



# FY22 Program Report



AmeriCorps



Scientists in Parks Annual Program Report  
Fiscal Year 2022

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

ABOVE: SIP Fellow Elizabeth Rush surveying for insects in Dusy Basin, Kings Canyon National Park, CA. (NPS photo).  
COVER: SIP Intern Lauren Hurst in Yosemite Valley using a Leica BLK360 machine to take a LiDAR scan at a Fire Effects plot in Yosemite National Park, CA. (NPS photo)  
BACK COVER: SIP Intern Riannon Colton participating in a non-emergency Search and Rescue (SAR) team mission in Carlsbad Caverns National Park, NM. (NPS Photo)

# Table of Contents

|                                                                                               |    |
|-----------------------------------------------------------------------------------------------|----|
| Executive Summary .....                                                                       | 4  |
| Statement of Purpose .....                                                                    | 5  |
| Program Objectives .....                                                                      | 5  |
| Types of Positions .....                                                                      | 5  |
| Program Summary .....                                                                         | 6  |
| Program Costs .....                                                                           | 6  |
| COVID-19 Statement .....                                                                      | 7  |
| Support of DOI Strategic Plan .....                                                           | 7  |
| Coordinating Organizations .....                                                              | 8  |
| Demographic Information .....                                                                 | 10 |
| Gender and Ethnicity of SIP Participants .....                                                | 10 |
| Education Status of SIP Participants .....                                                    | 11 |
| Veterans .....                                                                                | 11 |
| Positions by Region .....                                                                     | 11 |
| List of SIP Participant Positions .....                                                       | 12 |
| Site Visits .....                                                                             | 20 |
| Kick-off Meeting .....                                                                        | 21 |
| Federal Hires .....                                                                           | 22 |
| Publicity Highlights .....                                                                    | 23 |
| SIP Intern Program Evaluations .....                                                          | 28 |
| Knowledge and Interest in Federal Careers .....                                               | 29 |
| Participant Quotes .....                                                                      | 30 |
| Professional Development .....                                                                | 31 |
| Webinar Series .....                                                                          | 31 |
| Ecological Society of America-Canadian Society for Ecology and Evolution Annual Meeting ..... | 31 |
| Geological Society of America Connects Annual Conference .....                                | 31 |
| SIP Fellows .....                                                                             | 32 |
| Program Summary .....                                                                         | 32 |
| Program Objectives .....                                                                      | 32 |
| SIP Fellow Program Evaluations .....                                                          | 33 |
| SIP Fellows Bios .....                                                                        | 34 |
| Financial Contributions .....                                                                 | 38 |
| Special Thanks to Sally and Bob Newcomb .....                                                 | 38 |
| Park Associations .....                                                                       | 38 |
| Conclusion .....                                                                              | 38 |
| Acknowledgements .....                                                                        | 39 |

# Executive Summary

In 2022, the Scientists in Parks Program (SIP) successfully completed its second year and placed a total of 253 participants in 152 park units across the country (Note: The total number of participants includes SIP Mosaics. All other numbers do not include SIP Mosaics, which are reflected in a separate report). These accomplished participants supported the NPS mission by completing essential natural resource science work in parks while learning the importance of conservation and stewardship on public lands.

All positions supported natural resource management park needs and focused on multi-disciplinary approaches including citizen science, interpretive programs, data collection and analysis, collections management, and more. In FY22 the SIP Intern and Fellows participants were 14% racially diverse, 74% female, and 68% reported having a bachelor's degree. The SIP Interns' work contributed 154,731 service hours, or the equivalent of 74 years of full-time work on needed natural resource science projects for the NPS at a cost of approximately \$4M.

The SIP program implemented strategies to provide participants professional development resources including a webinar series and hiring authority infographics. On the administrative side, SIP debuted a new portal to better maintain program data. The SIP Portal provides the ability to submit and review position proposals, collect accounting lines, and have one access point for SIP NPS admin, NPS supervisors/mentors, and partners to view position information. The SIP program is run in partnership with Stewards Individual Placement Program, a program of Conservation Legacy, The Geological Society of America, The Ecological Society of America, and Environment for the Americas.



SIP Interns Maeve Holland and Ali Frame with NPS ranger Malak Ghazal listening to a recording of distance learning video introduction at the Furnace Creek weather station in Death Valley National Park, CA.

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**“National Parks are important to me because of the way they facilitate place-based learning and connection for so many people, especially those who lack an outdoor background. The parks make nature accessible and inclusive while mitigating climate change and providing invaluable habitat of course.”**

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## Statement of Purpose

The Scientists in Parks Program is administered by the National Park Service (NPS) Natural Resources Stewardship and Science Directorate (NRSS), in partnership with the WASO Youth Programs Division and several non-governmental partner organizations. The SIP Program provides an easy-to-use mechanism by which NPS parks, networks, regions, and programs can hire non-federal interns to undertake projects that address natural resource management issues. Simultaneously, the SIP Program affords SIP interns a high-quality work experience that inspires and develops the next generation of diverse park

stewards, and fosters a life-long connection to the National Park System. SIP positions may vary considerably in complexity, length, discipline, and skill set, in accordance with the particular needs of NPS units and abilities of the SIP participants.

SIP manages two seasons of positions that contribute to natural resource management issues in Biological Sciences, Physical Sciences, Social Sciences, and Communication & Education. Positions within these disciplines must address one or more natural resource management categories, including—but not limited to: air quality, climate change, geology, hydrology, night skies, paleontology, and soundscapes.

## Program Objectives

- Meet park natural resource management needs
- Provide interns with meaningful natural resource management experience to foster lifelong connections to the NPS and improve their career potential
- Increase diversity within the natural resource ranks of the NPS

## Types of Positions

**SIP Intern** positions are best for entry- to mid-level skill sets. Positions range from 12 – 52 weeks in length during either the summer or winter season. Interns receive a relocation allowance of \$350 or \$1000 (depending on park location) plus a weekly stipend of \$400 if park housing is provided, or \$525 if park housing is not provided. Interns are eligible to earn hours toward the Public Lands Corps Hiring Authority (if they are between the ages of 18 – 30 or a veteran up to 35) and an AmeriCorps Segal Education Award if they successfully complete their term.

**SIP Mosaic** positions are 12 or 20 weeks during the summer season with a one-week career workshop. Positions range from entry to advanced skill sets. Interns earn a weekly stipend of \$600 (PLC) or \$640 (DHA), all housing costs are provided and they are also eligible for either Public Land Corps Hiring Authority or Direct Hire Authority-Resource Assistant.

**SIP Fellow** positions target upper-level undergraduate or graduate students who are interested in natural resource science careers with the federal government. These are rigorous internships that develop the participant's technical and creative thinking abilities, leadership skills, and problem-solving capabilities. These positions last 12 weeks during the summer and included attendance at the ESA Annual Meeting, where the Fellows presented their findings to the greater scientific community. Fellows receive a weekly stipend of \$640 along with guaranteed housing and support for traveling to the park and are eligible for Direct Hire Authority-Resource Assistant

# Program Summary

The SIP Interns are administered through a NPS youth cooperative agreement and annual task agreement with Conservation Legacy (Cooperative Agreement P21AC10180). This national youth agreement authorized under the Public Lands Corps Act (16 U.S.C. §§ 1721) focuses primarily on U.S. citizens and legal residents. A key benefit of the SIP Program is that SIP Interns may be non-competitively hired by the federal government after completing 640 hours of satisfactory service in one or more appropriate conservation projects (for the Public Lands Corps Non-Competitive Hiring Authority see DOI Personnel Bulletin 17-03, May 23, 2017 and DOI Personnel Bulletin 12-13, January 22, 2013). SIP Fellows can be directly hired after successfully completing their 11-week summer DHA internship and graduating from an accredited college or university (see DOI Personnel Bulletin 12-15). The NPS strives to hire outstanding SIP alumni into NPS natural resource science positions. The SIP Interns are affiliated with AmeriCorps, a program that engages individuals in intensive community service work with the goal of helping others and meeting critical community needs. SIP Interns are eligible for a \$1,678 to \$6,345 pre-tax AmeriCorps Segal Education Award upon successfully completing their internship. This award can be used for paying back student loans, continuing the participant's higher education, or for other qualifying educational expenses. In FY22 SIP Interns received \$316,415 in AmeriCorps Segal Education Awards at no cost to the NPS. In addition to the AmeriCorps affiliation, free medical insurance can be provided to SIP Interns for positions that last 52 weeks.



## Program Costs

NRSS provided financial assistance to 60 positions to support the cost of one, 12-week internship position. NRSS divisions, park associations, the Geological Society of America Foundation, and regions also assisted parks with the costs for SIP interns. The table shown below summarizes the costs for the positions that began in FY22.

**Table 1.** SIP Program cost breakdown in FY22

| FUNDING SOURCE (DOUBLE CHECK HERE)                                  |                                              | COST        | SUBTOTAL           |
|---------------------------------------------------------------------|----------------------------------------------|-------------|--------------------|
| NPS                                                                 | NRSS SIP*                                    | \$468,883   | \$ 3,846,434       |
|                                                                     | Inventory & Monitoring Program               | \$167,100   |                    |
|                                                                     | Climate Change Response Program (CCRP)**     | \$215,567   |                    |
|                                                                     | Regions                                      | \$152,395   |                    |
|                                                                     | Park Units & Programs***                     | \$2,842,489 |                    |
|                                                                     | <b>Subtotal Direct Costs - NPS</b>           |             |                    |
| Partners                                                            | The Geological Society of America Foundation | \$27,360    | \$197,455          |
|                                                                     | Park associations                            | \$170,095   |                    |
|                                                                     | <b>Subtotal Direct Costs - Partners</b>      |             |                    |
| <b>TOTAL DIRECT COSTS</b>                                           |                                              |             | <b>\$4,043,889</b> |
| <b>Approximate In-Kind and Cash Contribution - Program Partners</b> |                                              |             | <b>\$1,347,945</b> |

\*SIP Program funding includes any NRSS-related funds administered by the SIP program on behalf of NRSS and its divisions

\*\*CCRP funds supported the SIP Fellows. Number provided is an estimate of costs from October 1, 2021 to September 15, 2022

\*\*\*NRSS division funding outside of the SIP program's control or provided by individual Inventory and Monitoring networks is considered park unit funds

## COVID-19 Statement

During this reporting period, the COVID-19 pandemic was still present but had much less of an impact to programming than previous years. Though there was less impact, the top priority remained the participants' safety and well-being. Coordinating organizations continued implementation of the COVID-19 Response Policy which included SIP participants to be fully vaccinated (unless exempt for medical or religious reasons) against COVID-19 and to wear face coverings if local infection rates were high. Interns followed all CDC and local guidelines if quarantine was needed.

