NATIONAL PARK SERVICE | U.S. DEPARTMENT OF THE INTERIOR

Geoscientists-in-the-Parks Program Report

Fiscal Year 2016



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Geoscientists-in-the-Parks Program Annual Accomplishments Report
Fiscal Year 2016

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October 2016

U.S. Department of the Interior
National Park Service
Natural Resource Stewardship and Science

ON THE COVER: Megan Thompson-Munson at Mount Rainier National Park, Washington (NPS photo).
ON THE BACK: LEGO® Park Ranger mini-figures at John Day Fossil Beds National Monument, Oregon (NPS photo by Abby Burlingame).

Executive Summary

In 2016, the Geoscientists-in-the-Parks (GIP) successfully completed its 20th year and placed **121** interns in 52 parks, four Washington offices, and three inventory and monitoring networks. These talented college students and recent graduates gained on-the-ground work experience, completed important natural resource science projects for the National Park Service, and gained an understanding of the importance of conservation and resource stewardship on public lands. Half of the projects focused on geologic resources, and the rest on other natural resource science disciplines.

Projects ranged from inventorying and monitoring to research to developing and presenting educational and interpretive programs. This year, 26% of the participants were minorities, twice what it has been in past several years, furthering the program and partner's commitment to increasing diversity in the STEM workforce. Nearly three-fourths of the interns were female undergraduate students or recent graduates. The GIP interns work contributed **75,312** hours of work doing critical science projects for the NPS at a cost of $1.3 MM. With the addition of Environmental Stewards as a second program partner, the GIP Program became an AmeriCorps program and now offers Segal education awards to its participants. The GIP Program is run in close partnership with The Geological Society of America and Environmental Stewards.



GIP intern Sarah Sparhawk (Biological Resources Division) with U.S. Secretary of the Interior Sally Jewell (NPS photo).

"I can't say enough about how beneficial and enjoyable my experience as a GIP has been. "

Statement of Purpose

The Geoscientists-in-the-Parks Internship Program was developed by the NPS Geologic Resources Division in 1996 to provide undergraduate, graduate students and recent graduates 18 – 35 years old with on-the-ground, natural resource science-based work experience with the National Park Service and to fulfill requests by park and central office staff for assistance with geologic and other natural resource science projects. GIP interns enable the National Park Service to complete important natural resource projects that would not be feasible without the help of GIP interns. This multidisciplinary program provides many opportunities for persons to work on projects focusing on inventorying and monitoring; research; curation of natural resources; developing educational brochures, visitor materials, and education curricula; and interpreting natural resource science information for park staff and the public. GIP projects address a broad array of natural resource science needs in air resources, biology, geology, natural sounds and night skies, water resources, and other integrated science topics.

Since the program's inception, 1,286 participants have worked with parks and central offices to further the NPS' resource management needs while gaining on-the-ground work experience.

In 2016, **121 GIP interns** helped parks and NPS central offices fulfill their unmet natural resource science needs, while gaining practical job experience ranging from three months to one-year. This year, GIPs served a total of **75,312 hours**. Since the program's creation twenty years ago, 1,286 participants have worked with parks and central offices. The number of program participants in fiscal year 2016 decreased due to increased program costs and parks delaying start dates in to FY17. The Geoscientists-in-the-Parks Program is run in partnership with Environmental Stewards (ES) and The Geological Society of America (GSA), in collaboration with the National Park Service's Natural Resource Stewardship and Science offices and divisions.



GIP intern Abby Buarapha at Denali National Park, Alaska. (NPS photo)

Program Objectives

- Provide on-the-job geoscience and other natural resource science training for undergraduate and graduate students and recent graduates 18-35 years old,
- Introduce program participants to science careers in the National Park Service,
- Build natural resource science technical capacity for parks and central offices, and
- Enhance the public's understanding of the natural resource sciences.

Types of Positions

Three types of Geoscientists-in-the-Parks positions were offered in FY16 - GIP interns, Guest Scientists, and Diversity Internships. GIP positions can last for 3 months to one year.

GIP Intern positions typically last for 3 months during the spring/summer or fall/winter seasons. These are entry level natural resource science internships that focus on career exploration and building fundamental natural resource science skills in its participants. GIP Intern positions are primarily for undergraduate students studying STEM fields. Each GIP Intern receives a weekly stipend of $300, park-provided housing or a housing allowance, and a $250 travel allowance.

Guest Scientist positions are more complex than entry level internships, may last longer than 3 months to complete, and are usually filled by students or recent graduates with a higher level of expertise or experience. These internships are intended to further develop the participant's technical and other professional skills. Each Guest Scientist receives a weekly stipend of $300 - $500, park-provided housing or a housing allowance, and a $250 travel allowance.

Diversity Internships target youth that are from groups under-represented in the natural resource science fields and can be either a GIP Intern or Guest Scientist position. Diversity interns typically receive a weekly stipend of $300 - $500, $500 travel allowance, and park-provided housing or a housing allowance.

Program Summary

The GIP Program is administered through NPS youth cooperative agreements and annual task agreements with The Geological Society of America (Cooperative Agreement P13AC00336) and Conservation Legacy (Cooperative Agreement P15AC00024). These national youth agreements authorized under the Public Lands Corps Act (16 U.S.C. §§ 1721-1726) focus primarily on 18-25 year olds. The NPS definition of youth has been increased to 35 years in recent years to accommodate non-traditional students and others who have delayed starting their professional careers. The Public Land Corps Act also allows participation of "resource assistants" that are older and/or more experienced than a typical college student and are occasionally hired in to the GIP Program. A key benefit of the NPS youth agreements is that program participants may be non-competitively hired by the federal government after completing 640 hours of satisfactory service on an appropriate conservation project (for more information, see NPS Human Resources Bulletin 10-09a, Jan 31, 2013).



GIP intern Genevieve Trafelet at George Washington Memorial Parkway, District of Columbia, Maryland, Virginia. (NPS photo)

With the addition of Environmental Stewards as the second program partner, GIP Interns became part of the AmeriCorps Program in FY16. AmeriCorps is a program that engages individuals in intensive community service work with the goal of "helping others and meeting critical needs in the community". GIPs are eligible for a $1,515 to $5,730 pre-tax AmeriCorps (Segal) Education Award upon successfully completing their internship. This award can be used for paying back student loans or for continuing the participant's higher education. In FY16 the GIP interns were eligible to receive $218,021 in AmeriCorps education awards at no cost to the NPS. The amount of each award is based on

the hours worked with most interns receiving an award of $1,515. In addition to the new AmeriCorps affiliation, medical insurance may be provided to GIP interns (not provided to their spouse or children) if the position lasts 46 weeks or more. Another change to the GIP Program is that interns are now paid every two weeks via direct deposit and receive a W-2 form for filing their income taxes. Overall, the program changes provided by Environmental Stewards have greatly improved the quality of the program for the GIP interns.

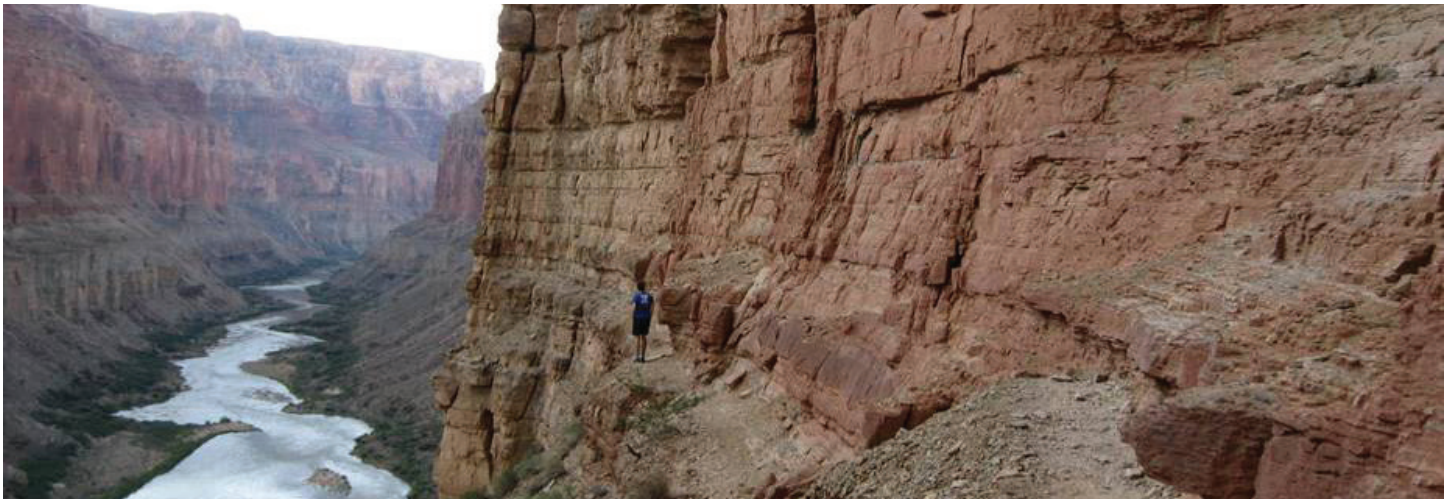
Another enhancement to the program this year was the implementation of site visits by program staff. These site visits have a significant value to the program since they provide an opportunity for the program staff to answer the host site's questions, receive feedback on the program, evaluate the quality of the GIP projects, and help create a more personal relationship between the GIP Program staff, the host site, and GIP interns.

