History, Nevada State Museum at Las Vegas, Nevada Friends of Paleontology, Outside Las Vegas Foundation, Protectors of Tule Springs, and Archaeo-Nevada Society were National Fossil Day partners.
- In partnership with the Las Vegas Natural History Museum, Las Vegas Science and Technology Festival, and Clark County School District School-Community Partnership Program, Protectors of Tule Springs hosted an art contest for National Fossil Day.
- The Nevada Bureau of Land Management welcomed the public at the Visitor Center at Red Rock Canyon National Conservation Area for a National Fossil Day event highlighting the importance of paleontology, how fossils are preserved and protected, and what dinosaurs roamed there in the past.
- For National Fossil Day, Tule Springs Fossil Bed National Monument hosted the Second Annual Pleistocene Palooza, an interactive outdoor event for fossil enthusiasts, featuring live animals and a Junior Paleontologist program. Visitors glimpsed Ice Age Las Vegas and viewed Pleistocene-age fossils.

New Hampshire

- Rindge Conservation Commission invited community members to explore the outdoors and learn about Native American culture at Contoocook Marsh Conservation Complex on October 16 for International Archaeology Day. Franklin Pierce University professor Robert Goodby discussed nearby archaeology excavations.
- The New Hampshire Geological Survey promoted awareness of Earth Science Week among community members by distributing educational materials.

New Jersey

- The Big Brook Preserve hosted an interactive fossil hunt. Participants waded the shallow waters of Big Brook, sifted through the substrate, and searched for fossils.
- Paterson Great Falls National Historical Park celebrated Earth Science
 Week by inviting guests to hike and
 observe geological features, such as
 outcroppings of columnar basalt
 and pillow lava formations.
- The New Jersey State Museum promoted participation in National Fossil Day on social media. An online video by Dr. Dana Ehret, assistant curator of natural history, presented fossils.
- The New Jersey Geological and Water Survey promoted Earth Science Week and provided Earth Science Week Toolkits to the first 50 Earth and space science teachers to request one.
- National Fossil Day partners included New Jersey State Museum, Rutgers Geology Museum, New Jersey Earth Science Teachers Association, and New Jersey Paleontological Society.
- Savvas Learning Company spotlighted inspiring talks from its Virtual STEM Fair, which teachers can use in the classroom for free and on-demand.

 Rutgers Geology Museum promoted National Fossil Day through social media, highlighting its fossil collection.

New Mexico

- The governor of New Mexico issued a proclamation for Earth Science Week.
- The New Mexico Bureau of Geology and Mineral Resources continued its 13-year tradition of hosting an Earth Science Week podcast series for KUNM 89.9 FM, a public radio station. This year's series, "Earth Matters: Field Notes on the Geology of New Mexico's Enchanting Landscapes," offered two-minute podcasts on the geology of the state.
- The New Mexico State Historic Preservation Office invited the public to the Bernalillo Community Museum for its annual Archaeology Fair on October 15. The fair explored archaeology through hands-on activities, exhibits and displays. Local experts shared their work and expertise.
- The New Mexico Geologic Survey held an art contest for Earth Science Week.
- The Las Cruces Museum of Nature & Science collaborated with the Bureau of Land Management's Las Cruces Office, New Mexico State University, Insights El Paso Science Center, and local paleontologists for a National Fossil Day event focusing on mammals. The museum also offered STEM activity kits.
- The New Mexico Museum of Natural History & Science invited locals to celebrate Earth Science Week by exploring fossils, minerals, and rocks of New Mexico with experts, who offered demonstrations and displays.
- The New Mexico Bureau of Geology and Mineral Resources distributed Earth Science Week educational materials.

- The New Mexico Bureau of Geology and Mineral Resources, Ghost Ranch, Prehistoric Trackways National Monument, Mesalands Community College's Dinosaur Museum, New Mexico Museum of Natural History and Science, and New Mexico Science Teachers Association were National Fossil Day partners.
- For International Archaeology Day, an archaeology fair on October 15 at the Marquette Regional History Center introduced provided handson activities, dig-site stories, games, and displays. Local experts shared their work and expertise.

New York

- David Amidon, a science teacher at LaFayette Junior/Senior High School was the 2022 recipient of AGI's Edward C. Roy Jr. Award for Excellence in K–8 Earth Science Teaching.
- The Paleontological Research Institution invited guests to join in its annual "Fossil Mania" event at the Museum of the Earth.
- The Paleontological Research Institution promoted awareness of Earth Science Week among community members by distributing educational materials.
- The Rochester Museum & Science Center and the Archaeological Institute of America's Rochester Society presented a family-friendly introduction to archaeology for International Archaeology Day. Visitors got up close with local artifacts, practiced archaeology in the indoor dig box, and observed stone tool demonstrations.
- Fort Stanwix National Monument shared an educational International Archaeology Day video on social media.