## Support of DOI Strategic Plan

This program supports the following Department of the Interior priorities and objectives outlined in the DOI Strategic Plan for Fiscal Years 2018 – 2022:

### **Mission Area #1– Conserving our Lands and Water**

*Goal 1 – Utilize science in land, water, species, and habitat management supporting decisions and activities.*

SIP Intern Katie Spivey created a new survey in Esri's Survey123 for the parks to inventory their abandoned mineral land (AML) features, added a unique value to the previous AML inventory in order for features to be categorized and labeled, surveyed over 90 AML features/1,000 acres of land, and wrote a final report of her findings and approaches.

*Goal 3 – Foster partnerships to achieve balanced stewardship and use of our public lands.*

SIP Intern Kathryn Ayers at Congaree National Park identified key metrics for assessing current upland forest conditions in the park. Additional relationships were formed with the U.S. Forest Service, The Longleaf Alliance, and Florida Natural Areas Inventory. Using goal criteria and the metrics identified for assessing forest stands, she began writing a protocol following rapid assessment methods from the Southeastern Longleaf Ecosystem Occurrences (LEO) Project.

SIP Fellow Alex Ramirez Landaverde at Everglades National Park was tasked with disseminating climate change information in a culturally relevant way to local community members, groups, and organizations. The purpose of the internship was to help the park understand what the gateway community of Miami, FL deems important in regards to climate change impacts.



SIP Intern Lydia Jones facilitates a fossil talk and also shows visitors fossils from Badlands National Park, SD. (NPS Photo)

# Coordinating Organizations



## National Park Service, Natural Resource Science and Stewardship Directorate

The NPS Natural Resource Stewardship and Science Directorate provides scientific, technical, and administrative support to national parks for the management of natural resources. NRSS has a strong commitment to providing science-based on-the-ground youth career development opportunities through the management of the Scientists in Parks Program.

**For more information about SIP:** <https://go.nps.gov/sip>

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## Stewards Individual Placement Program

Stewards Individual Placement Program (Stewards) is a program of Conservation Legacy. It offers land and water management agencies and other non-profit organizations opportunities to accomplish specific projects by providing individual placements (internships) on public lands. Stewards is responsible for administering the SIP 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 Stewards:** <https://www.stewardslegacy.org/>

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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 20,000 individuals in more than 100 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 SIP Program. GSA Foundation annually supports multiple positions in Alaska.

**For more information about GSA:** [www.geosociety.org](http://www.geosociety.org)

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## Ecological Society of America



The Ecological Society of America (ESA) is a nonpartisan, nonprofit organization of scientists. Their mission is to advance the science and practice of ecology and support ecologists throughout their careers. They envision a future where people embrace science to understand and foster a thriving planet. Central to ESA's work is the mentoring of young scientists in the field. ESA organizes activities during its annual meetings to help students review their resumes, hone their interviewing skills, and share tips to succeed as scientists and professionals in all sectors. ESA is the administrative and engagement partner for the SIP Fellows program where they host webinars, conduct site visits and evaluations, and organize social sessions during the ESA Annual Meeting.

**For more information about ESA:** [www.esa.org](http://www.esa.org)

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## Environment for the Americas



Environment for the Americas (EFTA) is a nonprofit organization that is committed to providing environmental education opportunities and materials throughout the Western Hemisphere, with the primary goal of improving public understanding of shared resources and their conservation. EFTA believes providing opportunities for youth to become involved in science and natural resource careers is key to ensuring the protection and future existence of quality public lands and wildlife habitat. EFTA is committed to increasing participation in environmental education and outdoor recreation across all demographics and has conducted research and efforts to reduce barriers to participation since 2009.

**For more information about EFTA:** [www.environmentamericas.org](http://www.environmentamericas.org)

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(Left) SIP Intern Madelyn Barrie adding an observation of a pollinator to iNaturalist using a smartphone at Isle Royale National Park, MI. (Right) SIP Intern Kale'a Pawlak-Kjolhaug analyzing Buffelgrass to prepare for field surveying for the exotic grass detection project at Big Bend National Park, TX. (NPS Photos)

# Demographic Information

Note: The following demographic information represents the SIP Interns and SIP Fellow participants. The SIP Mosaics demographics can be found in the Mosaics annual report.

## Gender and Ethnicity of SIP Participants

73.5% percent of SIP participants in FY22 identified as women. Women participation in the SIP Program was 35.8% higher than the percentage of women in the U.S. earning undergraduate degrees in science fields (37.7%) and over 2X the percentage of women working in the U.S. science workforce (34%) (National Science Foundation). This year, 14% of participants were from racial/ethnic groups under-represented in STEM career fields. Actual numbers of racially diverse interns may be higher than reported because 3% of participants chose not to disclose their race/ethnicity. Overall, the 14% diversity in the SIP Program does not adequately represent the diversity of the U.S. population however is nearly seven 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.

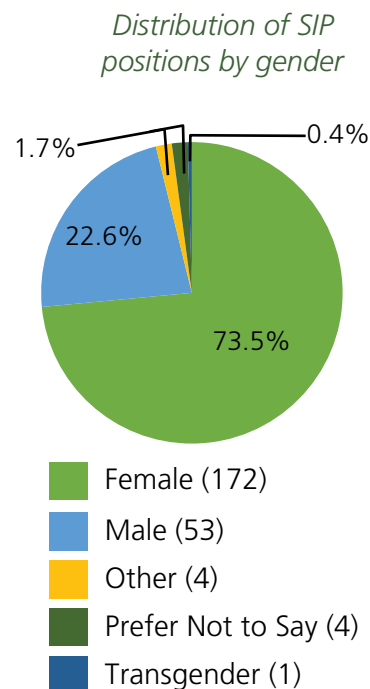
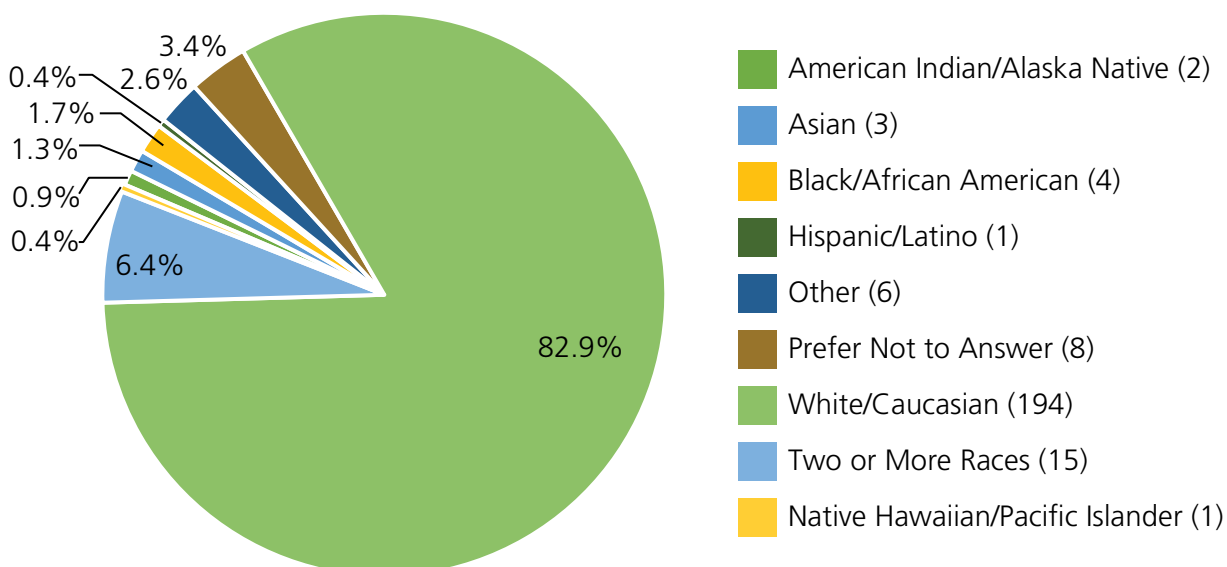


**Table 2.** Diversity of the overall NPS workforce and in STEM fields (2014 NPS data).

| 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 |

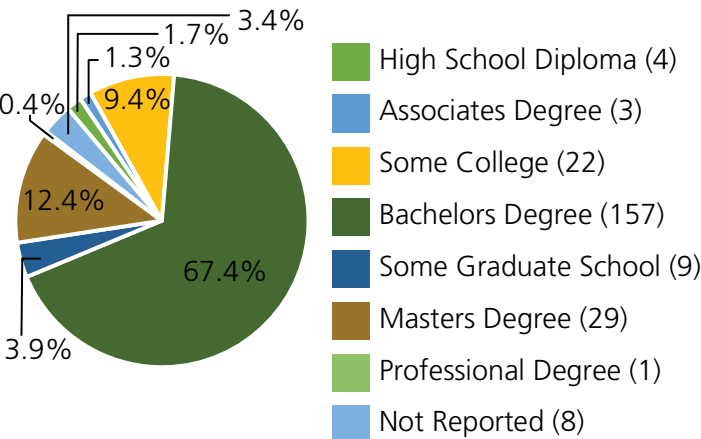
*Distribution of SIP positions by race / ethnicity*



## Education Status of SIP Participants

Nine percent of participants reported to be undergraduate students. Sixty-seven percent of SIP participants reported to have received a bachelor's degree, and twelve percent of the interns reported receiving a master's degree demonstrating the high caliber of participants.