Program Costs

The table shown below summarizes the costs for the 121 Geoscientist-in-the-Parks positions in FY16. These costs are the total costs for the positions that started or ended in FY16 regardless of whether the position extended in to FY17.

Table 1. GIP Program cost breakdown in FY16.

FUNDING SOURCE	AMOUNT
GRD Cost Share and Scholarships	$272,770
Inventory and Monitoring	$64,230
Natural Resource Stewardship and Science	$133,773
Parks	$589,870
Regions	$36,110
Youth Programs Division	$114,582
Subtotal Direct Costs - NPS	**$1,211,335**
National Park Foundation	$3,908
Park Associations	$63,875
The Geological Society of America Foundation	$24,200
Subtotal Direct Costs - Partners	**$91,983**
TOTAL – DIRECT COSTS	**1,303,318**
IN-KIND CONTRIBUTION – PROGRAM PARTNERS	**$1,178,765**



GIP intern Russell Bair at Grand Canyon National Park, Arizona. (NPS photo)

The NPS Geologic Resources Division cost-shared two GIP positions per park in FY16. This funding amounted to $3,550/position. In addition, GRD fully funded eleven diversity internships in parks. Park associations, GSA Foundation, inventory and monitoring networks, and regions also assisted parks with the costs to host GIP interns.

Intern and Supervisor Webinars

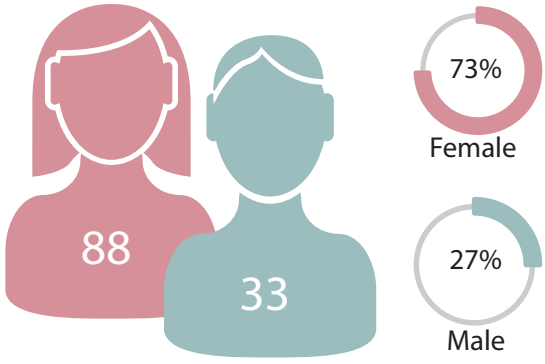
In February, the GIP manager and partners led a webinar to launch the spring and summer internships. The webinar provided information on this year's program changes and enhancements, AmeriCorps affiliation and requirements, roles and responsibilities, selection process, and costs. A second supervisor's webinar was conducted in June to kick-off the fall and winter internships. All current webinars are recorded and posted on the GIP intranet website.
Environmental Stewards conducts individual webinars for each GIP supervisor and intern to go over program procedures and requirements. The supervisor's orientation covers ES and NPS supervisor's roles and responsibilities, program reporting, AmeriCorps benefits and requirements, and paperwork (enrollment, and time-sheet approval). The GIP intern orientation introduces the interns to the GIP Program and ES, covers roles and responsibilities, AmeriCorps benefits and requirements, and paperwork requirements (background clearances, enrollment, and time-sheet submittal).



GIP intern Kelli Tolleson at Hagerman Fossil Beds National Monument, Idaho. (NPS photo)

Demographic Information

Gender and Ethnicity of GIP Interns



Seventy-three percent of GIP interns in FY16 were women. Participation by women in the GIP Program is very high and exceeds the nationwide percentage of women studying STEM fields and working in these career fields. Participation in the GIP Program by women is 16% higher than the percentage of women earning undergraduate degrees in the U.S. natural resource science fields (National Science Foundation, 2012 data).

The diversity of the GIP Program is increasing every year and has doubled in the past several years, with over one fourth of the 2016 GIP participants (26%) from minority groups under-represented in STEM career fields. Participation by minority students is likely higher than is reported because nearly 7% of program participants chose not to disclose their race / ethnicity on their applications.
The program's goal of increasing diversity in the NPS STEM workforce aligns closely with the goals in the U.S. Department of Interior's STEM Education and Employment Pathways Strategic Plan for Fiscal Years 2013-2018. The five-year goal in the strategic plan is "that our youth and the American public become scientifically literate stewards of our natural and cultural heritage and that today's youth, especially those underrepresented in STEM

fields of study, become inspired to choose career paths at DOI or related agencies and partners".

Overall, the diversity in the GIP Program does not adequately represent the diversity of the U.S. population but is four times that of the U.S. STEM workforce (6%) and more than eight times that of the NPS STEM workforce (3%).

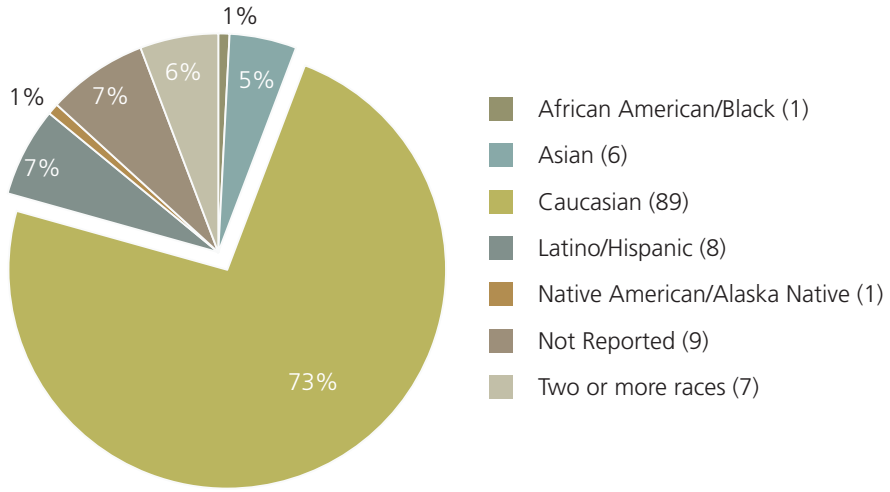


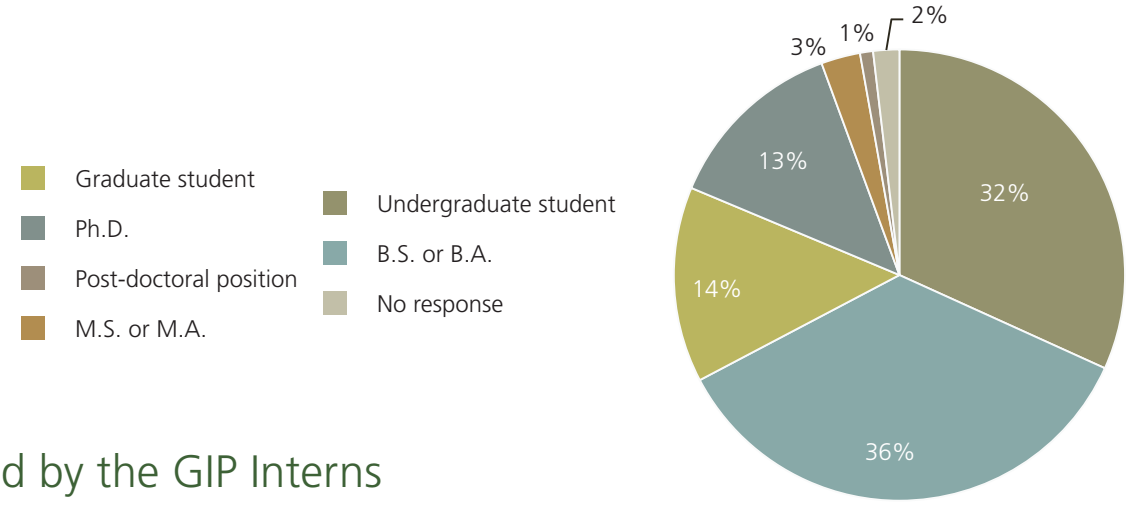
Table 2 lists the racial/ ethnic diversity of the overall NPS workforce and in STEM fields. The NPS statistics were compiled from 2014 NPS employment data compiled by James Wiggins, NPS Equal Employment Opportunity Specialist.