- Partners of National Fossil Day included Penn Dixie Paleontological and Outdoor Education Center, American Museum of Natural History, Buffalo Museum of Science, Paleontological Research Institute-Museum of the Earth, Rochester Museum and Science Center, Science Museum of Long Island, and Vassar College's Warthin Museum of Geology and Natural History.
- Guests were welcomed to use trowels, explore trenches, and join archaeology professors and students from State University of New York at Brockport in uncovering the story of a 19th century homestead at Cumming Nature Center.

North Carolina

- Community members learned about geoscience on Minerals Day and Geologic Map Day with https://storymaps.arcgis.com/stories/ee7ee-588b3d443c7acfc4df50685937b, an interactive experience provided by the North Carolina Geological Survey, which also promoted awareness of Earth Science Week through its website and by distributing materials.
- Audrey Collins of Cullowhee was a finalist in the 2022 Earth Science Week photography contest.
- The Aurora Fossil Museum held multiple events, including a talk with its museum educator and its annual celebration of National Fossil Day, held annually through a partnership with the National Park Service.
- The Bertie County Public Library provided packets for children to learn about fossils for National Fossil Day.
- The Museum of Natural Sciences celebrated the start of Earth Science Week with "Rocktober." Participants interacted with Earth scientists, did geoscience activities such as solving crimes with geology, and identified rocks, minerals, and fossils.

- North Carolina's Department of Environmental Quality helped community members celebrate Earth Science Week by joining the North Carolina Geological Survey on interactive explorations of geologic maps and minerals.
- Aurora Fossil Museum, Discovery Place, McKinney Geology Teaching Museum at Appalachian State University, Imagination Station Science & History Museum, Museum of Life and Science, North Carolina Fossil Club, and North Carolina's Museum of Life and Science were National Fossil Day partners.
- Imagination Station Science and History Museum hosted a National Fossil Day-inspired event including activities and crafts focusing on fossils and forests.
- Asheville Museum of Science held STEM Lab Activities, using an Enviroscape to demonstrate erosion, sediment pollution, and the water cycle.

North Dakota

- North Dakota has a perpetual proclamation of Earth Science Week.
- The Dakota Science Center, North Dakota Geological Survey, and North Dakota Geological Society were partners for National Fossil Day.

Ohio

- The governor of Ohio issued a proclamation for Earth Science Week 2022.
- The Ohio Department of Natural Resources Division of the Geological Survey promoted ways to get involved in Earth Science Week, including hikes, hands-on activities, classroom-based inquiries, talks, and interactive experiences with professional geologists and guests. They also distributed educator kits.
- Finalists of the 2022 Earth Science Week Visual Arts contest included Owen Holt of Youngstown, Kendra Schirckel of Poland, and Maxwell Wernicki of Poland.

- The School of Earth Sciences and the Orton Geological Museum celebrated Earth Science Week and National Fossil Day with an interactive series, "Stones for Stories." Each day, organizers highlighted a rock, mineral, or fossil that tells an interesting story and helps expand understanding of the planet. They also hosted a mineral and fossil scavenger hunt.
- The American Institute of Petroleum Geologists promoted Earth Science Week on its website.
- Allen County Museum, in partnership with Ohio State University at Lima, welcomed visitors for National Fossil Day. Participants enjoyed activities and a lecture.
- The Association of Environmental & Engineering Geologists distributed Earth Science Week Toolkits and other materials to teachers and others.
- The Falls of the Ohio State Park celebrated National Fossil Day on October 16 with fossil bed hikes, reduced admission for the Interpretive Center, guides on collecting piles, and talks and displays about fossils.
- The Pickaway County Library and the Pickaway County Park District hosted a program for Earth Science Week on October 15.
- National Fossil Day partners included the Ohio Geological Survey, Cincinnati Museum Center, Cleveland Museum of Natural History, Dry Dregers, and North Coast Fossil Club.
- The Ohio Geological Survey distributed Earth Science Week Toolkits.
- For National Fossil Day, visitors explored fossils in the building stones of the Ohio Statehouse. This event included special guests Charles Salmons of the state geological survey, paleontologist Mark Peter, and Dale M. Gnidovec, curator of Ohio State University's Orton Geological Museum.