*Distribution of SIP positions by level of education*



## Veterans

In 2022, one veteran participated in the SIP program. The SIP program is proud to host veterans at National Parks and wants to thank Connor Vartanian for his service!

## Schools Attended by SIP Participants

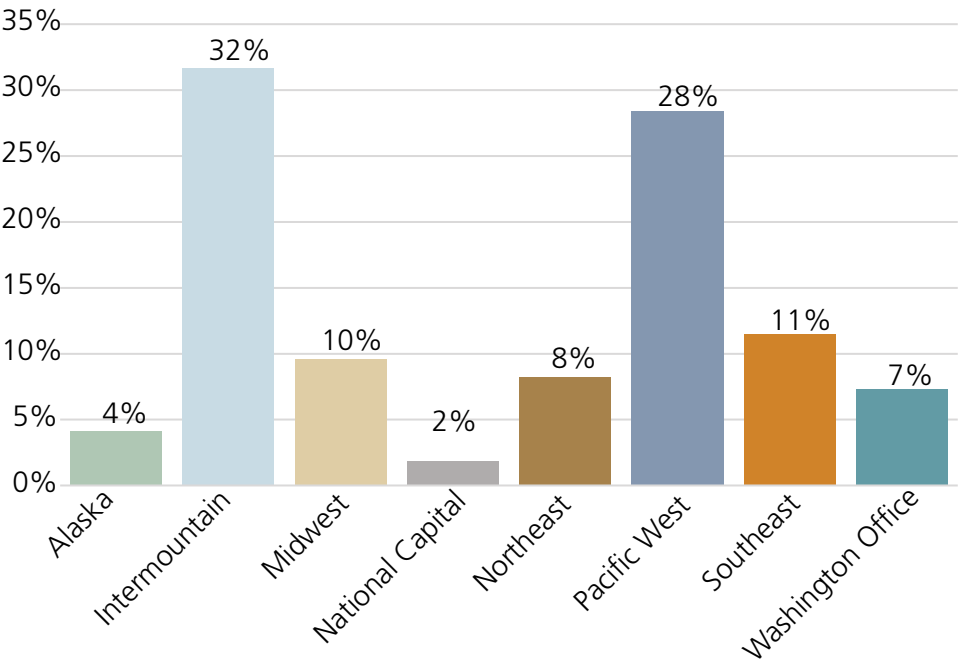
**Table 3.** Schools attended by two or more SIP participants in FY22.

| COLLEGES & UNIVERSITIES                            |
|----------------------------------------------------|
| University of California - Los Angeles (UCLA)      |
| University of California - Santa Cruz              |
| Colorado State University                          |
| SUNY College of Environmental Science and Forestry |
| Oregon State University                            |
| James Madison University                           |
| University of Washington                           |
| University of California - Santa Barbara           |
| Virginia Tech                                      |

## Positions by Region

SIP participants worked throughout the National Park Service in all DOI regions. Similar to last year, over half of the participants were in the Intermountain and Pacific West Regions (32% and 28% respectively). The Alaska and National Capital Regions represent the smallest portions of distribution. The percentage distribution for each region is reflected in the graph below.

*Percentage Distribution of SIP positions by NPS region*



# List of SIP Participant Positions

**Table 4.** SIP positions with start dates in FY22.

Note: Some positions worked at multiple sites, but only the primary sites are included below.

| NPS Unit                                                                 | Position Title (Intern Name)                               | Position Type | ID#     |
|--------------------------------------------------------------------------|------------------------------------------------------------|---------------|---------|
| Acadia National Park                                                     | Ecology Assistant (Maya Chari)                             | SIP Intern    | 137     |
| Andersonville National Historic Site                                     | Night Skies Assistant (Zoe Kane-Preissing)                 | SIP Intern    | 17      |
| Appalachian Highlands Inventory & Monitoring Network                     | Hydrology Assistant (Ross Shipley)                         | SIP Intern    | 2021435 |
| Arches National Park                                                     | Visitor Use Management Assistant (Caleb Meyer)             | SIP Intern    | 148     |
| Assateague Island National Seashore                                      | Biology Assistant (Olivia Butler)                          | SIP Intern    | 143     |
| Assateague Island National Seashore                                      | Natural Resource Management Assistant (Katie Gipson)       | SIP Intern    | 2021436 |
| Aztec Ruins National Monument                                            | Natural Resource Interpretive Assistant (Nicoletta Browne) | SIP Intern    | 2021453 |
| Aztec Ruins National Monument                                            | Natural Resource Management Assistant (Shea Nolan)         | SIP Intern    | 2021454 |
| Badlands National Park                                                   | Acoustic Assistant (Myles Cramer)                          | SIP Intern    | 125     |
| Badlands National Park                                                   | Paleontology Assistant (Morgan Nystuen)                    | SIP Intern    | 164     |
| Badlands National Park                                                   | Paleontology Assistant (John Clonce)                       | SIP Intern    | 167     |
| Badlands National Park                                                   | Paleontology Assistant (John Gallucci)                     | SIP Intern    | 175     |
| Badlands National Park                                                   | Paleontology Assistant (Alaska Schubert)                   | SIP Intern    | 1329    |
| Badlands National Park                                                   | Fossil Preparator (Grace DeVault)                          | SIP Intern    | 2021381 |
| Bandelier National Monument                                              | Natural Resource Management Assistant (Taylor Solorzano)   | SIP Intern    | 5       |
| Bandelier National Monument                                              | Natural Resource Management Assistant (Lawton Bryant)      | SIP Intern    | 6       |
| Bandelier National Monument                                              | Natural Resource Management Assistant (Shelly Hill)        | SIP Intern    | 2021389 |
| Bandelier National Monument                                              | Natural Resource Mgmt. Asst. (Alexis Liljenquist)          | SIP Intern    | 2021390 |
| Big Bend National Park                                                   | Communications and Outreach Intern (Bella Fucigna)         | SIP Intern    | 2021451 |
| Big South Fork National River and Recreation Area                        | GIS Assistant (Amanda Wright)                              | SIP Intern    | 2021413 |
| Big Thicket National Preserve                                            | Natural Resource Management Assistant (Olivia Sheldon)     | SIP Intern    | 4       |
| Biscayne National Park                                                   | Ecology Assistant (Sophia Troeh)                           | SIP Intern    | 92      |
| Blackstone River Valley National Historical Park                         | Science Communication Assistant (Joviethe Ramos)           | SIP Intern    | 11      |
| Bryce Canyon National Park                                               | Hydrology Assistant (Collin Davidson)                      | SIP Intern    | 42      |
| Bryce Canyon National Park                                               | Paleontology Assistant (Dakota Pittinger)                  | SIP Intern    | 43      |
| Bryce Canyon National Park                                               | Natural Resource Interpretive Assistant (Hannah Marshall)  | SIP Intern    | 2021376 |
| Bryce Canyon National Park                                               | Natural Resource Interpretive Assistant (Claire Crise)     | SIP Intern    | 2021377 |
| Buck Island Reef National Monument, Christiansted National Historic Site | Natural Resource Management Assistant (Nicole Stevens)     | SIP Fellow    | 111     |
| Buffalo National River                                                   | Hydrology Assistant (Jasmine Summers-Evans)                | SIP Intern    | 59      |
| Buffalo National River                                                   | Natural Resource Management Assistant (Courtney Werner)    | SIP Intern    | 2021392 |

| NPS Unit                                                | Position Title (Intern Name)                           | Position Type | ID#     |
|---------------------------------------------------------|--------------------------------------------------------|---------------|---------|
| Cabrillo National Monument                              | Natural Resource Management Assistant (Brenton Wilder) | SIP Fellow    | 182     |
| Cape Cod National Seashore                              | Biology Assistant (Maeve Noone-Price)                  | SIP Intern    | 129     |
| Cape Cod National Seashore                              | Ecological Assistant (Sophia Feuerhake)                | SIP Intern    | 166     |
| Cape Cod National Seashore                              | Natural Resource Management Assistant (Petra Zuniga)   | SIP Intern    | 168     |
| Cape Hatteras National Seashore                         | GIS Assistant (Kegan Kleeschulte)                      | SIP Intern    | 91      |
| Cape Lookout National Seashore                          | Biology Assistant (Jessica Byers)                      | SIP Intern    | 79      |
| Cape Lookout National Seashore                          | Biology Assistant (Jessica Pantan)                     | SIP Intern    | 80      |
| Captain John Smith Chesapeake National Historical Trail | Biology Assistant (Meg Kargul)                         | SIP Intern    | 174     |
| Captain John Smith Chesapeake National Historical Trail | Biology Assistant (Abby Perez)                         | SIP Intern    | 197     |
| Carlsbad Caverns National Park                          | Natural Resource Management Assistant (Riannon Colton) | SIP Intern    | 2021399 |
| Chattahoochee River National Recreation Area            | Natural Resource GIS Assistant (Aazia Taylor)          | SIP Intern    | 2021028 |
| Chattahoochee River National Recreation Area            | Natural Resources GIS Assistant (Rebekah Keller)       | SIP Intern    | 2021164 |
| Chesapeake Bay Office NPS                               | Communications and Outreach Intern (Colleen Norton)    | SIP Intern    | 2021360 |
| Chihuahuan Desert Inventory & Monitoring Network        | Ecology Assistant (Adam Pingatore)                     | SIP Intern    | 135     |
| Chihuahuan Desert Inventory & Monitoring Network        | GIS Assistant (Kevin Gross)                            | SIP Intern    | 2021445 |
| Colorado National Monument                              | Natural Resource Mgmt. Asst. (Ben Landolt)             | SIP Intern    | 2021404 |
| Congaree National Park                                  | Natural Resource Management Assistant (Kathryn Ayers)  | SIP Intern    | 2021385 |
| Coronado National Memorial                              | Natural Resource Management Assistant (Raven Devaney)  | SIP Intern    | 75      |
| Coronado National Memorial                              | Natural Resource Management Assistant (Ann Thompson)   | SIP Intern    | 76      |
| Coronado National Memorial                              | Natural Resource Mgmt. Asst. (Hailey Galit)            | SIP Intern    | 2021412 |
| Coronado National Memorial                              | Natural Resource Management Assistant (Amelia Lewis)   | SIP Intern    | 2021462 |
| Cumberland Piedmont Inventory & Monitoring Network      | Biology Assistant (Kacey Russo)                        | SIP Intern    | 184     |
| Curecanti National Recreation Area                      | Hydrology Assistant (Lucca Sterrer)                    | SIP Intern    | 73      |
| Cuyahoga Valley National Park                           | Natural Resource Management Assistant (Megan Herbruck) | SIP Intern    | 147     |
| Cuyahoga Valley National Park                           | Natural Resource Management Assistant (Chris Poling)   | SIP Fellow    | 150     |
| Death Valley National Park                              | Hydrology Assistant (Kimberly Nichter)                 | SIP Intern    | 2021379 |
| Death Valley National Park                              | Education Assistant (Carmen Kraus)                     | SIP Intern    | 2021425 |
| Death Valley National Park                              | Education Assistant (Alison Frame)                     | SIP Intern    | 2021426 |
| Death Valley National Park                              | Education Assistant (Maeve Holland)                    | SIP Intern    | 2021459 |
| Denali National Park and Preserve                       | Geology Assistant (Nicole Benshoff)                    | SIP Intern    | 27      |
| Denali National Park and Preserve                       | Ecology Assistant (Teagan Russell)                     | SIP Intern    | 28      |
| Denali National Park and Preserve                       | Acoustic Assistant (Dini Zucker)                       | SIP Intern    | 45      |
| Denali National Park and Preserve                       | Acoustic Assistant (Samantha Hilburn)                  | SIP Intern    | 210     |
| Denali National Park and Preserve                       | Ecology Assistant (Johanne Albrigtsen)                 | SIP Intern    | 2021353 |