Table 2. Diversity of the overall NPS workforce and in STEM fields (2014 NPS data).

CATEGORY	# EMPLOYEES	%
NPS Employees	23,529	100%
NPS Racial/Ethnic Diversity (excluding Caucasian) of NPS Workforce	4,183	18%
NPS workforce - Caucasian	19,346	82%
NPS Workforce – STEM fields	5,054	21%
NPS Workforce – Racial /Ethnic Diversity in STEM Fields	698	14% of NPS STEM employees, 3% of total NPS workforce

Educational Status of GIP Interns

Sixty eight percent of program participants that reported their education level were undergraduate students or had recently earned their undergraduate degree the remainder of the GIPs were in graduate school, earned a graduate degree, or did not report their educational status.



Schools Attended by the GIP Interns

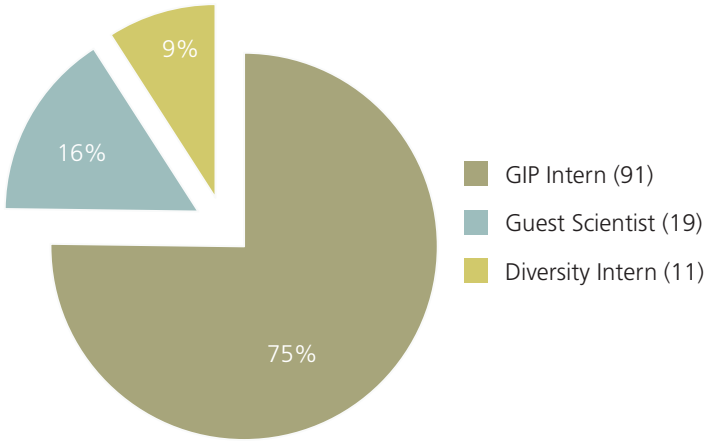
Table 3. Schools attended by GIP interns in FY16.

COLLEGES & UNIVERSITIES
Adams State University
Australian National University
Boise State University
Boston University
Bryn Mawr College
California Polytechnic State University San Luis Obispo
California State University - Fullerton
Central Michigan University
Clark University
College of Wooster*
Colorado State University*
Cornell College
Flagler College
Florida Atlantic University
Georgia State University
Gustavus Adolphus College
Humboldt State University
Iowa State University
Johns Hopkins University
Miami University
Michigan State University*
Michigan Technological University
Mississippi State University
Morehead State University
Mount San Antonio college
New Mexico State University
New Mexico Tech
Northern Arizona University
Northwest Missouri State University
Oberlin College*
Ohio State University
Ohio University
Oklahoma State University
Oregon State University
Purdue University - Main Campus
Regis University
Salem State University
San Diego State University
Slippery Rock University
South Dakota School of Mines & Technology
Stanford University
State University of New York - Cortland
Stevenson University
Stony Brook University
Susquehanna University
The College of William & Mary
The University of Oklahoma
The University of Rhode Island
University of Akron
University of Alaska Fairbanks
University of Calgary
University of California - Davis
University of California - Irvine
University of California - Santa Barbara
University of Central Arkansas
University of Cincinnati
University of Colorado - Boulder*
University of Houston
University of Idaho
University of Kansas
University of Massachusetts - Amherst
University of Michigan
University of Nebraska - Omaha
University of Nevada - Las Vegas
University of New Mexico
University of North Carolina - Asheville
University of North Carolina - Wilmington
University of North Florida
University of Northern Colorado
University of Oklahoma
University of Pennsylvania
University of Texas at Austin
University of Texas at El Paso
University of Vermont
University of Washington*
University of West Florida*
University of Wisconsin - La Crosse
University of Wisconsin - Madison*
University of Wisconsin - Parkside
University of Wyoming
Utah State University
Vanderbilt University
Western Kentucky University*
Winona State University
Yale University

*Two or more GIP interns attended or graduated from the college or university

Distribution of Positions by Type of Position

The majority of the GIP internships (75%) in FY16 were entry-level GIP intern positions, which is typical in most program years.



List of Intern Projects

Geoscientists-in-the-Parks (GIP) positions for spring/summer are shown in Table 4. Positions for fall/winter are shown in Table 5. Guest Scientist (GS) and Diversity Internships (DI) are marked in the position title column.

Table 4. GIP positions with spring or summer start dates in FY16.

NPS UNIT		POSITION TITLE		ID #
1.	Alaska Region (Alaska)	Geologist / Paleontologist (Amanda Lanik)		2016001
2.	Assateague Island National Seashore (Maryland, Virginia)	Groundwater Hydrologist (Ruth Coffey)	GS	2016002
3.	Assateague Island National Seashore (Maryland, Virginia), Northeast Coastal and Barrier Network (Massachusetts)	Biology Technician (Caitlyn Sutherlin)	DI	2016072
4.	Assateague Island National Seashore (Maryland, Virginia), Northeast Coastal and Barrier Network (Massachusetts)	Biology Technician (Kristen Thiebault)	DI	2016073
5.	Badlands National Park (South Dakota)	Field Paleontologist (Grady Hart)		2016003
6.	Badlands National Park (South Dakota)	Fossil Preparator (Justin Coats)		2016004
7.	Badlands National Park (South Dakota)	Resource Educator / Paleontologist (Tiffany Leone)		2016005
8.	Bandelier National Monument (New Mexico)	Bird Bander Intern (Emily Reich)		2016007
9.	Big Thicket National Preserve (Texas)	Environmental Protection Specialist (Abbie Corbett)		2016008
10.	Biological Resources Division (Colorado)	Web Design Assistant (Sarah Sparhawk)	DI	2016006
11.	Biological Resources Division (Colorado)	Student Engagement Coordinator (Allison Petersen)		2016012
12.	Biological Resources Division (Colorado)	Biology Technician (Evelin Preciado)		2016018
13.	Biological Resources Division (Colorado)	Institutional Animal Care and Use Committee Assistant (Allison Petersen)		2016633
14.	Biological Resources Division (Colorado)	Biology Technician (Alexandra Stoenburner)		2016637
15.	Bryce Canyon National Park (Utah)	Astronomy/Geology Park Guide (Randall Niffenegger)		2016009
16.	Buffalo National River (Arkansas)	Karst Educator (Lorena Martinez)		2016014
17.	Capitol Reef National Park (Utah)	Geology Interpreter (Robert Meyer)		2016015

NPS UNIT		POSITION TITLE		ID #
18.	Carl Sandburg Home National Historic Site (North Carolina)	Biological Science Technician (Hunter Therron)		2016016
19.	Catoctin Mountain Park (Maryland)	Hydrology Assistant (Stephanie Uriostegui)		2016017
20.	Chaco Culture National Historical Park (New Mexico)	Geoscience Intern/Interpretation (Lucy Kruesel)		2016023
21.	Chickasaw National Recreation Area (Oklahoma)	Paleontology Intern (Madison Armstrong)		2016019
22.	Chickasaw National Recreation Area (Oklahoma)	Paleontology Intern (Alysia Korn)		2016087
23.	Chiricahua National Monument (Arizona)	Resource Management Assistant (Krishna Sharma)		2016050
24.	Climate Change Response Program (District of Columbia)	Climate Change Adaptation Science Assistant (Amber Childress Runyon)		2016100
25.	Colonial National Historical Park (Virginia)	Hydrology Assistant (Hannah Gatz-Miller)		2016020
26.	Congaree National Park (South Carolina)	K12 Earth Science Educator (Montague Brantley)		2016602
27.	Congaree National Park (South Carolina)	K12 Earth Science Educator (Claudia Santiago)		2016603
28.	Coronado National Memorial (Arizona)	Speleology Assistant (Brittiny Moore)		2016021
29.	Cuyahoga Valley National Park (Ohio)	Park Interpreter (Andrea Rocchio)	GS	2016024
30.	Denali National Park (Alaska)	GIS Specialist (Abby Buarapha)		2016025
31.	Denali National Park (Alaska)	Science Communicator (Lindsey Taylor)		2016026
32.	Denali National Park (Alaska)	Paleontology / Geomorphology Specialist (Tyler Hunt)		2016027
33.	Devils Tower National Monument (Wyoming)	Astronomy Assistant (Karin Legnigk)		2016028
34.	Dinosaur National Monument (Colorado, Utah)	Paleontology Assistant (Sara Oser)		2016029
35.	Dinosaur National Monument (Colorado, Utah)	Paleontology Assistant (Nicole Ridgwell)	GS	2016030
36.	Fire Island National Seashore (New York), Gateway National Recreation Area (New Jersey, New York), Northeast Coastal and Barrier Network (Massachusetts)	Geologist / GIS Specialist (Michael Endicott)		2016070
37.	Fire Island National Seashore (New York), Gateway National Recreation Area (New Jersey, New York), Northeast Coastal and Barrier Network (Massachusetts)	Geologist / GIS Specialist (Elizabeth Haussner)		2016071
38.	Florissant Fossil Beds National Monument (Colorado)	Paleontology Technician (Carolyn Thornton)		2016032
39.	Florissant Fossil Beds National Monument (Colorado)	Paleontology Technician (Gwen Antell)		2016033
40.	Fort Caroline National Memorial (Florida)	Biological Science Aid (Elizabeth Adams)		2016034
41.	Fort Matanzas National Monument (Florida)	Natural Resource Interpreter/Field Assistant (Carmen Carrion)	DI	2016035
42.	Fossil Butte National Monument (Wyoming)	Public Education Geology/Paleontology Intern (Carson Hedberg)		2016036
43.	Geologic Resources Division (Colorado)	Geologist/Data and Information Management Specialist (John Wood)	GS	2016090
44.	George Washington Memorial Parkway (District of Columbia, Maryland, Virginia)	Interpreter / Education Technician (Genevieve Trafelet)		2016038
45.	Glacier National Park (Montana)	Park Interpreter (Anna Harris)		2016039

