

SciGirls in the National Parks

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OUTREACH: 16 National Parks are paired with 16 girl-serving organizations to engage 160 middle school middle school girls with National Park women STEM professionals to participate in a citizen science activity, watch *SciGirls* citizen science media (episodes + role model videos), and explore *SciGirls* citizen science activities.

EVALUATION: Evaluate the training of educators and role models and the use and impact of the *SciGirls* media and family events. The evaluation questions are:

1. To what degree were the outreach programs implemented as intended?
2. To what degree do educators increase their knowledge and use of research-based gender equitable instructional strategies, including encouraging families and role models to engage girls in citizen science?
3. To what degree do role models increase their confidence and ability to engage girls in citizen science?
4. To what degree do parents/caregivers increase their awareness of STEM opportunities and careers?
5. What aspects of the program collaboration do informal educator organizations and NPS staff plan to sustain after the completion of the grant? How do educators, role models and NPS women role models staff their practices or programs based on their experiences in the project?

National Park	Girl-Serving Organization	Location
Acadia National Park	Schoodic Institute at Acadia National Park	Maine
Cuyahoga Valley National Park	Project Rise	Ohio
Desert Research Learning Center - Biology and Ecology	The Ironwood Tree Experience	Arizona
Desert Research Learning Center - Southern Arizona Office	The University of Arizona STEM Learning Center	Arizona
Everglades National Park	Everglades Foundation	Florida
Glacier National Park	Glacier National Park Conservatory	Montana
Great Smokey Mountains National Park	Great Smokey Mountains Institute at Treemont	Tennessee
Homestead National Monument of America	YWCA of Lincoln	Nebraska
Indiana Dunes National Park	Woodland Girls	Indiana
Mississippi National River and Recreation Area	Science Museum of Minnesota	Minnesota
Nez Perce National Historical Park	Palouse-Clearwater Environmental Institute	Idaho
Niborara Scenic River	Boys & Girls Club of the Missouri River Area	Nebraska
NE Regional Archaeology Program	TBD	Massachusetts
Sequoia and Kings Canyon National Parks	Girl Scouts of Central California South	California
Valles Caldera National Parks	Girl Scouts of New Mexico Trails	New Mexico
Glen Canyon National Recreation Area	Girl Scouts of Utah	Utah

The project's goal is to create media-rich citizen science experiences for girls, particularly girls of color and/or from rural areas, which broaden their STEM participation, build positive STEM identity and increase understanding of scientific concepts, while leveraging the citizen science endeavors occurring at 16 diverse National Parks.

RESEARCH: Complete a research study to investigate the influence of the use of gender equitable and culturally responsive media on girls' STEM identity and understanding of scientific concepts. The research questions are:

1. To what extent does the use of culturally responsive and gender equitable multimedia (video and games) in citizen science programming affect girls' proximal and distal learning outcomes, and contribute to the development of positive STEM identity?
2. How will experiencing citizen science in the parks influence girls' connections to nature, especially for girls who might not otherwise have access to these wild places?



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