NSF and Geoheritage: funding opportunities for education, conservation, and research

America's Geoheritage Workshop II: Identifying, Developing, and Preserving America's Natural Legacy

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December 1, 2020

Geoheritage and NSF

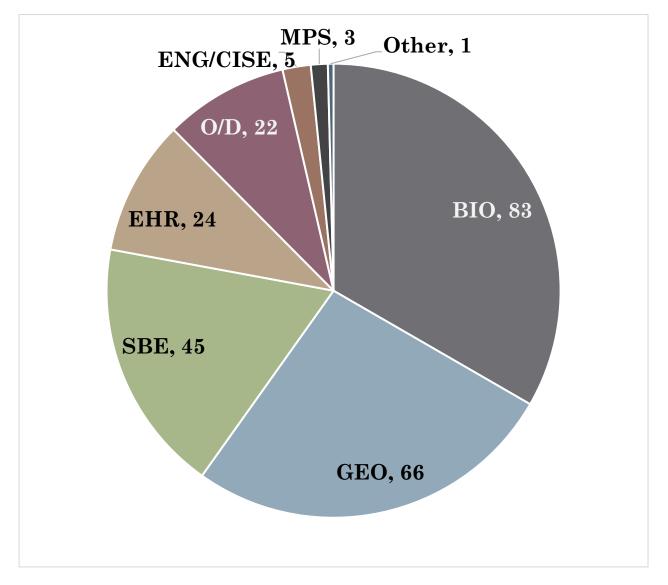
"Geoheritage" is a generic but descriptive term applied to sites or areas of geologic features with **significant scientific**, **educational, cultural,** and/or aesthetic value. ...Many geoheritage sites are tourist destinations that provide **local and regional economic benefits**. GSA Policy Statement

NSF invests in a *world-class research* enterprise, support the *development of a globally competitive scientific and engineering workforce*, and foster *greater understanding of science and technology among the American public*.



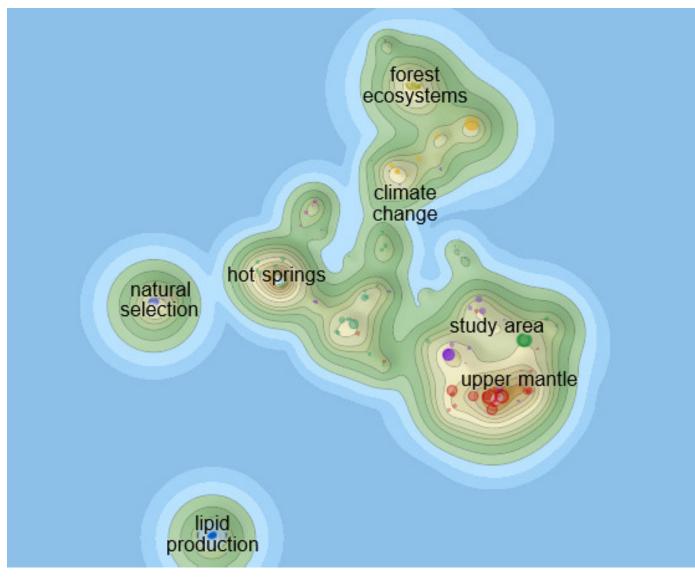
who/how

NSF AWARDS – "National Parks"



what/where





what/where

NSF AWARDS – "Yellowstone"





what/where

NSF AWARDS – "Yellowstone"

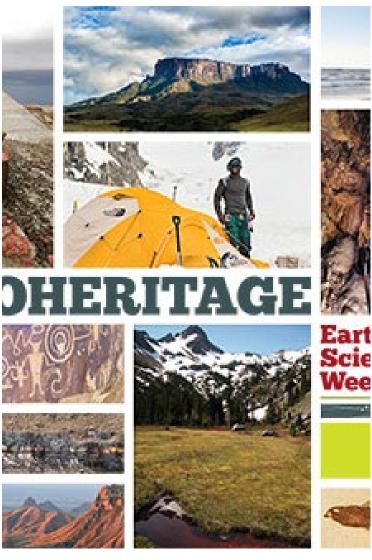


• Research

- Core disciplinary programs
- Special emphasis programs

Workforce Development

- Undergraduate research (REU Sites, IRES)
- Dissertation enhancement
- Postdoctoral Fellowships
- Institution specific
- Directorate Specific Programs
- Community engagement
 - Informal Education
 - Innovation Portfolio
 - Broader Impacts



https://www.earthsciweek.org/content/our-shared-geoheritage







https://www.nsf.gov/news/news_images.jsp?cntn_id=109769&org=NSF

- Research Special Emphasis Programs
 - Coastlines and People (CoPe)
 - Navigating the New Arctic (NNA)
 - Dynamics of Integrated Socio-Environmental Systems (DISES)
 - Paleo Perspectives on Climate Change (P2C2)
 - Understanding the Rules of Life (URoL)



who/how

Workforce Development

- Institution specific
 - Improving Undergraduate STEM Education: Hispanic Serving Institutions
 - Tribal Colleges and Universities
 - Historically Black Colleges and Universities