NPS UNIT		POSITION TITLE		ID #
46.	Glacier National Park (Montana)	Park Interpreter (Anna Gerrits)		2016089
47.	Glen Canyon National Recreation Area (Arizona, Utah)	Physcial Sciences Technician (Susan Wisehart)		2016040
48.	Glen Canyon National Recreation Area (Arizona, Utah)	Physcial Sciences Technician (Susan Hertfelder)		2016098
49.	Grand Canyon National Park (Arizona)	Physical Science Technician (Geomorphology) (Russell Bair)	GS	2016042
50.	Grand Canyon National Park (Arizona)	Interpretive Guide/Geologist - North Rim (Kira Minehart)		2016045
51.	Grand Canyon National Park (Arizona)	Interpretive Guide/Geologist - South Rim (Taylor Hartman)		2016046
52.	Grand Canyon National Park (Arizona)	Physical Science Technician (Geomorphology) (Allison Roush)	GS	2016093
53.	Grand Canyon National Park (Arizona)	Karst Technician (Natalie Jones)	GS	2016094
54.	Grand Canyon National Park (Arizona)	Paleontology Technician (Anne Miller)	GS	2016095
55.	Grand Canyon National Park (Arizona)	Karst Technician (Sarah Zappitello)	GS	2016096
56.	Great Basin National Park (Nevada)	Astronomy Education Assistant (Justin Griggs)		2016047
57.	Great Basin National Park (Nevada)	Astronomy Interpretation Intern (Mary Winsor)		2016608
58.	Great Sand Dunes National Park (Colorado)	Physical Science Technician (Evan King)		2016048
59.	Greater Yellowstone Inventory and Monitoring Network (Montana, Wyoming, Idaho)	Biological Technician/Hydrology Assistant (Liana Edwards)		2016066
61.	Gulf Islands National Seashore (Florida, Mississippi)	Biological Education Specialist (Emily Marshall)	DI	2016610
62.	Hagerman Fossil Beds National Monument (Idaho)	Paleontology Field Intern (Kelli Tolleson)		2016049
63.	Hot Springs National Park (Arkansas)	Invasive Species Management Intern (Emily Roberts)		2016051
64.	Hot Springs National Park (Arkansas)	Invasive Species Management Intern (William Harrison)	DI	2016052
65.	Hot Springs National Park (Arkansas)	Physical Science and Interpretive Intern (Kelly Sokolosky)	DI	2016053
66.	John Day Fossil Beds National Monument (Oregon)	Geologist / Paleontologist (Jeff Dobbins)	GS	2016054
67.	John Day Fossil Beds National Monument (Oregon)	Geologist / Paleontologist (Morgan Black)		2016055
68.	John Day Fossil Beds National Monument (Oregon)	Geology / Paleontology Interpretation Specialist (Caitlyn Gindling)		2016056
69.	John Day Fossil Beds National Monument (Oregon)	Geology / Paleontology Interpretation Specialist (Abby Burlingame)		2016091
70.	John Day Fossil Beds National Monument (Oregon)	Geologist / Paleontologist (Jonathan Hoffman)		2016092
71.	Joshua Tree National Park (California)	Geology Intern (Kylie Casear)		2016057
72.	Lassen Volcanic National Park (California)	Resource Management Assistant (Nicole Tamura)		2016058
73.	Lassen Volcanic National Park (California)	Resource Management Assistant (Christopher Gutierrez)		2016059
74.	Lassen Volcanic National Park (California)	Resource Management and Research Assistant (Stephanie Latour)		2016632
75.	Mammoth Cave National Park (Kentucky)	Karst Geoscience Research Assistant (Samel Nath)		2016060

NPS UNIT		POSITION TITLE		ID #
76.	Mesa Verde National Park (Colorado)	Restoration Hydrologist/Botanist (Henry Whitenack)		2016061
77.	Mount Rainier National Park (Washington)	Astro-Corps - Interpretive Intern (Christina Seeger)		2016062
78.	Mount Rainier National Park (Washington)	Biology Technician (Taylor Danielson)		2016063
79.	Mount Rainier National Park (Washington)	Cascades Butterfly Technician (Katherine Acosta)	DI	2016064
80.	Mount Rainier National Park (Washington)	Geomorphology Technician (James Mauch)		2016065
81.	Mount Rainier National Park (Washington)	Hydrologic Technician (Taylor Blumenstein)		2016067
82.	Mount Rainier National Park (Washington)	Interpretive Intern (Virginia Latane)		2016068
83.	Mount Rainier National Park (Washington)	Interpretive Intern (Megan Thompson-Munson)		2016069
84.	Mount Rainier National Park (Washington)	Hydrologic Technician (Tae Wan Kim)		2016076
85.	Mount Rainier National Park (Washington)	Geomorphology Technician (Robby Jost)		2016097
86.	Mount Rainier National Park (Washington)	Bio-Engineering Technician (Jennifer Chan)	GS	2016101
87.	Oregon Caves National Monument (Oregon)	Interpretive Park Guide (Deirdre LaBounty)		2016013
88.	Oregon Caves National Monument (Oregon)	Interpretive Park Guide (Marcella McKay)		2016031
89.	Oregon Caves National Monument (Oregon)	Environmental Educator (Catherine Hudson)		2016075
90.	Oregon Caves National Monument (Oregon)	Environmental Educator (Katherine Harding)		2016088
91.	Oregon Caves National Monument (Oregon)	Environmental Educator (Amy Stander)		2016617
92.	Oregon Caves National Monument (Oregon)	Environmental Educator (Elinor Utevsky)		2016636
93.	Pictured Rocks National Lakeshore (Michigan)	Geologic Mapper (El Hachemi Bouali)		2016099
94.	Pictured Rocks National Lakeshore (Michigan)	Geologic Mapper (Sarah Vandermeer)		2016102
95.	Rocky Mountain National Park (Colorado)	Geology Education Instructor (Paige Lambert)		2015618
96.	San Juan Island National Historical Park (Washington)	Biology Technician (Salvador Silahua)		2016077
97.	Shenandoah National Park (Virginia)	Geoscience Interpreter (Alyssa Coburn)		2016078
98.	Shenandoah National Park (Virginia)	Interpretation Intern (Miranda Hernandez)	DI	2016079
99.	Southwest Alaska Network (Alaska)	Remote Sensing Specialist (Michael Verrier)	GS	2016080
100.	Valley Forge National Historical Park (Pennsylvania)	Natural Resource Assistant (Hannah Rice)	DI	2016081
101.	Waco Mammoth National Monument (Texas)	Fossil Preparator Intern (Katrina Lewandowski)		2016082
102.	Water Resources Division (Colorado)	Hydrologic Technician (Sunny Grunloh)		2016083
103.	White Sands National Monument (New Mexico)	Physical Science Technician (Jackson Jakeway)		2016084

There are a total of 103 spring/ summer GIP positions.