Oklahoma

- Oklahoma obtained a perpetual proclamation of Earth Science Week.
- Spiro Mounds Archaeological Center celebrated International Archaeology Day with lectures, demonstrations, and guided tours of the mound site.
- Oklahoma Archaeology Month, sponsored by the Oklahoma Anthropological Society and Oklahoma Public Archaeology Network, held events in October.
- The American Association of Petroleum Geologists (AAPG) shared an article on its website highlighting ways to celebrate Earth Science Week. AAPG also distributed Earth Science Week Toolkits.
- National Fossil Day partners included the Oklahoma Geological Survey and Sam Noble Museum Oklahoma of Natural History.
- On October 29, the Oklahoma City Society of Archaeological Society of America celebrated Archaeology Day at Sam Noble Museum. Families explored archaeology through games, crafts, and activities such as searching for clues in an archaeology scavenger hunt, digging up artifacts in a sand pit, and learning how arrowheads were made.
- Oklahoma Public Archaeology Network guests joined Alex DeGeorgey in a webinar exploring how archaeological skills, originally developed for studying the past, are adapted for recovery efforts following a disaster.
- The Oklahoma Geological Survey and the Society for Sedimentary Geology distributed Earth Science Week Toolkits to educators and students.
- For Earth Science Week, Oklahoma State University's Boone Pickens School of Geology hosted activities.
- For Oklahoma's Archaeology Month and International Archaeology Day, the Spiro Mounds Archaeological Center offered guided walks, lectures, and other activities focused on Native American artifacts

Oregon

- John Day Fossil Beds National Monument celebrated National Fossil Day at the Thomas Condon Paleontology and Visitor Center on October 15. Participants experienced activities and demonstrations and became Junior Rangers.
- Oregon Geological Survey obtained Earth Science Week Toolkits for distribution among K-12 educators.
- National Fossil Day was promoted by partners including Oregon's Department of Geology and Mineral Industries, University of Oregon Museum of Natural and Cultural History, and Douglas County Museum of Natural History.

Pennsylvania

- The governor of Pennsylvania issued a proclamation for Earth Science Week.
- Penn Dixie Fossil Park & Nature Reserve encouraged Pennsylvanians to celebrate National Fossil Day.
- For International Archaeology Day, the Penn Museum held "Cartifacts" events, providing interactive experiences with reproductions of artifacts from ancient Egypt and North America. Guests learned from experts and explored collections.
- The Pennsylvania Geological Survey, Ferncliff Peninsula Natural Area, Academy of Natural Sciences, Carnegie Science Center, Earth and Mineral Sciences Museum & Art Gallery at Penn State University, Carnegie Museum of Natural History, State Museum of Pennsylvania, Reading Public Museum, and Pennsylvania Earth Science Teachers Association raised awareness as National Fossil Day partners.
- The Delaware Water Gap National Recreation Area held a free event where rangers helped visitors discover, identify, and learn about ancient life.

- Guests traveled to Raccoon Creek State Park for a Hiking 101 Educator Workshop where teachers explored using hiking to modernize curricula and instruction.
- Earth Science Week Toolkits were distributed among science teachers by the Pennsylvania Department of Conservation and Natural Resources as well as the Petroleum History Institute.
- The Anthropology Department at Indiana University of Pennsylvania held its annual Archaeology Open House on October 15. The event provided prehistoric and historic artifact displays from local archaeological sites, artifact identification, stone tool-making demonstrations, early human displays and lab tours.
- The state Department of Conservation and Natural Resources' Park Naturalist program hosted an exhibit along the multi-use trail of Ridley Creek State Park for National Fossil Day. Attendees saw real specimens up close while learning about how fossils form, in what types of geology they can be found, and ancient life.
- This year's International Archaeology Day coincided with the final public archaeology excavation of the year at Newlin Grist Mill. Community members assisted archaeologists with excavations.

Rhode Island

- The Rhode Island Geological Survey and Rhode Island Museum of Natural History and Planetarium promoted National Fossil Day as program partners.
- For International Archaeology Day, Joukowsky Institute for Archaeology and the Ancient World and Brown University welcomed guests to join the Archaeological Institute of America's Narragansett Society for archaeological activities at the Rhode Island Hall in Province.

South Carolina

- The University of South Carolina, Friends of Arkhaios, and University of Pittsburg sponsored the ninth annual Arkhaios Cultural Heritage and Archaeology Film Festival, a free, educational event offering lessons about past cultures gained from ethnological or archaeological research and illustrated by documentary films.
- The South Carolina Geological Survey celebrated Earth Science Week by distributing Earth Science Week Toolkits to educators.
- The South Carolina State Museum was an official partner of National Fossil Day.