| NPS Unit                                 | Position Title (Intern Name)                              | Position Type | ID#     |
|------------------------------------------|-----------------------------------------------------------|---------------|---------|
| Denver Service Center Planning Division  | Natural Resource Management Assistant (Georgia Schneider) | SIP Intern    | 134     |
| Denver Service Center Planning Division  | Science Communication Assistant (Eva Tsow)                | SIP Intern    | 2021440 |
| Denver Service Center Planning Division  | Planning Assistant (Benjamin Harper)                      | SIP Fellow    | 181     |
| Devils Tower National Monument           | Natural Resource Management Assistant (Laurel Shanks)     | SIP Intern    | 90      |
| Dinosaur National Monument               | Education Assistant (Nikki Simon)                         | SIP Intern    | 186     |
| Dinosaur National Monument               | Natural Resource Mgmt. Asst. (Emma Trost)                 | SIP Intern    | 2021350 |
| Dinosaur National Monument               | Paleontology Assistant (Kathryn Elizabeth Whelton)        | SIP Intern    | 2021407 |
| Dinosaur National Monument               | Paleontology Assistant (Kaylee Velasquez)                 | SIP Intern    | 2021466 |
| Dry Tortugas National Park               | Natural Resource Management Assistant (Nathan Beirne)     | SIP Intern    | 3       |
| El Malpais National Monument             | Natural Resource Management Assistant (Emily L Brent)     | SIP Intern    | 2021427 |
| Everglades National Park                 | Science Communication Assistant (Alex Ramirez Landaverde) | (Fellow       | 72      |
| Fire Island National Seashore            | Ecology Assistant (Madisyn Guza)                          | SIP Intern    | 19      |
| Fire Island National Seashore            | Ecology Assistant (Coral Matos)                           | SIP Intern    | 20      |
| Fire Island National Seashore            | Natural Resource Management Assistant (Marie Jensen)      | SIP Intern    | 36      |
| Fire Island National Seashore            | Natural Resource Management Assistant (Pauline Peterson)  | SIP Intern    | 37      |
| Fire Island National Seashore            | Natural Resource Management Assistant (Anthony Grigal)    | SIP Intern    | 107     |
| First State National Historical Park     | Biology Assistant (Laura Hancock )                        | SIP Fellow    | 192     |
| Florissant Fossil Beds National Monument | Education Assistant (Rory Sweedler)                       | SIP Intern    | 57      |
| Florissant Fossil Beds National Monument | Education Assistant (Tara Tankersley)                     | SIP Intern    | 58      |
| Fort Matanzas National Monument          | Natural Resource Management Assistant (Molly Niekamp)     | SIP Intern    | 10      |
| Glacier National Park                    | Biology Assistant (Megan Potter)                          | SIP Intern    | 18      |
| Glacier National Park                    | Visitor Use Management Assistant (Kat Barrs)              | SIP Intern    | 110     |
| Glacier National Park                    | Biology Assistant (Holli Holmes)                          | SIP Intern    | 2021356 |
| Golden Spike National Monument           | Biology Assistant (Rachel Struhs)                         | SIP Intern    | 179     |
| Grand Canyon National Park               | Science Communication Assistant (Julia Roome)             | SIP Intern    | 8       |
| Grand Canyon National Park               | Acoustic Assistant (Madison Chudzik)                      | SIP Intern    | 25      |
| Grand Canyon National Park               | Biology Assistant (Blake Hoffman)                         | SIP Intern    | 2021423 |
| Grand Canyon National Park               | Biology Assistant (Jalyn Gearries)                        | SIP Fellow    | 159     |
| Grand Teton National Park                | Geomorphology Assistant (Jared Bathen)                    | SIP Intern    | 113     |
| Grand Teton National Park                | GIS Assistant (Jamie McBryde)                             | SIP Intern    | 2021354 |
| Great Basin National Park                | Night Skies Assistant (Serena Wurmser)                    | SIP Intern    | 15      |
| Great Basin National Park                | Night Skies Assistant (Erin Lippitt)                      | SIP Intern    | 16      |
| Greater Yellowstone Network              | Hydrology Assistant (Allyson Marrs )                      | SIP Fellow    | 151     |

| NPS Unit                                  | Position Title (Intern Name)                                     | Position Type | ID#     |
|-------------------------------------------|------------------------------------------------------------------|---------------|---------|
| Gulf Islands National Seashore            | Natural Resource Management Assistant (Madison Williams)         | SIP Intern    | 49      |
| Gulf Islands National Seashore            | Natural Resource Management Assistant (Mary Ponti)               | SIP Intern    | 165     |
| Gulf Islands National Seashore            | Natural Resource Management Assistant (Nicholas Wagner)          | SIP Intern    | 198     |
| Gulf Islands National Seashore            | Natural Resource Management Assistant (Grady Jakobsberg)         | SIP Intern    | 2021408 |
| Gulf Islands National Seashore            | Invasive Species Monitoring and Management Intern (Darby McGhee) | SIP Intern    | 2021409 |
| Hagerman Fossil Beds National Monument    | Paleontology Assistant (Scott Kottkamp)                          | SIP Intern    | 2021432 |
| Harpers Ferry National Historic Park      | Natural Resource Management Assistant (Maxwell Carter)           | SIP Intern    | 61      |
| Harpers Ferry National Historic Park      | Natural Resource Management Assistant (Mackenzie Rogers)         | SIP Intern    | 62      |
| Harpers Ferry National Historic Park      | GIS Assistant (Marcella Svetz)                                   | SIP Intern    | 2021394 |
| Hawaii Volcanoes National Park            | Biology Assistant (Jacob Bornyasz)                               | SIP Intern    | 115     |
| Hawaii Volcanoes National Park            | Biology Assistant (Madison Jochum)                               | SIP Intern    | 116     |
| Hawaii Volcanoes National Park            | Biology Assistant (Audrey Vinton)                                | SIP Intern    | 117     |
| Hawaii Volcanoes National Park            | Biology Assistant (Esaac Mazengia)                               | SIP Intern    | 2021380 |
| Hot Springs National Park                 | Hydrology Assistant (Connor Vartanian)                           | SIP Intern    | 86      |
| Indiana Dunes National Park               | Natural Resource Management Assistant (Steven Kaylor)            | SIP Intern    | 156     |
| Isle Royale National Park                 | Ecology Assistant (August Camp)                                  | SIP Intern    | 66      |
| Isle Royale National Park                 | Ecology Assistant (Maddie Betz)                                  | SIP Intern    | 67      |
| Isle Royale National Park                 | Geology Assistant (Jillian Cain)                                 | SIP Intern    | 205     |
| Isle Royale National Park                 | Natural Resource Interpretive Assistant (Maddie Barrie)          | SIP Intern    | 2021378 |
| Jewel Cave National Monument              | Cave and Karst Assistant (Chelsea Parada)                        | SIP Intern    | 124     |
| Jimmy Carter National Historic Site       | Natural Resource Management Assistant (Josephine Duffy)          | SIP Intern    | 2021395 |
| John Day Fossil Beds National Monument    | Paleontology Assistant (Samuel Lavin)                            | SIP Intern    | 9       |
| John Day Fossil Beds National Monument    | Paleontology Assistant (Conner Bennett)                          | SIP Intern    | 203     |
| Joshua Tree National Park                 | Night Skies Assistant (Zerxes Bhadha)                            | SIP Intern    | 24      |
| Klamath Inventory & Monitoring Network    | Cave and Karst Assistant (Brian Young)                           | SIP Intern    | 1       |
| Klamath Inventory & Monitoring Network    | Cave and Karst Assistant (Anna Reachmack)                        | SIP Intern    | 2       |
| Klamath Inventory & Monitoring Network    | Biology Assistant (Kira Ware)                                    | SIP Intern    | 2021446 |
| Klondike Gold Rush National Historic Park | Natural Resource Management Assistant (Bethany Humphrey)         | SIP Intern    | 189     |