Table 5. GIP positions with fall or winter start dates in FY16

NPS UNIT		POSITION TITLE		ID #
104.	Death Valley National Park (California, Nevada)	Biological Science Assistant (Rachel Terry)		2015623

NPS UNIT		POSITION TITLE		ID #
105.	Death Valley National Park (California, Nevada)	Paleontology Intern (Matt Ferlicchi)	GS	2016604
106.	Geologic Resources Division (Colorado)	Cave and Karst Specialist (Melisa Bishop)	GS	2016022
107.	Geologic Resources Division (Colorado)	Natural Hazard Risk Reduction Advisor (Daniel Walsh)		2016631
108.	Grand Canyon National Park (Arizona)	Wildlife Program Field and Data Assistant (Skye Salganek)		2016011
109.	Grand Canyon National Park (Arizona)	Paleontology Technician (Robyn Henderek)		2016041
110.	Grand Canyon National Park (Arizona)	Wildlife Program Field and Data Assistant (Matthew Safford)		2016043
111.	Grand Canyon National Park (Arizona)	Karst Technician (Hampton Childres)		2016044
112.	Grand Canyon National Park (Arizona)	Wildlife Program Field and Data Assistant (Miles Brown)		2016607
113.	Guadalupe Mountains National Park (Texas)	Geologic Mapping Technician (Steven Skotnicki)		2015622
114.	Hagerman Fossil Beds National Monument (Idaho)	Science Education/Interpretation Assistant (Gina Roberti)	GS	2015612
115.	Hagerman Fossil Beds National Monument (Idaho)	Science Education/Interpretation Assistant (Amanda Manzanares)		2015630
116.	Mammoth Cave National Park (Kentucky)	Karst Geoscience Research Assistant (Chelsea Ballard)		2016643
117.	San Juan Island National Historical Park (Washington)	Biology Technician (Elise Landreaux)	GS	2016620
118.	White Sands National Monument (New Mexico)	Archeologist (Vanessa Carrillo)		2016640
119.	Yellowstone National Park (Idaho, Montana, Wyoming)	Geologic Resource Assistant (Jacob Thacker)		2016085
120.	Yellowstone National Park (Idaho, Montana, Wyoming)	Geologic Resource Assistant (Megan Norr)	GS	2016086
121.	Yosemite National Park (California)	Geology Assistant (Elizabeth Haddon)		2015626

There are a total of 18 fall/winter GIP positions.

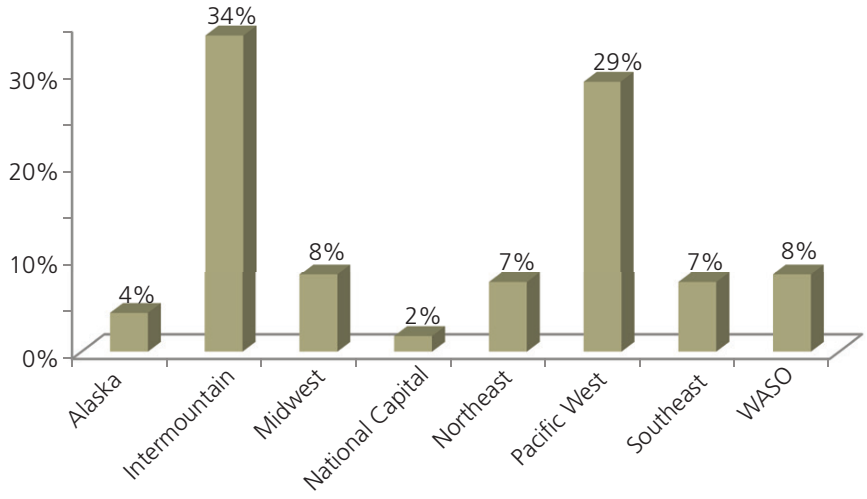
Regional Distribution of Projects

GIP interns worked throughout the Service in 52 parks, four Washington offices, and three inventory and monitoring networks. Approximately two-thirds of the GIP positions were in the Intermountain and Pacific West Regions (34% and 29% respectively). The number of GIP positions by park and region is shown in Table 6 and the percentage distribution for each region is shown in the graphic on the following page.

Table 6. Distribution of GIP positions by NPS region

REGION	# POSITIONS	PARK
Alaska	5	AKRO, DENA (3), SWAN
Intermountain	41	BAND, BITH, BRCA, CARE, CHCU, CHIC (2), CHIR, CORO, DETO, DINO (2), FLFO (2), FOBU, GLAC (2), GLCA (2), GRCA (12), GRSA, GRYN, GUMO, MEVE, ROMO, WACO, WHSA (2), YELL (2)
Midwest	10	BADL (3), BUFF, CUVA, HOSP (3), PIRO (2)
National Capital	2	CATO, GWMP
Northeast	9	ASIS (3), COLO, FIIS (2), GATE (2), NCBN (4), SHEN (2), VAFO
Pacific West	35	DEVA (2), GRBA (2), HAFO (3), JODA (5), JOTR, LAVO (3), MORA (10), ORCA (6), SAJH (2), YOSE
Southeast	9	CARL, CONG (2), FOCA, FOMA, GUIS (2), MACA (2)
WASO	10	BRD (5), CCRP, GRD (3), WRD

Percentage Distribution of GIP positions by NPS region.



Distribution of Positions by Discipline

In fiscal year 2016, GIP participants represented a broad range of natural resource science disciplines - from biology to geology to hydrology. Half of the projects focused on geologic resources, followed by biology (20%) and hydrology (15%).The graphic shown below displays the number and percentage distribution for GIPs for each natural resource field. Table 7 lists the project sub-disciplines, and the chart on the next page illustrates the disciplines grouped by type of project.



GIP intern Grady Hart at Badlands National Park, South Dakota. (NPS photo)

Distribution of GIP positions for each natural resource science field.

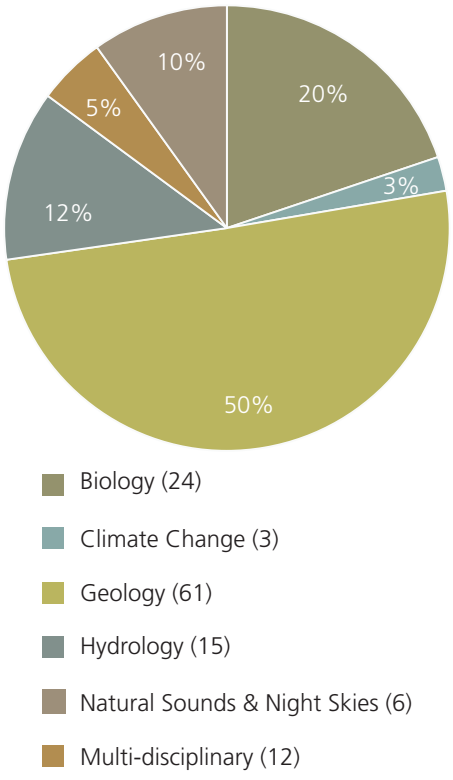
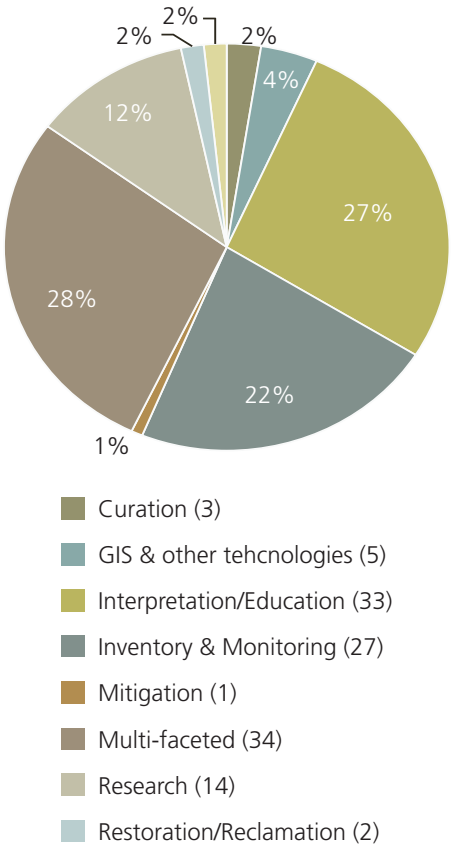


Table 7. GIP positions by natural resource sub-discipline.

PROJECT DISCIPLINES	# OF PROJECTS	%
Biology - Exotic Plant Management	3	2%
Biology - General	21	17%
Cave / Karst	7	6%
Climate Change	3	2%
Energy and Minerals	1	1%
Geologic Hazards	2	2%
Geology - General	29	24%
Geomorphology	2	2%
Hydrology - General	12	10%
Hydrology - Groundwater	3	2%
Multi-disciplinary	12	10%
Night Skies	6	5%
Paleontology	20	17%

In FY16, the majority of the projects were multi-faceted (28%) interpretation and education (27%), and inventory and monitoring (22%). The internship categories for all of the projects are shown below.