South Dakota

- South Dakota has a perpetual proclamation recognizing Earth Science Week.
- National Fossil Day was celebrated by the Museum of Geology at the School of Mines and Technology. An exhibit was unveiled, and talks were given by paleontologists who work in the Black Hills.
- For National Fossil Day, the South Dakota Mines' Museum of Geology held an event enabling the public to meet with paleontologists from federal agencies. They also housed an exhibit celebrating the 100th anniversary of Fossil Cycad National Monument.
- Paleontologists and Badlands National Park officials kicked off National Fossil Day with activities ranging from exhibits to fossil cleaning.
- Mammoth Site and the South Dakota School of Mines and Technology's Museum of Geology were National Fossil Day partners.

Tennessee

• The governor of Tennessee issued a proclamation for Earth Science Week.

- The Tennessee Geological Survey distributed Earth Science Week Toolkits to science teachers and home schoolers.
- The University Memphis' Department of Earth Sciences hosted, in collaboration with the Memphis Museum of Science and History, an Earth Science Week colloquium, during which students and faculty previewed their presentations for the Geological Society of America Annual Meeting.
- East Tennessee State University's Museum of Natural History and Hands On Discovery Center held a celebration at the Gray Fossil Site for National Fossil Day, including activities enabling visitors to tour the fossil site, see Appalachian fossils, and learn how paleontologists use the latest technologies to research and preserve fossils.
- The Frank H. McClung Museum, Gray Fossil Site, East Tennessee State General Shale Brick Natural History Museum, and the Pink Palace Museum promoted awareness as National Fossil Day partners.
- Discovery Park of America held "A Geoscience Celebration" with talks and panels on sustainability.
- During Earth Science Week, the Children's Museum of Oak Ridge hosted "Minerals, Rocks, and Fossils! Oh My!" as part of their Imagination Station Fall Break Camps series. Students participated in hands-on activities to earn an Earth Science Week activity patch.
- The McClung Museum of Natural History and Culture celebrated International Archaeology Day with "Can You Dig It?" on October 16. The event featured handson activities, crafts, displays, and educational booths led by university researchers, professors, and graduate students. Interactive stations included cave art painting, hunter-gatherer games, and booths where guests made their pottery, perfumes, and shields.

- The Tennessee STEAM Festival offered an array of hands-on activities, from scavenger hunts to hiking.
- The Archaeological Institute of America-Nashville Society and the Nashville Parthenon celebrated International Archaeology Day.

Texas

- The Arlington Archosaur Site promoted National Fossil Day on social media.
- Vera Hsiang of Corpus Christi was among finalists in the Earth Science Week photo contest.
- Jurassic Quest celebrated National Fossil Day by holding virtual sessions with Safari Sarah and posting activities on its website.
- The Rio Brazos Chapter of the Texas Master Naturalist program presented a come-and-go interactive Earth science event on October 15. The event, Discover Earth Science, taught about geology, soils, water, and atmosphere. Partners and sponsors included Acton Nature Center, Hood County Development District 1, Texas Parks and Wildlife, and Texas A&M AgriLife Extension.
- The Bureau of Economic Geology hosted the 22nd Annual Austin Earth Science Week Career Day. Middle and high school students met with scientists and learned about geoscience careers.
- For Earth Science Week, the Texas Water Development Board offered K-12 resources for teachers to use in classroom activities.
- The Texas State Geological Survey, Arlington Archosaur Site, Dinosaur Valley State Park, Fossil Rim Wildlife Center, Ladonia Fossil Park, Mineral Wells Fossil Park, Waco Mammoth Site, Perot Museum of Nature and Science, Whiteside Museum of Natural History, Centennial Museum at the University of Texas- El Paso, Witte Museum, Heard Natural Science Museum and Wildlife Sanctuary, Houston Museum of Natural Science, Mayborn Museum, Museum of Texas