| NPS Unit                                        | Position Title (Intern Name)                            | Position Type | ID#     |
|-------------------------------------------------|---------------------------------------------------------|---------------|---------|
| Lake Clark National Park and Preserve           | Biology Assistant (Samuel Graf)                         | SIP Intern    | 2021403 |
| Lake Mead National Recreation Area              | Night Skies Assistant (Benjamin Banet)                  | SIP Intern    | 2021358 |
| Lassen Volcanic National Park                   | Natural Resource Management Assistant (Ishan Merkel)    | SIP Intern    | 141     |
| Lassen Volcanic National Park                   | Natural Resource Management Assistant (Shauna Sayers)   | SIP Intern    | 142     |
| Lewis and Clark National Historical Park        | Natural Resource Management Assistant (Emily Scott)     | SIP Intern    | 2021429 |
| Lyndon B. Johnson National Historical Park      | Night Skies Assistant (Isabel McIntyre)                 | SIP Fellow    | 35      |
| Mammoth Cave National Park                      | Biology Assistant (Megan Garvey)                        | SIP Intern    | 2021434 |
| Manassas National Battlefield Park              | Natural Resource Management Assistant (Madeline Clevon) | SIP Intern    | 60      |
| Mesa Verde National Park                        | Hydrology Assistant (Erin Markey)                       | SIP Intern    | 2021373 |
| Mesa Verde National Park                        | Hydrology Assistant (Claire Stellick)                   | SIP Intern    | 2021464 |
| Mojave Desert Network                           | Natural Resource Management Assistant (Sierra Moore)    | SIP Intern    | 44      |
| Mojave Desert Network                           | Ecology Assistant (Ashley Marie O'Brien)                | SIP Intern    | 50      |
| Mojave Desert Network                           | Hydrology Assistant (Emma Kaufman)                      | SIP Intern    | 2021414 |
| Mojave Desert Network                           | Hydrology Assistant (Evan Kolb)                         | SIP Intern    | 2021465 |
| Mojave National Preserve                        | Biology Assistant (Brett Allen)                         | SIP Intern    | 29      |
| Mojave National Preserve                        | Paleontology Assistant (Emily Claire Johnson)           | SIP Intern    | 2021351 |
| Mount Rainier National Park                     | Geomorphology Assistant (Lauren Walker)                 | SIP Intern    | 102     |
| Mount Rainier National Park                     | Geomorphology Assistant (Madeline Keep)                 | SIP Intern    | 103     |
| Mount Rainier National Park                     | Night Skies Assistant (Katie Copeland)                  | SIP Intern    | 104     |
| Mount Rainier National Park                     | Interpretive Assistant (Odin Wium)                      | SIP Intern    | 109     |
| Mount Rainier National Park                     | GIS Assistant (Frances Nelson)                          | SIP Intern    | 169     |
| Mount Rushmore National Memorial                | Bat Ecology Intern (Max Maddox)                         | SIP Intern    | 2021396 |
| National Capital Inventory & Monitoring Network | Ecology Assistant (Galen Oettel)                        | SIP Intern    | 83      |
| National Park of American Samoa                 | Biology Assistant (Robert Smith)                        | SIP Intern    | 2021415 |
| Natural Bridges National Monument               | Biology Assistant (Lyra Martin)                         | SIP Intern    | 106     |
| New England National Scenic Trail               | Biology Assistant (Grace Piselli)                       | SIP Intern    | 95      |
| Geologic Resources Division                     | Natural Resource Management Assistant (Noah Angell)     | SIP Intern    | 1326    |
| Geologic Resources Division                     | Geology Assistant (Sophia Shuler)                       | SIP Intern    | 1328    |
| Geologic Resources Division                     | Engineering Assistant (Brian Mulroy)                    | SIP Intern    | 2021419 |
| Geologic Resources Division                     | Geomorphology Assistant (Karina Zyatitsky)              | SIP Intern    | 2021430 |

| NPS Unit                                            | Position Title (Intern Name)                                | Position Type | ID#     |
|-----------------------------------------------------|-------------------------------------------------------------|---------------|---------|
| Inventory and Monitoring Division                   | Ecology Assistant (Myles Cramer)                            | SIP Intern    | 2021424 |
| Natural Resources Stewardship & Science Directorate | Acoustic Assistant (Kayley Dillon)                          | SIP Intern    | 32      |
| Natural Resources Stewardship & Science Directorate | Hydrology Assistant (Maddie Barrie)                         | SIP Intern    | 48      |
| Natural Resources Stewardship & Science Directorate | Natural Resource Management Assistant (Celeste Moran)       | SIP Intern    | 74      |
| Natural Resources Stewardship & Science Directorate | Science Communication Assistant (Alexis Monti)              | SIP Intern    | 127     |
| Natural Resources Stewardship & Science Directorate | Ecology Assistant (Brooke Bauman)                           | SIP Intern    | 172     |
| Natural Resources Stewardship & Science Directorate | Natural Resource Management Assistant (Julia Young)         | SIP Intern    | 176     |
| Natural Resources Stewardship & Science Directorate | Natural Resource Management Assistant (Olivia Helinski)     | SIP Intern    | 178     |
| Natural Resources Stewardship & Science Directorate | Inventory and Monitoring Intern (Elizabeth-Ann Jamison)     | SIP Intern    | 2021140 |
| Natural Resources Stewardship & Science Directorate | Science Communication Assistant (Meg Withers)               | SIP Intern    | 2021418 |
| Alaska Regional Office                              | Geomorphology Assistant (Liza Hasan)                        | SIP Intern    | 2021369 |
| Alaska Regional Office                              | GIS Assistant (Dana Hansen)                                 | SIP Intern    | 2021420 |
| Alaska Regional Office                              | Natural Resource Management Assistant (Taylor Stinchcomb)   | SIP Intern    | 2021443 |
| Pacific West Regional Office                        | Natural Resource Management Assistant (Brennan Kessenich)   | SIP Intern    | 2021400 |
| Midwest Regional Office                             | Natural Resource Management Assistant (Bailey Adams)        | SIP Intern    | 146     |
| Water Resources Division                            | Ecology Assistant (Brooke Bauman)                           | SIP Intern    | 2021447 |
| Obed Wild & Scenic River                            | Geology Assistant (Katie Spivey)                            | SIP Intern    | 2021375 |
| Ocmulgee Mounds National Historical Park            | Natural Resource Management Assistant (Bernadette Mitchell) | SIP Intern    | 51      |
| Olympic National Park                               | Education Assistant (Jill Brigham)                          | SIP Intern    | 2021450 |
| Oregon Caves National Monument and Preserve         | Natural Resource Management Assistant (Garrett Cooper)      | SIP Intern    | 2021398 |
| Oregon Caves National Monument and Preserve         | Education Assistant (Hollis Hatfield)                       | SIP Intern    | 2021442 |
| Oregon Caves National Monument and Preserve         | Education Assistant (Brenna McBride)                        | SIP Intern    | 2021456 |
| Pacific Island Inventory & Monitoring Network       | Ecology Assistant (Samantha Orndorff)                       | SIP Intern    | 30      |
| Perry's Victory & International Peace Memorial      | Biology Assistant (Sophie Rabinowicz)                       | SIP Intern    | 2021364 |
| Pictured Rocks National Lakeshore                   | Hydrology Assistant (Addy Pletcher)                         | SIP Intern    | 53      |

| NPS Unit                                        | Position Title (Intern Name)                               | Position Type | ID#     |
|-------------------------------------------------|------------------------------------------------------------|---------------|---------|
| Point Reyes National Seashore                   | Natural Resource Interpretive Assistant (Ellen Murphy)     | SIP Intern    | 2021397 |
| Redwood National Park                           | Natural Resource Management Assistant (Maeve Bittle)       | SIP Intern    | 64      |
| Redwood National Park                           | Natural Resource Management Assistant (Rebecca Montgomery) | SIP Intern    | 65      |
| Rocky Mountain Inventory & Monitoring Network   | Ecology Assistant (Drew Abraham Sangerman)                 | SIP Intern    | 38      |
| Rocky Mountain National Park                    | Education Assistant (Olivia Gregg)                         | SIP Intern    | 63      |
| Rocky Mountain National Park                    | Natural Resource Management Assistant (Frank Peplowski)    | SIP Intern    | 70      |
| Rocky Mountain National Park                    | Education Assistant (Britt Seifert)                        | SIP Intern    | 2021370 |
| Rocky Mountain National Park                    | Natural Resource Management Assistant (Mackenzie Conant)   | SIP Fellow    | 82      |
| San Francisco Bay Area Network                  | Biology Assistant (Alee Knoell)                            | SIP Intern    | 39      |
| San Francisco Bay Area Network                  | Biology Assistant (Yvonne Ng)                              | SIP Intern    | 40      |
| San Francisco Bay Area Network                  | GIS Assistant (Arista Regalia)                             | SIP Intern    | 2021452 |
| Shenandoah National Park                        | Night Skies Assistant (Sophia Cielo)                       | SIP Intern    | 69      |
| Shenandoah National Park                        | Interpretive Assistant (Kristen Steinke)                   | SIP Intern    | 71      |
| Shenandoah National Park                        | Natural Resource Interpretive Assistant (Lawson Osteen)    | SIP Intern    | 2021468 |
| Shenandoah National Park                        | Ecology Assistant (Rowan Fay)                              | SIP Fellow    | 195     |
| Sleeping Bear Dunes National Lakeshore          | Biology (Maisie Wiler)                                     | SIP Intern    | 152     |
| Sleeping Bear Dunes National Lakeshore          | Natural Resource Management Assistant (Holly Francart)     | SIP Intern    | 2021438 |
| Sleeping Bear Dunes National Lakeshore          | Natural Resource Management Assistant (Lauren Charles)     | SIP Intern    | 2021439 |
| Sleeping Bear Dunes National Lakeshore          | GIS Assistant (Meagan Fairfield-Peak )                     | SIP Fellow    | 105     |
| Sonoran Desert Inventory & Monitoring Network   | GIS Assistant (Sam Olivares-Mejia)                         | SIP Intern    | 139     |
| Southern Plains Inventory & Monitoring Network  | Ecology Assistant (Carson Barry)                           | SIP Intern    | 132     |
| Southwest Alaska Inventory & Monitoring Network | Coastal Geology Assistant (Journey Berry)                  | SIP Intern    | 2021444 |
| Tallgrass Prairie National Preserve             | Natural Resource Management Assistant (Denise Cameron)     | SIP Intern    | 140     |
| Timucuan Ecological & Historic Preserve         | Ecology Assistant (Abby Gonzalez)                          | SIP Intern    | 46      |
| Tule Springs Fossil Beds National Monument      | Paleontology Assistant (Morgan Adamson)                    | SIP Intern    | 2021467 |
| Vicksburg National Military Park                | Paleontology Assistant (Megan Rich)                        | SIP Intern    | 2021402 |
| Waco Mammoth National Monument                  | Paleontology Assistant (Rudolph (Rudy) Hummel)             | SIP Intern    | 55      |