GIP positions by type of project.





GIP intern Nicole Ridgwell at Dinosaur National Monument, Colorado, Utah. (NPS photo)

Site Visits

A total of 8 site visits were conducted this year by NPS and Environmental Stewards staff. During the site visits, the staff met with the GIP interns and supervisors to answer questions, obtain feedback on the program, learn about the GIP projects, perform field work, and help to create a more personal relationship between the GIP Program staff, host site, and interns.



GIP Program Manager Lisa Norby (left) with interns Megan Norr and Jacob Thacker at Yellowstone National Park, Idaho, Montana, Wyoming. (NPS photo)

Table 8. GIP site visits conducted in FY16.

DATE	CONDUCTED	NPS NAME	SUPERVISOR NAME(S)	INTERN NAME (S)
March 15, 2016	Krista Rogers Mandy Eskelson	Florissant Fossil Beds NM	Herb Meyer	(pre-internship meeting with park supervisor)
March 16, 2016	Krista Rogers Mandy Eskelson	Geologic Resources Division	Eric Bilderback Dale Pate	John "Jack" Wood
June 16, 2016	Krista Rogers Mandy Eskelson	Great Sand Dunes NP Park & Preserve		Evan King
June 17, 2016	Krista Rogers Mandy Eskelson	Bandelier National Monument	Sarah Milligan	Emily Reich
June 20, 2016	Krista Rogers Mandy Eskelson	Grand Canyon National Park (South Rim)	Pete Peterson	Taylor Hartman Robyn Henderek Allison Roush Anne Miller Saj Zappitello
July 11, 2016	Lisa Norby	Yellowstone National Park and Greater Yellowstone Network		Liana Edwards Jacob Thacker Megan Norr
July 19, 2016	Lisa Norby Lima Soto Krista Rogers Mandy Eskelson	Mesa Verde National Park	George San Miguel Paul Morey Tova Spector	Henry Whitnack
July 29, 2016	Lima Soto	Mount Rainier National Park	Curt Jacquot Ben Wright Paul Kennard Rebecca Lofgren Scott Beason	Christina Seeger James Mauch Jennifer Chan Megan Thompson-Munson Robby Jost Tae Wan Kim Taylor Blumenstein

GIP 20th Year Anniversary

This year marks the twenty-year anniversary of the Geoscientists-in-the-Parks Internship Program! The GIP Program was created two decades ago to assist parks in filling gaps in geoscience expertise and to provide on-the-ground learning opportunities for college students and recent graduates. Over time, the program has been a tremendous success assisting parks with their varied natural resource science needs and has supported close to 1,300 interns across the Service. As the NPS celebrates its 100th anniversary, the GIP Program will continue to develop the next generation of conservation stewards and park advocates.



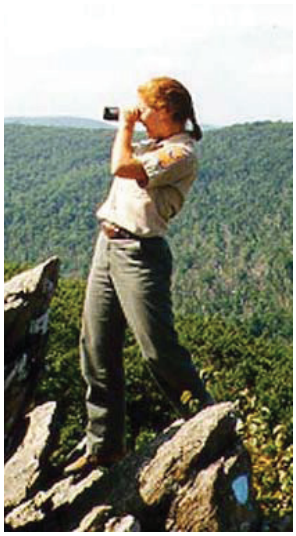
1,286
GIP interns

665,894
Hours of service

177
NPS parks, regions, central offices



1997 - PRWI



1998 - SHEN



1999 - ZION



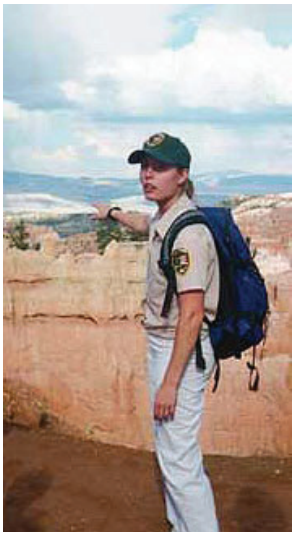
2000 - CAVO



2001 - FOBU



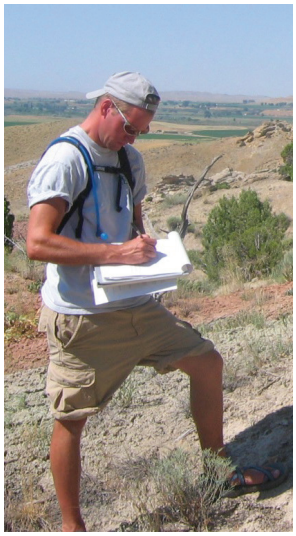
2002 - DENA



2003 - BRCA



2004 - WACA



2005 - DINO



2006 - CRMO



2007 - PEFO



2008 - CRMO



2009 - LACL



2010 - BADL



2011 - MORA



2012 - ASIS



2013 - FLFO



2014 - BRCA



2015 - ELMA



2016 - SHEN

Participant and Project Highlights

A few of the outstanding projects completed this year's GIP interns are described below. This is a small sampling of the great work that GIPs are doing in national parks.

Lindsey Taylor, Science Communicator - Denali National Park and Preserve, Alaska

Lindsey Taylor helped bridge the gap between park research studies and public education in Denali National Park by creating and updating digital education exhibits that bring current research findings to public visitors. Lindsey collaborated with education staff from the Murie Science and Learning Center (MSLC), park scientists, and a park media team to create NPS web pages of Denali's incredible biological, cultural, and physical research findings. She also updated the MSLC climate change exhibit and a new digital exhibit by contributing written content, collecting/taking photographs, and designing the exhibit. The combination of the Denali science research web pages and updated exhibits developed by Lindsey will continue to increase the public's knowledge about these research projects and grow support for other necessary studies.



GIP intern Lindsey Taylor at Denali National Park. (NPS photo)

Robyn Henderek, Paleontology Technician - Grand Canyon National Park, Arizona

During her GIP internship at Grand Canyon National Park, Robyn significantly contributed to the park's cave paleontological inventory by collecting spatial and abundance data of artiodactyl (hooved mammals) and other fossils in remote cave systems. Robyn also analyzed the association between archeological Split Twig Figurines from the middle to late Archaic culture, and fossils of the extinct Harrington's mountain goat, which allowed her to correlate the exact ages of the figurines to a climate model from the Late Holocene. She also created 3D models of these paleontological and archaeological resources.



GIP Robyn Henderek examining the jawbone of an extinct Pleistocene mountain goat, an extinct species from Grand Canyon National Park, Arizona. (NPS photo)

Emily Roberts and G. William Harrison, Invasive Species Management Interns, Hot Springs National Park, Arkansas

During their summer GIP internships, Emily Roberts and William Harrison worked on invasive species monitoring and control at Hot Springs National Park. The park decided that they would not use herbicides for invasive species eradication in order to protect the quality of the thermal and other park resources. Instead, William and Emily developed a less destructive method and piloted a program that used goats to eradicate invasive plant species They mapped and monitored the extent of known infestations and measured coverage in areas treated by different means (prescribed fire, mechanical removal, up-rooting, goats, etc.) to determine the most cost-effective means of eradication. In addition, the interns prepared and presented programs to the public about their pilot goat project, designed and produced educational materials for park visitors, and participated in the active management/removal of invasive plant species. Their project attracted the attention of local media and may influence park policy and invasive species management in the future. In addition to their main project, both interns contributed to other ongoing park projects such as assisting with hot springs water quality monitoring and acoustic bat monitoring.





GIP Emily Roberts mapping invasive species at Hot Springs National Park, Arkansas (left photograph). William Harrison (left) and Emily Roberts (right) with the goats used for research and invasive species eradication (right photograph). (NPS photo)

Jennifer Chan, Bio-Engineering Technician, and Robby Jost, Geomorphology Technician – Mount Rainier National Park, Washington

Robby and Jeni, under the supervision of Geomorphologist Paul Kennard, evaluated the risk of flooding at different sites at Mount Rainier National Park in an effort to mitigate damage to park roads. Early road construction techniques utilized only rock and loose sediment as fill material for park roads, which is not appropriate for the dynamic hydrologic conditions at the park. Due to climate change, catastrophic debris flows and glacial outburst floods are increasingly frequent and are capable of transporting large rocks and woody debris that can damage park roads. During flood events where the water rises and fill material is entrained by the river, it can erode the roadbed. One of the projects Robby and Jeni worked on was to remediate the Westside Road—a historic corridor of the park which has been continually damaged and closed to the public by flood and debris flow events since the 1960's. As part of their work, they measured the width of the remaining road surface and the height of the road surface above the riverbed to estimate the volume of fill material remaining and how much material would be required to restore the road so that it is passable by vehicles. Robby proposed the construction of a Large Woody Structure (LWS) to repair, stabilize, and reduce further damage to the road. After the installation of the LWS, Jeni proposed planting willows and other pioneer plant species along the outer edge of the road in order to create a biological buffer and facilitate forest succession that will dramatically improve the stability of the riverbank and reduce further damage to the roadway.