- Tech University, Panhandle-Plains Historical Museum, Sherman Museum, Texas Memorial Museum, East Texas Gem and Mineral Society, Paleontological Society of Austin, and Dallas Zoo were National Fossil Day partners.
- Bexar BiblioTech Public Library led craft events for Earth Science Week.
- The Texas Memorial Museum highlighted ways to celebrate National Fossil Day on its website.
- Celebrating National Fossil Day and Earth Science Week, the Paleontological Society of Austin hosted the 30th annual two-day Fossil Fest event. This year's theme, "Texas Dinosaurs," explored the large variety of dinosaurs that lived in Texas millions of years ago and what fossils of those animals can reveal.
- During Earth Science Week, the Houston Gem & Mineral Society hosted the 69th Annual Gem, Jewelry, Mineral & Fossil Show at the Humble Civic Center.
- The University of Texas at El Paso's Department of Earth, Environmental and Resource Sciences presented Earth Science Week activities on October 15, including a hands-on activity, drone demos, and stream table demos.
- For Earth Science Week, Sul Ross State University's Geology Program and Geology Club presented educational events and activities.
- Texas Master Naturalist, an extension of Texas A&M University, promoted participation in Earth Science Week on its website.
- An announcement about Earth Science Week 2022 appeared on the Texas Bureau of Economic Geology's website.
- The Texas Geological Survey distributed Earth Science Week Toolkits.
- The Society of Exploration Geophysicists distributed materials and highlighted, on its SEG Library webpage, materials, activities, and opportunities for Earth Science Week.

- The Mineral Wells Chamber of Commerce, in partnership with the Dallas Paleontological Society and the City of Mineral Wells, held its 6th annual Crazy Fossil Dig on October 15 at Mineral Wells Fossil Park. The event included fossil displays and a scavenger hunt.
- For Earth Science Week and National Fossil Day, the Perot Museum of Nature and Science invited visitors to view rare fossils and virtual paleo-habitats that provide an up-close look at prehistoric life.
- To kick off Texas Archeology Month, the Denton County Historical Commission hosted "Denton Dig It," an archaeology fair at the Denton County Historical Park. Visitors enjoyed educational activities.
- Dallas Public Library celebrated National Fossil Day with activities.
- The Houston Geological Society hosted an Earth Science Week event at the Houston Museum of Natural Science. The society also provided links to videos, field trips, and activities.
- Waco Mammoth National Monument held an art contest with the theme "The Age of Mammals." The contest celebrated the 13th annual National Fossil Day.
- A National Fossil Day event was held at Ladonia Fossil Park on October 15. Attendees handled fossils and learned from locals who hunt for fossils.

Utah

- The Utah Geological Survey hosted activities for over 700 fourth-grade students to celebrate Earth Science Week. Activities addressed earthquakes, fossils, and minerals. The survey also provided virtual activities and hands-on teaching kits for schools.
- Earth Science Week Toolkits were distributed to students, teachers, and others by the Utah Geological Survey.

- The Utah Geological Survey's Earth Science Week webpage featured short videos about geology and geologists; information about rocks, minerals, and fossils; and links to home-based science activities.
- Archaeology Day at the Edge of the Cedars State Park featured educational activities and demonstrations. Participants learned skills practiced by the region's earliest inhabitants such as pottery making, stone tool production, wood carving, and weaving. Additional highlights included the opening of an exhibit featuring student artwork from the San Juan School District.
- The Utah Geological Survey, Cleveland-Lloyd Dinosaur Quarry National Natural Landmark, Ogden Eccles Dinosaur Park, St. George Dinosaur Discovery Site at Johnson Farm, Garth and Jerri Frehner Museum of Natural History, Utah Field House of Natural History State Park Museum at Vernal, Museum of Moab, Museum of Ancient Life at Thanksgiving Point, University of Utah Natural History Museum, Utah Friends of Paleontology, Earth Science Education, and others promoted National Fossil Day as partners.
- Grand Staircase-Escalante National Monument and Glen Canyon National Recreation Area staff celebrated the 13th Anniversary of National Fossil Day through activities highlighting the importance of paleontological resources on public lands. Visitors joined paleontologists as well as monument and park service staff in fossil-related activities.
- The Eastern Prehistoric Museum at Utah State University held "Fossil Fest: Horns and Tusks," a multiday event featuring field trips, presentations, and free admission to the museum, where there were interactive activities focused on the paleontology and geology of Utah.

 October 19–23 marked the seventh annual Moab Festival of Science with activities throughout the weekend. The event engaged citizens and visitors of southeastern Utah with information on science and the societal importance of regional research.

Vermont

- The Vermont Geological Survey and Chazy Fossil Reef were partners for National Fossil Day.
- For International Archaeology Day, the Niagara Peninsula Society of the Archaeological Institute of America hosted a guided walk along the Welland Canal to explore local history, environment, and ecology.