| NPS Unit                                      | Position Title (Intern Name)                              | Position Type | ID#     |
|-----------------------------------------------|-----------------------------------------------------------|---------------|---------|
| War in the Pacific National Historical Park   | Natural Resource Management Assistant (Marisa Agarwal)    | SIP Intern    | 2021382 |
| War in the Pacific National Historical Park   | Natural Resource Management Assistant (Michelle Diminuco) | SIP Intern    | 2021383 |
| War in the Pacific National Historical Park   | Natural Resource Management Assistant (Motusaga Vaeoso)   | SIP Fellow    | 122     |
| Whiskeytown National Recreation Area          | Natural Resource Mgmt. Assistant (Olivia Barnes)          | SIP Intern    | 2021410 |
| Whiskeytown National Recreation Area          | Natural Resource Mgmt. Assistant (Laina Rose)             | SIP Intern    | 2021411 |
| Whiskeytown National Recreation Area          | Natural Resource Mgmt. Assistant (Alice Stitzer)          | SIP Intern    | 2021460 |
| Wrangell - St. Elias National Park & Preserve | Geology Assistant (Shane Scoggin)                         | SIP Intern    | 41      |
| Wrangell - St. Elias National Park & Preserve | Biology Assistant (Rachel Sperry)                         | SIP Intern    | 96      |
| Yellowstone National Park                     | Biology Assistant (Marnie Brice)                          | SIP Intern    | 194     |
| Yellowstone National Park                     | Natural Resource Management Assistant (Hannah Stelley)    | SIP Intern    | 2021428 |
| Yellowstone National Park                     | Geology Assistant (Hannah Bortel)                         | SIP Intern    | 2021448 |
| Yosemite National Park                        | Ecology Assistant (Padraig Coleman)                       | SIP Intern    | 13      |
| Yosemite National Park                        | Biology Assistant (Truman Boot)                           | SIP Intern    | 21      |
| Yosemite National Park                        | Biology Assistant (Alena Arnold)                          | SIP Intern    | 22      |
| Yosemite National Park                        | Biology Assistant (Sarah Gobris)                          | SIP Intern    | 23      |
| Yosemite National Park                        | Hydrology Assistant (Sara Donatich)                       | SIP Intern    | 2021352 |
| Yosemite National Park                        | Geomorphology Assistant (Autumn Helfrich)                 | SIP Intern    | 2021361 |
| Yosemite National Park                        | GIS Assistant (Dory Shreve)                               | SIP Intern    | 2021441 |
| Yosemite National Park                        | GIS Assistant (Lauren Hurst)                              | SIP Intern    | 2021461 |
| Yosemite National Park                        | Geomorphology Assistant (John Stapke)                     | SIP Intern    | 2021463 |
| Yosemite National Park                        | Ecology Assistant (Elizabeth Rush)                        | SIP Fellow    | 14      |
| Yukon - Charley Rivers National Preserve      | Biology Assistant (John Merlo-Coyne)                      | SIP Intern    | 119     |
| Zion National Park                            | Science Communication Assistant (Sam Pena)                | SIP Intern    | 187     |
| Zion National Park                            | Science Communication Assistant (Madison Anderson)        | SIP Intern    | 2021405 |

# Site Visits

Six site visits were conducted this year by NPS, Stewards, and ESA staff. During the visits, the staff met with the SIP participants and supervisors/mentors to learn about the participants day-to-day activities, answer program and hiring authority questions, hear program feedback, and help build relationships between the SIP program staff, host site, and the participants. The table below outlines all site visits conducted in FY22.

**Table 5.** Site visits conducted in FY 22.

| Park Unit                                 | Participant Name                                                    | Supervisor/Mentor Name                        | SIP Administrator Name                                                                                                            |
|-------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Rocky Mountain National Park              | MacKenzie Conant<br>Olivia Gregg<br>Frank Peplowski<br>Keily Pineda | Lisa Baron<br>Paige Lambert<br>Katie Phillips | Emma Savely<br>Ali Jones<br>Sierra Miller<br>Lisa Thai<br>Jessica Johnston<br>Teresa Mourad<br>Kiersten Jarvis<br>Chelsea Bitting |
| Everglades National Park                  | Alex Ramirez Landaverde                                             | Ivan Bermejo                                  | Jessica Johnston<br>Jessie Ribera                                                                                                 |
| Sleeping Bear Dunes National Lakeshore    | Meagan Fairfield-Peak                                               | Varun Acharya                                 | Jessica Johnston<br>Jessie Ribera                                                                                                 |
| Lyndon B Johnson National Historical Park | Isabel McIntyre                                                     | Jorge Hernandez                               | Chelsea Bitting                                                                                                                   |
| Waco Mammoth National Monument            | Rudolph Hummel                                                      | Lindsey Yann                                  | Chelsea Bitting                                                                                                                   |
| Glacier National Park                     | Kat Barrs<br>Meghan Potter                                          | Phil Wilson<br>Lisa Bate                      | Alex Whittow                                                                                                                      |



(Left to right) ESA staff Jessie Ribera, SIP Fellow Alex Ramirez Landaverde, and ESA staff Jessica Johnston during a site visit in Everglades National Park, FL. (NPS Photo)

# Kick-off Meeting

In June 2022, SIP administrators met in Denver for a kick-off meeting for introductions between partnering organizations. During the meeting they made strides toward designing, maintaining, and implementing programmatic objectives.

The following day, Stewards, ESA, and NRSS staff visited SIP Interns Frank Peplowski, Olivia Gregg, SIP Fellow McKenzie Conant, and SIP Mosaic Keily Pineda, as well as their supervisors/mentors: Lisa Baron, Katie Phillips and Paige Lambert at Rocky Mountain National Park. The crew had a wonderful time getting to know each other, sharing feedback and stories. The staff also had a chance to get to see Olivia, Frank and McKenzie's workstations and a few projects.



SIP admins pose together after concluding successful meetings. From right to left: Lisa Thai, Ali Jones, Emma Savely, Chelsea Bitting, Kiersten Jarvis, Krista Rogers, Sierra Miller, Lesley Petrie, Melanie Wood, Matt Dawson, Teresea Mourad, and Jessica Johnston. (NPS Photo)



(Top) Stewards staff Emma Savely and Ali Jones listen to SIP Intern Frank describe how he takes data from the trail monitoring camera in Rocky Mountain National Park, CO. (NPS Photo)



(Bottom) SIP admins and participants mingle after lunch in Rocky Mountain National Park, CO. Left to right: Sierra Miller, Keily Pineda, Lisa Baron, Emma Savely, McKenzie Conant, Jessica Johnston, and Frank Peplowski. (NPS Photo)



(Left) SIP Interns Kat Barrs and Meg Potter attempting to locate goats at Avalanche Lake in Glacier National Park, MT. (Right) SIP Intern Grace DeVault conducting a visual inventory of all fossil specimens in collections at Badlands National Park, SD. (NPS Photos)

## Federal Hires

One program goal is to hire more SIP participants into federal service. There are requests from NPS hiring managers for more scientists and over 75% of participants were very or extremely interested in working in a park at the end of their internship (see graph on page 29). Hiring authorities provided by SIP can assist in bridging that gap. This year SIP created two infographics (one for PLC and one for DHA-RA) to help participants navigate the hiring authority process. SIP also hosted webinars (see page 31) with NPS Human Resources and former participants hired using the authorities to hear their first-hand accounts of becoming federal employees.

| Participant Name       | Federal Agency          | Position Title                     | GS Level     |
|------------------------|-------------------------|------------------------------------|--------------|
| Evan Laughlin          | Army Corps of Engineers | Geologist                          | Not reported |
| Hailey Galit           | USGS                    | Hydrologist                        | 5            |
| Blake Hoffman          | NPS (GRCA)              | Wildlife Technician                | Not reported |
| Dory Shreve            | NPS                     | Cartography Technician             | 7            |
| Victoria Crystal       | USGS                    | Geology Museum Collections Manager | 9            |
| Michelle (Shelly) Hill | NPS (CHCU/AZRU)         | Seasonal Interpretive Ranger       | 5            |
| Jamie McByrde          | NPS (SLBE)              | Cartography Technician             | Not reported |

# Publicity Highlights

Highlights of SIP Participants who were either mentioned in news media or published articles focused on the work from their internship.

## **Perry's Peace Memorial works to help migratory birds with new lighting plan: Fremont News-Messenger USA TODAY Network**

- <https://www.thenews-messenger.com/story/news/2022/04/29/put-bay-monument-changes-lighting-plan-help-migratory-birds/9568360002/>
- "Thanks in part to a Scientists in Parks work experience program intern, the park was able to devise a plan to allow for limited illumination of the monument while also protecting the many migrating birds that move through the area."

## **Jordan Kemp, featured in a Geological Society of America article, "Wildfires Affect Cave Diversity Underneath Scorched Surfaces"**

- <https://www.geosociety.org/GSA/News/pr/2021/21-61.aspx>
- A Press release was also written and Jordan's work was featured at the #GSA2021 presentation 'Unprecedented Wildfire Season Leaves Lasting Impact on Cave Resources: Case Study from Lava Beds National Monument'

## **Taryn Black, featured in University of Washington News Article, "New study calculates retreat of glacier edges in Alaska's Kenai Fjords National Park"**

- <https://www.washington.edu/news/2022/08/05/kenai-fjords/>

## **Alexandra Gulick, co-wrote an article with her supervisor/mentor Kristen Ewen for Park Science, Why Sea Turtles Returned to Buck Island**

- <https://www.nps.gov/articles/000/why-sea-turtles-returned-to-buck-island.htm>
- The article features the long-term sea turtle research program at Buck Island, while highlighting the comeback of hawksbills on the nesting beach and the return of green turtles to the park's foraging areas.



