AMERICA'S GEOHERITAGE II: IDENTIFYING, DEVELOPING, AND PRESERVING AMERICA'S NATURAL LEGACY--WORKSHOP PROCEEDINGS

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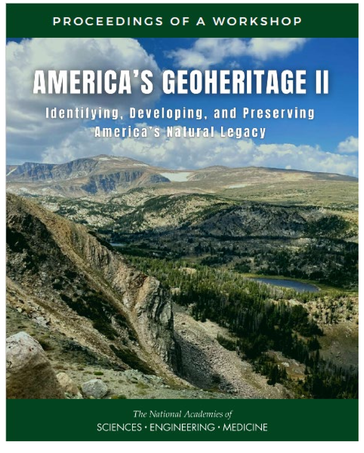

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BACKGROUND

In 2013, an *ad hoc* committee of the National Academies convened the original "America's Geoheritage" workshop. Participants in that workshop—the first of its kind in the U.S.—included staff from U.S. government and state agencies, nonprofit organizations, museums, academia, and industry. America's Geoheritage II was convened by the U.S. National Committee for Geological Sciences to take a fresh look in light of the social, political, and environmental changes in the last decade.

GOALS

1) survey the status of Geoheritage (GH) across America and provide opportunities for participants to share interests, experiences, and resources;
2) develop a shared vision for GH and demonstrate the value of GH in research, education, and for the general public;
3) identify resources needed to identify and develop GH sites in communities across the country;
4) build a community of geoscientists and collaborators to promote GH and,
5) encourage the use of GH sites by researchers, educators and the general public.

STRUCTURE

Part I: Fall 2020 Distinguished Speakers Webinar series of eight webinars with presentations by 30 speakers on a global vision for GH and relation of U.S. initiatives to international programs; a survey of GH activities in the U.S. (federal agencies and state geological surveys); GH and cultural heritage, economic development and geotourism; and GH in education and research.
Part II: A week-long January 2021 virtual writing workshop attended by 101 participants representing diverse stakeholders from geoscience and allied disciplines self-distributed in 12 Focus Groups and 3 *ad hoc* topical discussion groups. It was organized in synchronous (introductory and report out plenaries and focus group meetings) and asynchronous exploratory sessions during six days.

Scan this QR for the videos of the Webinar series, report outs of the group findings, the 2021 *America's Geoheritage II* proceedings, and the 2013 *America's Geoheritage* workshop summary:

WHAT IS GEOHERITAGE?

"Geoheritage sites are areas of geologic features with significant scientific, educational, cultural, and/or aesthetic value…Many geoheritage sites are tourist destinations that provide local and regional economic benefits" (GSA Position Paper on Geoheritage, 2017).

WHO DOES GEOHERITAGE?

Federal agencies; State Geological Surveys; academic institutions, faculty and students; nongovernmental groups; state geological societies; museums; mining and mineral companies; hiking and climbing clubs; state and local tourism agencies; conservation and environmental groups; civic groups; local radio and TV stations; and science festivals and fairs.

HIGHLIGHTS

- **The U.S. has not established formal Geoparks, though Geopark principles have informed development of GH in the U.S. Individual U.S. groups have identified areas that can be developed as GH sites. The U.S. government protects areas of GH interest.**
- **Many geoscientists and others do GH work without labeling it as such. Better knowledge of geoheritage concepts and terms would improve the inventorying, study, and protection of GH sites for the benefit of the entire Earth Science community.**
- **Geodiversity and biodiversity have to be linked in nature conservation efforts: ecodiversity. GH is a natural extension of Earth System science, it is an interdisciplinary endeavor that requires integration across many disciplines, and can support research on many topical scientific questions.**
- **GH sites support geoscience AND cultural literacy, including human history, geography, language arts, philosophy, and the humanities.**
- **GH is connected to a sense of place ("any locality we imbue with meaning based on individual or collective experience"). Cultural landscapes are interwoven with natural landscapes.**
- **GH has a central role in geoscience education, including support for the K-12 Next Generation Science Standards, undergraduate and graduate training of next generation geoscientists, and for outreach programs to the general public. GH can be experienced and taught in person (especially during field work), at museums and science centers, or through virtual media.**
- **GH can contribute to diversity, equity, and inclusion in geoscience. GH can inspire people from minoritized communities and diverse economic statuses to engage in the geosciences. GH has great potential to demonstrate the broader impact of research and to build human infrastructure in science.**
- **GH provides natural laboratories for research, long-term monitoring, education, and outreach to the public.**
- **GH can be drivers of local sustainable economic development: local champions are needed. Examples of mining-based GH: are in southeastern WV and Keewenaw Peninsula (MI).**
- **When planning and designing GH sites, need to engage all stakeholders from the beginning, not as an afterthought. Need to respect cultural traditions and sensitivities, build relationships of trust, and to be sure that indigenous ways of knowing are incorporated into the planning as a central component.**
- **Checklists should be constructed to assist in site identification and development process. Technological tools can be used in the establishment and development of GH sites. Find allies and share GH's embrace of community, inclusivity, access, respect, responsibility, and communication.**
- **Ethics should be a pillar of everything that is done in GH, from personal to professional, societal, and planetary ethics.**

WRITING WORKSHOP FOCUS AND *AD HOC* GROUPS
America's Geoheritage (GH) Vision, Values, Principles
America's GH and International GH Initiatives (Global Geopark Network, International Union of Geological Sciences, International Union for the Conservation of Nature)
GH "Toolkit": How to Identify and Develop a Local Geoheritage Site
Geodiversity/Geoconservation and Biodiversity
Federal, U.S. Forest Service, National Park Service, Bureau of Land Management
GH and State Surveys (two groups)
GH and Geotourism/Outdoor Recreation
GH and Culture; Sense of Place; Indigenous Ways of Knowing; Empowering Participation
GH and Education (3 groups): K-12, Undergraduate and Graduate, Informal Education and Public Outreach (EPO)/Museums
Ad hoc groups: GH and Ethics, GH and Coastal Areas-National Marine Sanctuaries, and GH and Social Media

Workshop supported by NSF, NPS, and USGS, and co-sponsored by AASG, AGI, GSA, NAGT, and NESTA