Virginia

- The governor of Virginia issued a proclamation for Earth Science Week.
- Aislynn Carroll of Virginia Beach won first place in the essay contest with a paper titled "The Cost."
- Finalists of the Earth Science Week essay contest included Sophia Altinok of Virginia Beach, Raizel Dino of Virginia Beach, and Arijus Knasas of Virginia Beach.
- The Mineralogical Society of America (MSA) provided content for the Earth Science Week Toolkit and activity calendar. MSA also distributed Earth Science Week Toolkits and promoted Minerals Day on its website with resources.
- The Virginia Geological Survey, Science Museum of Virginia, Virginia Museum of Natural History, Paleo Quest, and AGI helped build understanding of paleontology as National Fossil Day partners.
- The National Science Teaching Association promoted Earth Science Week offerings such as the 2022 contests and webinar series on its website and in its October NSTA Reports.

- The Archaeological Institute of America's Richmond Society hosted outreach events including a celebration of International Archaeology Day.
- Jamestown Rediscovery engaged the public in a celebration of International Archaeology Day and Virginia's Archaeology Month. Guided by an archaeologist, attendees toured sites such as the "archaearium."
- The U.S. Geological Survey (USGS) Youth and Education in Science office created a webpage to link USGS Earth Science Week efforts.

Washington

- Locals welcomed a day of activities and learning about local and global archaeology on October 22 for International Archaeology Day and Archaeology Month in Washington. The Burke Archaeology Team, Puget Sound Chapter, of the Archaeological Institute of America (AIA) and partners presented this archaeology fair, including flint-knapping; shell midden sorting; cacao grinding; archaeological techniques; and Pre-Roman Italy, Latin, and Egyptian artifacts.
- For International Archaeology Day, the Walla Walla Society of AIA sponsored a lecture presented by Scott Williams of the Maritime Archaeological Society at Whitman College on October 22.
- Nathan Xu of Clyde Hill was a finalist in the Earth Science Week visual arts contest.
- Washingtonians visited the Burke Museum of Natural History and Culture for activities and information on archaeology.
- For International Archaeology Day, the Puget Sound Society of AIA teamed up with the Burke Museum of Natural History and Culture and others for technique-sharing and storytelling.

- Ginkgo Petrified Forest State Park, Burke Museum of Natural History and Culture, and Stonerose Interpretive Center and Eocene Fossil Site were partners in National Fossil Day.
- The Association for Washington Archaeology's East Group resumed its Spokane Archaeology Day on the grounds of the Northwest Museum of Arts and Culture. Activities included an atlatl toss, flintknapping, historic and precontact material analysis and site interpretation, ethnobotany and zooarchaeology booths, and rock art education.
- For International Archaeology Day, the University of Washington enabled visitors to watch a live flintknapping demonstration, learn to throw an atl-atl, hear what archaeologists have found around Puget Sound, and try writing in Latin cursive, Etruscan, or cuneiform.
- Earth Science Week Toolkits were distributed among science teachers statewide by the Washington Geological Survey.

West Virginia

- In honor of Archaeology Day and West Virginia Archaeology Month, Grave Creek Mound Archaeological Complex featured activities October 1–2 with behind-the-scenes tours, flint knapping, atlatl demonstrations, museum scavenger hunt, and an October and 5 lecture on "The Real Bebbanburh: The Castle That Started It All in Netflix's Hit Drama 'The Last Kingdom'."
- On social media, the West Virginia Geologic and Economic Survey and the Clay Center for Arts and Sciences shared resources for National Fossil Day and raised awareness as National Fossil Day partners.
- Grace Yan of Morgantown won first place in the Earth Science Week video contest with the entry "Yellow to Green: How School Buses Are the Next Step in Global Sustainability."

Wisconsin

- The Soil Science Society of America participated in Earth Science Week by providing content for the 2022 Toolkit, including contributions to the Geologic Map Day poster and an activity in the calendar, and by distributing the Earth Science Week Toolkit.
- Dunn County Historical Society celebrated National Fossil Day at the Rassbach Museum with several local fossils on exhibit. The group also provided "take home" fossils for budding paleontologists.
- The Wisconsin Geological and Natural History Survey, Dinosaur Discovery Museum, Kenosha Public Museum, Weis Earth Science Museum, and Milwaukee Public Museum were partners for National Fossil Day.
- The Milwaukee Society of the Archaeological Institute of America held lectures on October 15–16 for International Archaeology Day.
- The Wisconsin Geological and Natural History Survey distributed the Earth Science Week Toolkit.
- Kenosha Public Museum hosted a week of activities to promote public awareness, education, scientific study, and stewardship of fossils. It also welcomed visitors throughout its National Fossil Week, celebrating "Eocene Fossils of Yellowstone National Park."