SIP Intern Kaliegh Schlender recording excavation and inventorying eggs at Dry Tortugas National Park, FL. (NPS Photo)



## JAMIE MCBYRDE

*GIS Assistant*

Grand Tetons National Park, WY

During Jamie's second term as a GIS Assistant at Grand Tetons National Park, she was able to make valuable headway on a long list of projects she was working on in her previous term and on began a plethora of new projects. One project she is particularly proud of was working on a Park Wall Map Conversion where her focus was to convert the project to ArcGIS pro, to set up a layout of map layers, and updating the cartography and symbology to new point and NPS branding styles. Another project involved some office work in which she created a Sharepoint/Teams resource page for other GIS users, created a Glacier Storymap, updated Glacier social media, developed field mobile data collection platforms and organized data inputs. To sum up her second term, one could say that Jamie was a map making machine!

She felt as though she made a contribution to the NPS with the projects she completed because her maps were useful and informative to not only employees of the park but also to visitors. Overall, she gained the information and tools she need to become a competitive applicant for other NPS and GIS positions. Sleeping Bear Dunes National Lakeshore is gaining a valuable employee because Jamie is moving on to be a Cartography Technician there.



(Top) SIP Intern Jamie McBryde holding a Trimble GPS unit and antenna at the Buffalo Fork on the Snake River taking GPS data of the bank edge in Grand Teton National Park, WY. (Bottom) SIP Intern Jamie McBryde recording data in attendance with NPS Park employees and volunteers. Located on the Snake River completing a fish salvage effort to save fish in seasonal closure waterways in Grand Teton National Park, WY. (NPS Photos)

## MOLLY NIEKAMP

*Natural Resource Management Assistant  
Fort Matanzas National Monument, FL*



Molly had a wonderful time serving as a Natural Resource Management Assistant at Fort Matanzas National Monument where her primary projects consisted of doing sea turtle nest patrols, nest management and evaluation, helping stranded turtles, shorebird nest and chick monitoring, and invasive plant monitoring.

This consisted of daily sea turtle nesting patrols and maintenance of nests, as well as weekly patrolling of least tern nesting areas and monitoring of other nearby shorebird species. Invasive plant monitoring included searching kalanchoe, lantana, Russian thistle, and asparagus fern. Along with her invasive plant species observations, she also took care of some of the native plants by watering and fixing fencing in revegetation areas. The diversity of her projects doesn't stop there! Molly got to exercise her creativity by developing

educational interpretive programs for park visitors. This was heavily independent work that allowed her to curate her own program and present it in a non-formal way. Last but not least, she assisted with other projects such as leading nature camps, writing lyrics and filming for a Fort Matanzas National Monument music video, roving dune areas for invasive moth species and more. Though creating lesson plans and educating were out of her comfort zone, these became projects she came to truly enjoy. Thanks to her wonderful experience as an intern, educating people - especially youth - is something that became very important to her. She concludes "It is exciting to spark inspiration and awe in visitors that learn something new from my programs, and I enjoy helping people develop more respect for the National Park Service and all of the natural resources it manages."



(Left) SIP Intern Molly Niekamp repairing gopher tortoise fencing along the roadside in Fort Matanzas National Monument, FL. (Right) Molly Niekamp excavating a possible sea turtle nesting site in search of loggerhead sea turtle eggs in Fort Matanzas National Monument, FL during a nest site evaluation. (NPS Photos)



**HAILEY GALIT**  
*Natural Resource Management Assistant*  
**Coronado National Memorial, AZ**

Since Natural Resource Management is an interdisciplinary field, Hailey started her internship by training and researching various projects. This training allowed Hailey to confidently manage the air quality station, measure depth in water wells, start to write a water resource management plan, take cave microclimate trend data, and assist in bat surveys. In December of 2021, she was able to work with a USGS/ NPS mine remediation project and acted as a field assistant with two hydrologists and a physical scientist.

During the second half of her internship, she started a border road repeat photography project to monitor boarder impacts on the East and West side of the

Memorial, while continuing to maintain the air quality station. She was most proud of these two accomplishments because she was able to have individual responsibility and freedom at times on these projects. Working independently from time to time developed her attention to detail and working as a field assistant taught her how to be more efficient in that role. This broad role allowed her to get hands-on experience and taught her about the parks hydrology, geology, and bats!

Following her internship, Hailey was able to immediately put her news skills, knowledge, and leadership to the test as a USGS Hydrologic Technician!



(Left) SIP Intern Hailey Galit collecting bat guano and maintaining microclimate data loggers at Clark Smith Mine in Coronado National Memorial, AZ. (Right) SIP Intern Hailey Galit monitoring spring water at Coronado National Memorial, AZ. (NPS Photos)

**BLAKE HOFFMAN**  
*Biology Assistant*  
Grand Canyon National Park, AZ



In recent years, Grand Canyon National Park has been conducting survival surveys on translocated Ringtails who were removed from park structures. The Ringtail, a mammal of the raccoon family, has come into conflict with park employees and visitors, and staff are cognizant about the growing concerns of disease transmission. Blake has been able to use and modify previous research to include disease testing and dietary analysis, giving him and the park a better understanding of this potential human-wildlife conflict. Over the past six months, however, he is most proud of the progress he has made processing camera images. He has created a protocol for a new image classifying software and learned enough coding to perform exploratory analysis of data in R. These tools have allowed him to discover a surprising amount of predator diversity along the river corridor.

Blake feels as if he has contributed to the Grand Canyon during his internship by working on resolving human-wildlife conflict in a way that allows healthy wildlife populations to occupy natural areas while humans enjoy those same areas in a safe way. That is the over-arching goal of the Grand Canyon Wildlife Program. Additionally, his imaging classifying work will allow future researchers to non-invasively monitor wildlife, especially since a large portion of the park is not easily accessible. He spent his time analyzing data from 2015-2016, with lots of reference material to guide him. As Blake said, "collecting data from these areas is one thing, being able to process it efficiently to inform your agency's mission is another."

After his service term, Blake transitioned into an NPS Wildlife Technician position until he starts graduate school this fall at Northern Arizona University (Flagstaff)!



(Left) SIP intern Blake Hoffman trapping, radio-collaring, and relocating ringtails from Park structures in Grand Canyon National Park, AZ. (Right) Blake took this photo during a radio telemetry flight, which was done in order to locate collared ring-tailed-cats in Grand Canyon National Park, AZ. (NPS Photos)

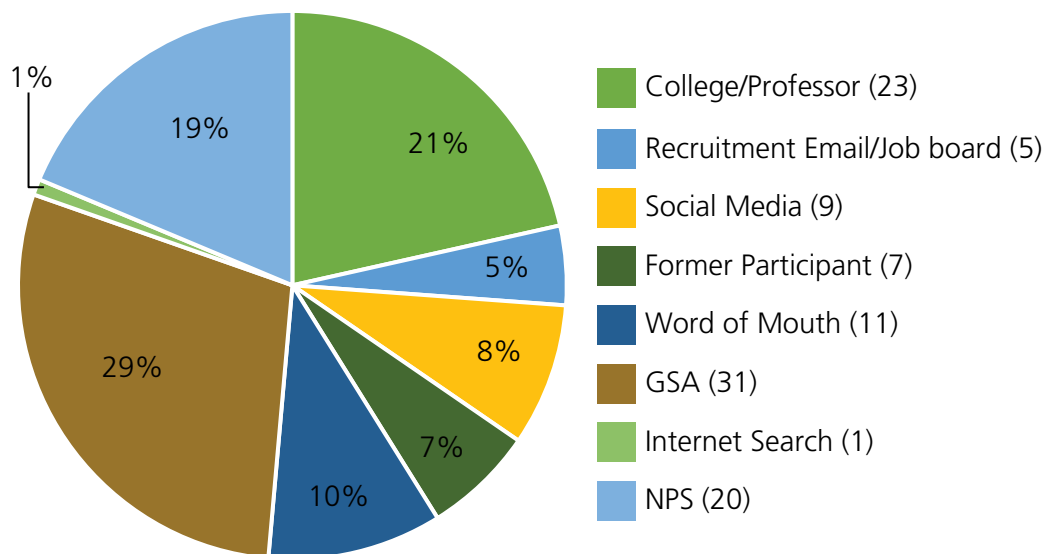
# SIP Intern Program Evaluations

SIP Interns were asked to complete pre-internship and post-internship evaluations in order to help the NPS understand the participants' backgrounds, experiences, and to improve the program and interns' experiences.

Note: The following program evaluations show data for the SIP Intern participants.