GIP Jennifer Chan (left), park volunteer (center), and GIP Robby Jost (right) at the Westside Road, Mount Rainier National Park (left photograph). Robby Jost standing next to the trees used to create the large woody structure for the road remediation and GIP project (right photograph). (NPS photo)

Megan Norr and Jacob Thacker, Geologic Resource Assistants - Yellowstone National Park, Montana and Wyoming

Megan Norr and Jacob Thacker, GIPs at Yellowstone National Park spent six months working on a variety of high priority geology projects. During the early part of their internships Megan catalogued over one hundred Cambrian fossils and cuttings, and Jacob curated thin sections, grain mounts, and rock specimens from the park's EarthScope Plate Boundary Observatory borehole drilling project. These materials are archived in the Yellowstone Heritage and Research Center, an affiliate of the National Archives. In addition to these projects, Megan monitored the park's thermal features, audited research permits, conducted thermal assessments, and inventoried archival material from the Old Faithful geology office. Jacob's projects included stream gauge measurements, conducting resource impact assessments, editing geologic wayside exhibits and public outreach materials, and undertaking thermal assessments for constructing needed infrastructure such as parking lots in thermal areas in the park.





GIPs Megan Norr and Jacob Thacker with supervisor Erik Oberg after completing the archival project in the geology lab, Yellowstone Heritage and Research Center (left photograph). Dave Conway, park volunteer, and GIP interns Megan and Jacob investigating and determining needed mitigation of a rock wall that had been undercut by thermal waters at the Artemesia Thermal Feature, Yellowstone National Park (right photograph). (NPS photo)

Taylor Blumenstein and Tae Wan Kim, Hydrologic Technicians – Mount Rainier National Park, Washington

GIP interns Taylor and Tae worked under the supervision of Park Geologist Scott Beason to examine the hydrologic hazards at Mount Rainier National Park. They completed a topographic survey of Tahoma Creek at the Tahoma Creek Bridge to help determine the volume of sediment to remove from the river. Because of excess sediment accumulating over time in the river, this area is experiencing high rates of aggradation — that is, riverbeds are rising by as much as 6 feet a year and the data collected by the GIPs will aid in designing dredging operations that will mitigate future bridge and road washouts. Taylor and Tae did reconnaissance work for soundscape and video feeds to detect outburst floods and debris flows at the terminus of the South Tahoma Glacier. They also assisted in installing two real-time solar-powered stream gages on the Nisqually and White Rivers to collect real-time hydrologic data to monitor the river for outburst floods.





GIP Taylor Blumenstein downloading stream gage data for Klickitat Creek at Mount Rainier National Park (left photograph). Taylor and Tae Wan Kim working on the satellite transmitter for the gaging station at Longmire in Mount Rainier National Park (right photograph). (NPS photo)

Program Evaluations

GIP Program participants were asked to complete pre and post program evaluations in order to help the NPS understand the participant's backgrounds, experiences, and to improve the program. Quotes by GIP interns from the evaluations are shown below.



GIP intern Salvador Silahua at San Juan Island National Historical Park. Washington. (NPS photo)

Prior to their internships, GIPs were most familiar with careers in academia or research with 50% of the respondents having a very good or excellent knowledge of academic and research career fields. Forty percent of the respondents had a very good to excellent knowledge of career fields with federal, state, and local government agencies. Nearly all of the GIPs had previously visited a national park (96%). Almost half (47%) of the GIPS learned about the GIP Program from information provided by The Geological Society of America, and the remainder of the GIP interns heard about the program from their professors (23%), NPS website (10%) and other sources.

Most of the GIPs stated that they had a good (8%), very good (18%), excellent (84%) experience as a GIP intern and stated that are interested in pursuing a career with a state or federal land management agency. Ninety-four percent stated that would recommend the program to others. All of the interns believed that their work greatly contributed to the mission of the National Park Service. Overall, the majority of the GIPs stated that they had discussions about careers with their supervisor (88%) and that other NPS staff were available to provide professional development input and guidance (96%). At the completion of their internships, GIPs knowledge of federal careers increased from 40% to 68%, with all respondents having some knowledge of federal career paths.

Quotes from Participants

Did you enjoy working with the NPS unit that hosted your project?

√ "Yes, immensely. Mount Rainier NP is very supportive of the GIP program, and provides us will all of the opportunities and resources we need to have a great experience here. I came away from this summer with an expanded skillset in fluvial geomorphology, an understanding of what it's like to work for the Park Service, and a strong desire to return and explore more of this amazing National Park."

√ "This was the best job I've ever had. I was able to expand on my current strengths and explore new topics."

√ "Denali NP is absolutely fantastic. Work is stressful, fun, and rewarding all at the same time. The project has connected me with various people, locations, and the park itself. Time away from work means exploring the lands of the park and Alaska even more. And the people here really appreciate all the park and the state have to offer. It is surreal."

Please describe your favorite aspect of your experience as a GIP participant.

√ "My favorite aspect of my GIP internship was how much I was able to learn in such a short period of time. Not only did I learn more about the region's geology, ecology, and history, but I also learned new skills (like boating) that I would not have learned elsewhere."

√ "My favorite aspect was working with a great group of people in the conservation and study of such a beautiful park. I also had the opportunity to learn so many new caving techniques which was a highlight of my experience."

√ "My favorite part of my experience, aside from first-hand experience with such a unique hydrogeologic system, was learning how to interact with the public. My weekly interpretive talks allowed me to develop ways to explain complex scientific processes in an understandable way."

Comments on your overall experience as a GIP participant:

√"As a GIP intern, I was treated as a professional geologist/paleontologist, and was able to develop many skills that will continue to help me after my service. Many of the skills I learned are directly applicable to my graduate thesis, and will help me as I work to finish my graduate education."

√"This experience has been one of the best experiences of my life. I feel like I have learned more this summer than I learn in a semester of school!"

√"I entirely loved it. It really helped direct me in my education and career path, and I look forward to the possibility of working with them again."

√"Absolutely amazing for the various work projects and experiences. A dream job come true...just wish it did not have to end."

If you could make one recommendation to the Director of the National Park Service on how to better engage young people/adults and diverse communities what would you say?

√"More programs geared at getting people out of their cars and on the trails. So many people only see the parks from their cars. There is no way they can ever feel a connection to the park or the land from the sterile bubble of their cars. Getting people on ranger led hikes or developing more all access trails would be great for the parks."

√"I think that one of the best ways to engage young people today is to appeal to their interests in social media, for example: Instagram, Facebook, and Twitter accounts that show young people the beauty of the outdoors, and promote park programs. Hiring young people to brainstorm and produce programs designed to engage young people is a wise decision."

√"Internship programs such as GIP and Mosaics may be the best way for young adults and diverse communities, in that these programs have far reaching abilities in diverse populations. Therefore, my suggestion would be to put more effort into appropriately marketing these internship programs at the college/university level."

√"My one recommendation to the Director of the NPS would be to enable the local communities - especially the Native Americans surrounding most of these park sites. I've noticed that visitors are always curious about the people who used these lands prior."

√Create a more just hiring process that does not discourage young people from seeking out federal employment. Seeing more diverse employee will encourage more diverse visitation. The National Park Service should not and can no longer be about aging, upper-middle class, white Americans."

Program Publicity

The following are examples of promotional materials, articles, and videos prepared about this year's GIP participants.



GIP interns at the Biological Resources Division office, Colorado (NPS photo).