Wyoming

- Hands-on events and planetarium shows were among activities offered on October 15 to celebrate Earth Science Week at the University of Wyoming.
- The Wyoming State Geological Survey in conjunction with the University of Wyoming (UW) Geological Museum, UW School of Energy Resources, and UW Art Museum hosted "Wyoming Rocks: Critical Resources for a Sustainable Future." Hands-on activities focused on state geology and minerals, with an emphasis on finite resources.

- Locals visited the National Historic Trails Interpretive Center to learn about the state's paleontological past.
- Big Horn Radio Network highlighted ways to participate in Earth Science Week in person and online.
- Tate Geological Museum celebrated National Fossil Day and dedicated a new bronze of Gastornis on October 8.
- The Wyoming State Geological Survey distributed the Earth Science Week Toolkit.
- Draper Museum of Natural History at the Buffalo Bill Center of the West, Sheridan College Science Museum of Discovery, Tate Geological Museum, UW Geological Museum, Wyoming Dinosaur Center, Grand Teton Association, and Bighorn Basin Geoscience Center and Geoscience Educational Adventures promoted National Fossil Day as partners.
- The Cheyenne Post promoted awareness of the Wyoming State Geological Survey's offer of kits to classrooms.
- The Wyoming State Geological Survey distributed 50 complimentary Earth Science Week Toolkits to Wyoming educators.
- International Events
- According to Google Analytics, the Earth Science Week website was accessed by users in 212 nations, territories, and regions in 2022. More substantial international activity included the following.

Australia

• GSA Neo, a new online initiative of the Geological Society of Australia, offered an online workshop, "Connection to Country: Towards Sustainable Earth Science," which targeted early-career geoscientists with new skills and knowledge during Earth Science Week. The October 11 event featured a presentation and panel discussions including First Nations Australians speaking about connection to country.

- The Australian Institute of Geoscientists presented a week of virtual activities and presentations.
- Geoscience Australia offered tours and art events throughout Earth Science Week. Events celebrated ways Earth science impacts people each day and allowed access to walking trails, including tours with an Auslan interpreter.
- Australian Earth Science Education highlighted educational organizations and resources to engage Australians in exploring the importance of the geosciences and geoscience education.
- DART Learning, an initiative of the New South Wales Department of Education, promoted Earth Science Week on its website and offered a trivia game.
- Virtual Excursions Australia hosted six online events focused on fossils, the environment, museums, and teacher professional development in the geosciences.
- The Australian National Maritime Museum hosted "Ocean Plastics," a virtual visit to its wharf, where innovative technologies are being used to clean up aquatic environments.

Belgium

• The European Federation of Geologists promoted participation in Earth Science Week.

Belize

• The Institute of Archaeology/ National Institute of Culture and History hosted an Archaeology Fair for International Archaeology Day on October 27 at Xunantunich Archaeological Reserve in San Jose Succotz, Cayo. The fair featured presentations, site tours, artifact displays, and informational booths showcasing the utility of Geographic Information Systems in archaeology research, bioarchaeology, and epigraphy for basic hieroglyphic reading and writing.

- The Belize Institute of Archaeology celebrated International Archaeology Day, hosting multiple Trivia Fridays pertaining to Belizean archaeology.
- Galen University's Anthropology Club hosted sessions and activities for International Archaeology Day.
- Members of the public celebrated International Archaeology Day with Heritage Education Network Belize during an all-day International Archaeology Day Fair.

Brazil

 Earth Science Toolkit materials were part of Brazilian celebration efforts.

Canada

- The Ontario Archaeological Society promoted International Archaeology Day by inviting members and symposium attendees to participate in a photo contest.
- The qathet Museum & Archives celebrated International Archaeology Day with hands-on activities, including unearthing artifacts from a simulated archaeological excavation.
- For International Archaeology Day, the Department of Classics and the Niagara Peninsula Chapter of the Archaeological Institute of America offered a guided walk along the Welland Canal to explore local history, environment, and ecology.
- As part of International Archaeology Day, the Museum of Croatian Archaeological Monuments organized its biennial International Archaeology Film Festival on archaeology, monument protection, and anthropology.

Croatia

• Earth Science Toolkit materials were part of celebration efforts in Croatia.