Directorate Specific Programs

- Improving Undergraduate STEM Education: Pathways into the Earth, Ocean, Polar and Atmospheric & Geospace Sciences (IUSE:GEOPAths)
- Dear Colleague Letter: Non-Academic Research Internships for Graduate Students (INTERN) Supplemental Funding Opportunity



who/how



Community engagement

- Informal Education
 - Advancing Informal STEM Learning (AISL)
 - Discovery Research PreK-12 (DRK-12)
 - Innovative Technology Experiences for Students and Teachers (ITEST)

Innovation Portfolio

- Small Business Innovation Research Program (SBIR)
- Small Business Technology Transfer Program (SBTT)
- Broader Impacts



Trail of Time at Grand Canyon (https://www.unm.edu/)

who/how



Public Land and Resources Law Review

Volume 28

Ethnic Cleansing and America's Creation of National Parks

Isaac Kantor

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who/how



Ethnic Cleansing and America's Creation of National Parks Isaac Kantor

A. A Personal Perspective in a Created Landscape 42 B. The Unpeopled Fallacy of the National Park Service Organic Act of 1916 and the Wilderness Act of 1964 43 C. George Catlin's Original National Park Featured Native 44 Americans 44 D. The Great Shift to John Muir's "Uninhabited Wilderness" 46 E. Why Muir's Vision Prevailed 48 II. REMOVING AMERICAN INDIANS FROM THE NATIONAL PARKS 49 B. Glacier National Park 51 C. Mesa Verde National Park 53 III. CONTEMPORARY ISSUES 54 A. Glacier National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	42
Act of 1916 and the Wilderness Act of 1964 43 C. George Catlin's Original National Park Featured Native 44 Americans 44 D. The Great Shift to John Muir's "Uninhabited Wilderness" 46 E. Why Muir's Vision Prevailed 48 II. REMOVING AMERICAN INDIANS FROM THE NATIONAL PARKS 49 B. Glacier National Park 49 B. Glacier National Park 51 C. Mesa Verde National Park 53 III. CONTEMPORARY ISSUES 54 A. Glacier National Park 55 B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	
Americans 44 D. The Great Shift to John Muir's "Uninhabited Wilderness" 46 E. Why Muir's Vision Prevailed 48 II. REMOVING AMERICAN INDIANS FROM THE NATIONAL PARKS 49 B. Glacier National Park 49 B. Glacier National Park 51 C. Mesa Verde National Park 53 III. CONTEMPORARY ISSUES 54 A. Glacier National Park 55 B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	
D. The Great Shift to John Muir's "Uninhabited Wilderness"	
E. Why Muir's Vision Prevailed	
II. REMOVING AMERICAN INDIANS FROM THE NATIONAL PARKS	
A. Yellowstone National Park 49 B. Glacier National Park 51 C. Mesa Verde National Park 53 III. CONTEMPORARY ISSUES 54 A. Glacier National Park 55 B. Mesa Verde National Park 55 B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	
A. Yellowstone National Park 49 B. Glacier National Park 51 C. Mesa Verde National Park 53 III. CONTEMPORARY ISSUES 54 A. Glacier National Park 55 B. Mesa Verde National Park 55 B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	40
B. Glacier National Park 51 C. Mesa Verde National Park 53 III. CONTEMPORARY ISSUES 54 A . Glacier National Park 55 B. Mesa Verde National Park 55 B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	49
C. Mesa Verde National Park	
III. CONTEMPORARY ISSUES 54 A . Glacier National Park 55 B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS 60	
A . Glacier National Park	
B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT OF 1980	ļ
B. Mesa Verde National Park 57 C. Federal Statutes: A Tacit Admission of Guilt 58 IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT OF 1980	
IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT OF 1980	
IV. A CONTRAST: THE ALASKA NATIONAL INTEREST LANDS CONSERVATION ACT OF 1980	
CONSERVATION ACT OF 1980 60	
V . CONCLUSION	62
"Once we were in our own country and we were seldom hungry, for th	

"Once we were in our own country and we were seldom hungry, for then the twoleggeds and the four-leggeds lived together like relatives ... [b]ut the [Americans] came, and they have made little islands for us and other little islands for the fourleggeds, and always these islands are becoming smaller " – Black Elk

who/how



NSF

Geoheritage in the 21st Century



Research: https://www.nsf.gov/discoveries/disc_summ.jsp?cntn_id=13 2758 Culture: https://grcahistory.org/history/humans-at-grand-canyon/ Accessibility: https://eos.org/opinions/creating-spaces-for-geoscientistswith-disabilities-to-thrive



what/where



Geoheritage in the 21^{st} Century



Advancing inclusion in the geosciences: An overview of the NSF-GOLD program

Julie R. Posselt , Jason Chen, P. Grady Dixon, Jerlando F. L. Jackson, Robert Kirsch, Anne-Marie Nuñez & Brian J. Teppen ...show less Pages 313-319 | Received 31 Aug 2018, Accepted 19 Jul 2019, Published online: 18 Sep 2019

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GeoSPACE – GeoScientists Promoting Accessible Collaborative Experiences

The Challenges of Fieldwork for LGBTQ+ Geoscientists

A new survey reveals the unique issues that traveling for research poses for LGBTQ+ scientists. The data should help us create solutions that foster safety and inclusion. Citation: Olcott, A. N., and M. R. Downen (2020), The challenges of fieldwork for LGBTQ+ geoscientists, *Eos, 101*, https://doi.org/10.1029/2020E0148200. Published on 28 August 2020.





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