Biological Resources Division

In the Fall of 2015, GIP Allison Mitchell worked as a Wildlife Conservation Biology Assistant at the Biological Resources Division in Fort Collins, Colorado. She shared her experience as a guest blogger with Speaking Geoscience a blog of The Geological Society of America. During her work at BRD, she wrote stories for the Bison Bellows a 52-week story series that highlights all things bison to celebrate the National Park Service's Centennial. She also assisted in developing a strategic communication plan based on social media analytics provided by the 19 federal units that have bison herds. To read more about Allison's experience, visit https://speakingofgeoscience.org/2016/05/04/combining-bison-conservation-and-geoscience-at-the-national-park-service/

Mount Rainier National Park

On June 2, 2016, a new U.S. Forever stamp was issued featuring a photograph taken by GIP intern Matt Dieterich that worked as an Astronomy Ranger at Mount Rainier National Park, Washington. The photo features a stunning star trail photograph comprised from 200 images. During his time at the park, Matt's role was to educate the public about the dramatic views of the stars and the effect of light pollution near highly populated areas. The stamp is one of 16 images selected to celebrate the National Park Service's 100th anniversary. For more information about Matt's photograph, see http://about.usps.com/news/national-releases/2016/pr16_029.htm



GIP intern Matt Dieterich at Mount Rainier National Park, Washington. (NPS photo)

Chickasaw National Recreation Area

GIPs interns Alysia Korn and Madison Armstrong assisted and participated in the first official National Park Service PaleoBlitz at Chickasaw National Recreation Area in Oklahoma. The PaleoBlitz is a Day of Discovery that focuses on ancient fossil life. During the PaleoBlitz the public had the opportunity to do field work with expert paleontologists and researchers and examined and inventoried the fossils at the park. For more information about the PaleoBlitz, see https://www.nps.gov/media/video/view.htm?id=E771DC3B-1DD8-B71B-0BFE9A5BABE7D492



GIP interns Alysia Korn and Madison Armstrong at Chickasaw National Recreation Area, Oklahoma. (NPS photo)

Waco Mammoth National Monument

This Summer GIP intern Katrina Lewandowski was featured for her paleontology work at Waco Mammoth National Monument in Texas. This paleontological site represents the nation's only recorded discovery of a nursery herd of Columbian mammoths. For more information on Katrina's work see, https://vimeo.com/174825315



GIP intern Katrina Lewandowski at Waco Mammoth National Monument, Texas. (NPS photo)

Hot Springs National Park

GIP interns working at Hot Springs National Park, Emily Roberts and William Harrison, were featured by the local newspaper—Hot Springs Sentinel – Record—and local TV news—THV11— because of their work on the management of invasive plants using a herd of goats. At Hot Springs NP, exotic and invasive plant species are a management challenge and the park has decided to not use herbicides and is testing the use of goats to clear or eat invasive plants in an effort to restore the area's original habitat. For more information on Emily's and William's work see http://www.thv11.com/news/local/hot-springs/goats-are-getting-work-done-for-national-park/258411546



GIP intern William Harrison at Hot Springs National Park, Arkansas. (NPS photo)

Long Term Goals

- Obtaining and implementing the Direct Hire Authority (DHA) for the rigorous internships in the program. The Direct Hire authority was approved for the program late in FY16,
- Streamlining NPS and partner administrative processes to improve program management and day-to-day operations,
- Preparing/improving supervisor and intern overview documents and handbooks and distributing them to GIP interns and host sites,
- Developing and implementing mentoring and cultural competency training for NPS supervisors, and career development webinars for the GIPs,
- Continuing to focus on increasing racial and ethnic diversity in the program through improved outreach and recruiting and advertising to minority serving institutions and organizations, and
- Securing sustainable program funding to ensure long-term viability of the GIP Program.



GIP interns at Glen Canyon National Recreation Area, Arizona, Utah. (NPS photo)

Conclusion

The National Park Service successfully completed the 20th year of the Geoscientists-in-the-Parks Program and is continually striving to enhance the program and make it a more highly sought after internship program for college students, recent graduates, and NPS units. Since the program's inception 1,286 interns have complete 665,894 hours of service in 177 parks and central offices.

With the completion of 121 important science projects in 2016, totaling 75,312 service hours in parks and central offices, the NPS has been able to move science-based decision-making and resource management forward for the Service. GIP interns gained valuable on-the-ground training, personable and professional development skills, and an increased awareness of conservation and environmental stewardship on public lands. The interns qualified for the Public Land Corps non-competitive hiring authority, and with the addition of the Direct Hire Authority in 2017, the program will continue to train and hopefully hire the most talented young people in to the NPS workforce.

Funding from the NPS Geologic Resources Division, parks, networks, central offices, park associations, and the substantial cost share by the program partners has leveraged NPS funding to complete highly critical science projects for the NPS and training for America's youth. These internship opportunities will help grow a stronger and more diverse STEM workforce in the NPS and elsewhere.

The program partners offered innovative ideas that have improved the GIP Program in 2016, have recruited highly talented participants, and effectively managed the day-to-day program operations. The NPS is looking forward to another successful year in 2017 with The Geological Society of America, Environmental Stewards, NPS staff, and our future scientists!



Krista Rogers, Joey Ruehrwein, Michael Rendon, and Mandy Eskelson, Environmental Stewards staff at Mesa Verde National Park, Colorado. (NPS photo)

Acknowledgments

The NPS would like to gratefully acknowledge the outstanding efforts and contributions of its 121 program participants this year. Every person who worked as a GIP intern contributed valuable work, perspectives, and completed essential natural resource science work that furthers the goals and objectives of the National Park Service.

NPS supervisors and mentors also provided essential support for the program by identifying projects, overseeing the participant's work, ensuring project success, and providing input and guidance to help the intern's to grow personally, technically, and professionally, and to help focus the GIPs future career goals.

Park associations, park's, networks, and regions provided funding for GIP positions throughout the Service. This funding greatly increased the park's ability to bring interns to parks and central offices to gain valuable work experience and complete critical natural resource science projects.

The National Park Service Youth Programs Division provided valuable input and guidance to help improve and grow the GIP Program. Special thanks go out George McDonald and Alex Tremble for their support and feedback.

The GIP Program will like to thank Dave Steensen, Chief of the NPS Geologic Resources Division, for his support of the program. Without GRD's financial and administrative support, the GIP Program would not be as successful as it is.

The NPS thanks, David Joseph, NPS retiree, for his support to the GIP Program and for updating and maintaining the NPS' program database. His work made it easy to respond to NPS data calls, track program costs and expenditures and other information, and his assistance is greatly appreciated.

The Geological Society of America provided excellent support during this transition year. GSA provided advertising and recruiting assistance to help the NPS find the best and brightest interns, and managed the program's on-line application system. The NPS sincerely appreciates the great work of Matt Dawson and Allison Kerns.

Last but not least, we will like to thank Environmental Stewards for partnering with the GIP Program this year and for providing outstanding support from hiring the interns, to working closely with the supervisors and GIPs to ensure success of the program, and administering the AmeriCorps component of the program. We appreciate the excellent work of Joey Ruehrwein, Michael Rendon, Krista Rogers, Mandy Eskelson, and many others at Environmental Stewards.

Coordinating Organizations

National Park Service, Geologic Resources Division

The Geologic Resources Division assists the National Park Service and partners in the Service-wide coordination, support, and guidance necessary to understand and implement science-informed stewardship of geologic and associated park resources; reduce impacts from energy, mineral, and other development; and protect visitor values. The Division created and manages the GIP Program and cost shares positions with NPS units. GRD manages two Service-wide internship programs – the Geoscientists-in-the-Parks and Mosaics in Science Programs.

For more information about GIP: http://nature.nps.gov/geology/gip/index.cfm
NPS intranet website: http://inside.nps.gov/waso/waso.cfm?prg=1117&lv=3
Facebook: https://www.facebook.com/Geoscientists.in.the.Parks/

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The Geological Society of America

The Geological Society of America (GSA) is a global professional society with a growing membership of more than 26,000 individuals in 115 countries. GSA provides access to elements that are essential to the professional growth of earth scientists at all levels of expertise and from all sectors: academic, government, business, and industry. The Society unites thousands of earth scientists from every corner of the globe in a common purpose to study the mysteries of our planet (and beyond) and share scientific findings. GSA is responsible for advertising, recruiting, and managing the application system for the GIP Program. GSA Foundation annually supports two or more positions in Alaska.

For more information about GSA: www.geosociety.org

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Allison Kerns, Education and Outreach Assistant | akerns@geosociety.org | (303) 357-1097

Environmental Stewards

Environmental Stewards is a program of Conservation Legacy that offers land and water management agencies and other non-profit organizations opportunities to accomplish specific projects by providing individual placements (internships) on public lands. ES is responsible for administering the GIP Program once the interns have been hired (enrollment, payment of stipends, travel, and housing allowance, issue resolution, and preparation of final program report).

For more information about ES: www.environmentalstewards.org

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The following graphic illustrates the respective roles and responsibilities of the GIP program:





http://go.nps.gov/gip

Facebook: https://www.facebook.com/Geoscientists.in.the.Parks/