Czech Republic

- The Regional Museum in Mikulov hosted a multi-day event, "International Archaeology Day: From Flint to Sigilatta," with free tours of exhibits, paleontology activities, and lectures on archaeological fieldwork.
- The City of Prague Museum held an International Archaeology Day event with activities and presentations.
- The Museum and Gallery in Česká Lípa offered guided tours of the permanent exhibitions in the Šatlava archaeological museum. There was also a traditional archaeological cinema corner with visualizations of changes in Česká Lípa in the late Middle Ages and 19th and 20th centuries.
- International Archaeology Day at Charles University's Faculty of Arts included public lectures and workshops concerning archaeology and Egyptology.
- The Center for Ecological Education of the Liberec Region and Bohemian Paradise House of Nature, in cooperation with partners, offered a field excursion on the archeology of the prehistoric settlement and hillfort Hrada a Klamorna.

Germany

 The European Geosciences Union promoted Earth Science Week and sustainability-related resources on its website.

Greece

• For the fourth consecutive year, the American School of Classical Studies at Athens's Corinth Excavations organized, in collaboration with the Ephorate of Antiquities of the Corinthia, an educational program in celebration of International Archaeology Day. Guests learned about vase painting and vase making in ancient times and today; were joined by archaeologists, conservators, a vase maker, and local vase painters; and modeled their own vases.

India

- The Department of Geology at Government P.G. College Rajouri hosted a weeklong national workshop on "Earth Science for a Sustainable World." More than 1,000 professors, scientists, geologists, research scholars, teachers and students across the country attended the workshop.
- Zainab Bie of Delhi was selected as a finalist in the 2022 Earth Science Week video contest.

Ireland

 Earth Science Week events took place in museums, libraries, schools, universities, geoparks and more, including urban geowalks, family activity days, talks, conservation days, and field trips.

Japan

- The fifth annual Earth Science Week Japan was celebrated at Sendai City Science Museum.
- A field excursion was held for Earth Science Week Japan. The location was the archaeological site of a gold mine, owned by famous Japanese Samurai Takeda Shingen about 500 years ago, is located in the fossa magna area as a tectonic line.

• JpGU provided support for the Earth Science Week webinar series by identifying a researcher whose work in the Kushiro Wetlands addresses SDGs, which is related to a StoryMap that was identified on the Earth Science Week poster.

Malta

 For International Archaeology Day, the Archaeological Society Malta sponsored a site visit to the Phoenicians of Malta Exhibition at the Valletta National Museum of Archaeology.

New Zealand

• Earth Science Toolkit materials were obtained for celebration efforts in New Zealand.

Poland

• Members of historical reconstruction group Pro Antica Legion XIIII GMV Association of Lublin were invited to the Upper Silesian Branch of the Scientific Association of Polish Archaeologists at the Upper Silesian Museum in Bytom for International Archaeology Day. Attendees of workshops and lectures learned about Roman traces in Upper Silesia, searched for coins, imprinted clay vessels from the mold, and made a gladiator masks and jewelry.

Portugal

• Earth Science Toolkit materials were part of Portuguese celebration efforts.

South Korea

• Earth Science Toolkit materials were used as part of celebration efforts in South Korea.

Spain

 Innovinc Organization held the third World Congress on Geology & Earth Science in Barcelona.

Thailand

• Earth Science Toolkit materials were obtained for Thai geoscience education-related efforts.

United Kingdom

- The Geological Society of London (GSL) supported several Earth Science Week events, including geowalks, hands-on activities, talks, and arts events.
- GSL and the Paleontological Association fostered understanding of paleontology as National Fossil Day partners.

- University College London Earth Sciences held a Women in Earth Sciences Event.
- During Earth Science Week, the Geosciences Advanced E-Learning Academy launched an online learning platform for United Kingdom postgraduate students studying geosciences and/or biological sciences.
- Somerset Earth Science Centre and Mendip Hills Area of Outstanding Natural Beauty organized three geoscience lectures in Stoke St. Michael for Earth Science Week.
- The Geological Society of London offered a number of small grants to support events for Earth Science Week. Events focused on public engagement and outreach to foster future generations of Earth scientists by communicating the importance and societal relevance of Earth science.

- University Technical College Portsmouth celebrated Earth Science
 Week with activities, including a
 challenge in which students acted
 as part of a "construction company"
 tasked with designing an earthquake-resistant skyscraper.
- The European Association of Geoscientists and Engineers and the European Federation of Geologists cohosted a photography competition titled "Legends of Geoscience," focusing on images of extraordinary actions or aspects of geoscience.

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



Earth Science Week 2022 Visual Arts Contest winning entry by Evelyn MacMichael.

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