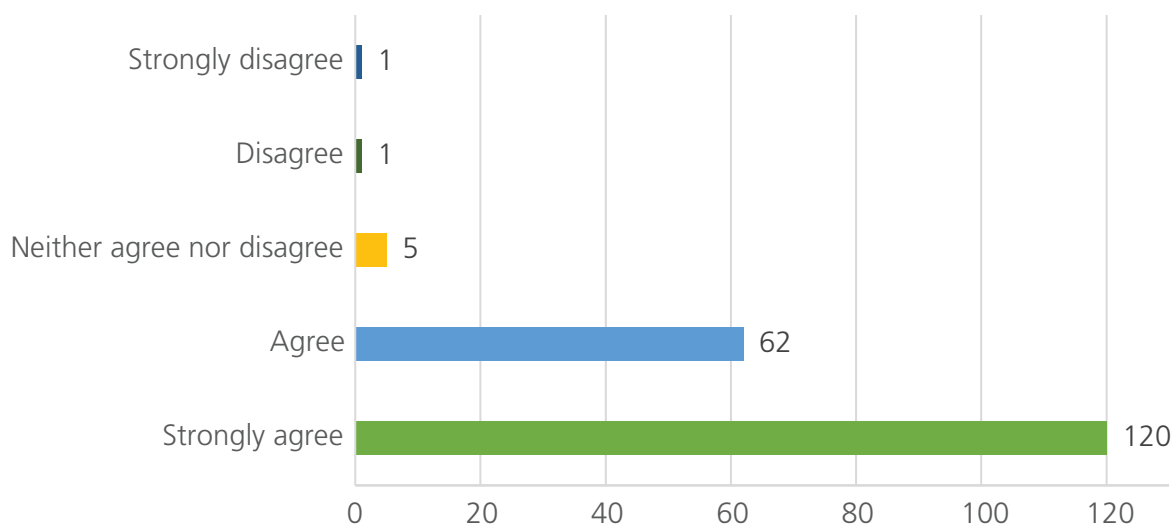
## *How did you first hear about this internship?*

Twenty-nine percent of SIP Interns learned about the program through The Geological Society of America website, emails, and annual meeting. A portion of the SIP Interns learned about the program from their college/professor (21%) or word of mouth from previous interns or NPS staff (19%). Other sources include the NPS website, university and conservation related job boards, and social media posts.



*Please assess the quality of the internship and how well it matched your expectations. >> The position helped me build skills and gain experience to become a competent professional in my field.*

SIP Interns were asked to rate the quality of their internship based on the skills and experience they gained to help them in their professional field. A majority of the interns "Agreed" or "Strongly Agreed" with that statement.

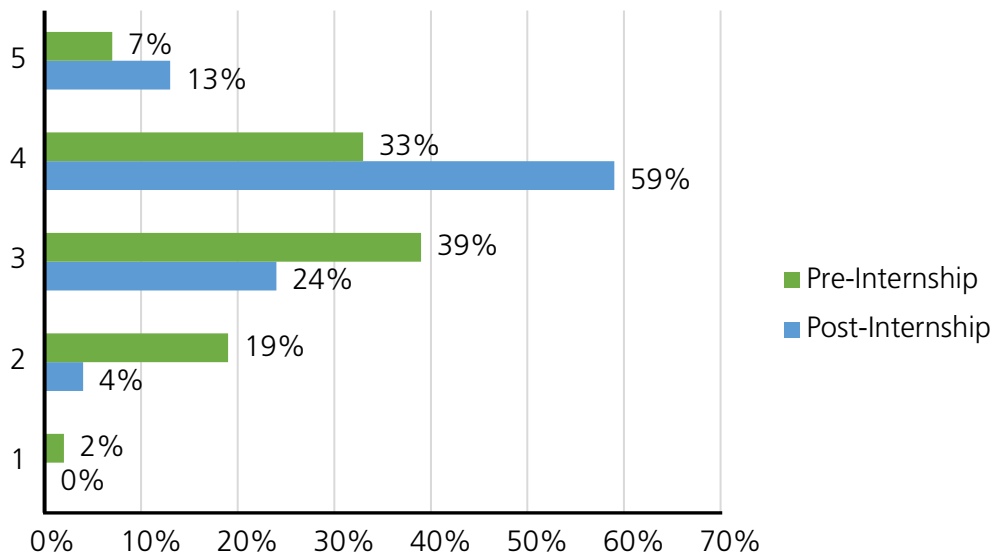


## Knowledge and Interest in Federal Careers

Participants were asked to report their familiarity of job opportunities available in government and their interest in pursuing a career with a state or federal public land agency in both the pre-internship and post-internship surveys.

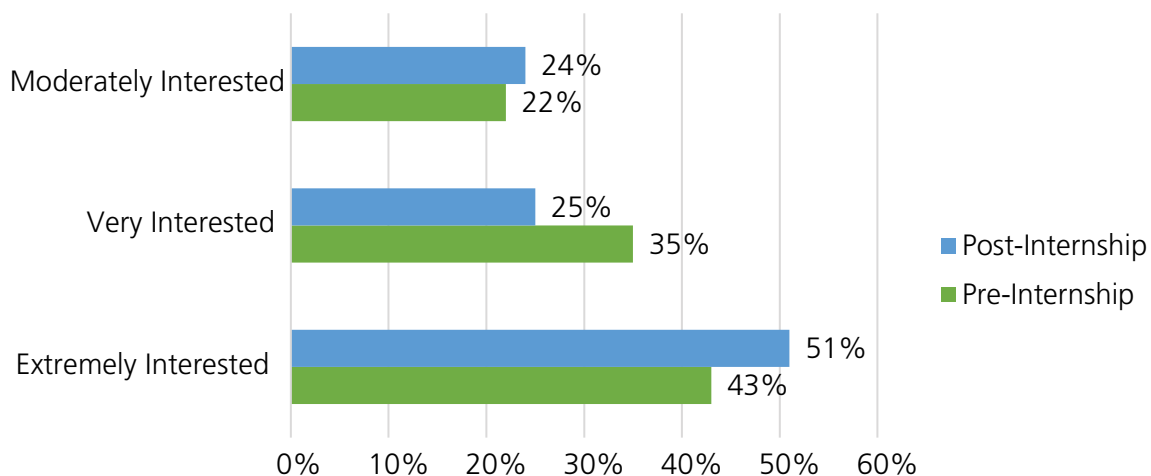
### *SIP Interns understanding of job opportunities available in Federal, State, & Local Government Agencies pre-internship and post-internship*

Ratings were on a scale of one through five, with one representing a poor understanding and five representing a high understanding. There was a notable difference (32%) in the percentage of Interns that reported an understanding of government job opportunities at the four or five level post-internship.



### *SIP Interns interest in pursuing a career with state or federal public land agencies pre-internship and post-internship*

The percentage of participants who responded that they were extremely interested to pursue a career with state or federal public land agencies rose by 8% after the completion of internships.



# Participant Quotes

## Please describe your favorite aspect of your experience as a SIP participant.

- “My favorite aspect was getting to do hands-on work with the resources protected by the park. It felt very special and gave me insight into the history of the military park, as well as professional experience handling delicate paleontological specimens. Since the land is so carefully preserved, I was able to get a glimpse into areas that very few get to see, which was incredibly exciting to me.”
- “I enjoyed the community and experience that I normally would not have been able to access through another internship. I think being a SIP participant was a really unique way to access the federal government and be introduced to it in a “real” way. This experience is something you can’t achieve with other internships or in other sectors of the profession.”
- “I have very much enjoyed the independence that I’ve been given during my internship. My mentor and colleagues have always provided help where needed, but I was able to engage with the difficult questions, find solutions, and present a final product which I truly helped shape. I feel that I made valuable contributions intellectually, as well as providing an extra set of hands to just get the work done.”

## Do you feel as if your project work made a contribution towards the mission of the National Park Service? How so or why not?

- “I definitely feel that my work made a contribution to the NPS mission because water is the lifeblood of all the natural resources that exist in our national parks and getting to contribute to the monitoring of water in the desert is vital to understanding how our natural resources may fare currently and in the future. We also can provide valuable information for other natural resources professionals to make the best management decisions in their conservation practices. We also help preserve our parks for future generations.”
- “Yes! I think that my work both in field trips and distance learning connected more youth to Death Valley, hopefully planting the seed of stewardship in the next generation. To preserve and protect these places, people need to care about them, and that can’t happen without fostering good relationships with the surrounding communities.”

- “Absolutely. I have helped to repair damage to the natural resources by managing a reintroduced species and impacted the community’s view of said species which holds an important place in the culture of the area. I have been able to make visitors smile and achieve - sometimes lifelong - goals of seeing California Condors. The most important thing to me is inspiring visitors to go home having learned something about birds or parks with the goal of spreading the ideas of wildlife conservation of our resources to their friends, family and beyond. Thinking about it makes me incredibly proud to have been a part of it, and I can’t wait to continue.”

## If you could make one recommendation to the Director of the National Park Service on how the NPS can better connect with young people/adults what would you say?

- “Altogether, I believe that the National Parks need to be more accessible for all. Usually, when people hear this, they think of reducing fees... But I think that the parks could do better to provide more community spaces. More and better kept picnic areas, pleasure grounds, and spaces to gather while enjoying nature are absolutely necessary.”
- “Programs like SIP Internship and other positions help young adults enter the federal workforce and care about their public lands. These federal jobs are important to maintain these natural places and parks. More money, opportunities and housing should be invested into these roles to continue to enhance and create diversity for government entities that reflect the general population. National Parks are for everyone and that needs to be reflected in the workforce as well.”

## Why are the national parks important to you?

- “I think national parks have the potential to be equalizing forces; I believe that parks are for everyone and that they can be made accessible to everyone easily. I think that parks help introduce people who are not as familiar with science to nature and scientific questions in a unique and unimposing way. I also think parks have the potential to be conduits for indigenous and local knowledge and for gathering support for conservation of lands not only for the purpose of public enjoyment, but also out of cultural respect.”

# Professional Development

## Webinar Series

A year-round professional development webinar series was piloted for all SIP participants. This series provided resources and information on a variety of topics related to professional development. Each webinar included guest hosts such as NPS, USFWS and USGS personnel, SIP Alumni, and external scientists to facilitate. Webinars were recorded and are available to view on the SIP YouTube Playlist.

| Date              | Webinar Title                                                            |
|-------------------|--------------------------------------------------------------------------|
| November 9, 2021  | Applying to Grad School                                                  |
| January 6, 2022   | Becoming a SIP intern                                                    |
| January 11, 2022  | Publishing your research: Inside the head of a journal editor            |
| February 17, 2022 | Science Communication: What's the best way to reach your audience        |
| April 12, 2022    | Becoming a DEIJ Leader: Where are we, where do we need to go?            |
| May 12, 2022      | Workplace Harassment Training                                            |
| May 26, 2022      | Public Lands Corps Hiring Authority                                      |
| June 16, 2022     | Stepping Stones to a Career in the NPS                                   |
| June 23, 2022     | Building Federal Resume/USAJobs Workshop                                 |
| July 14, 2022     | Natural Resource Management: Inside look at a park's everyday challenges |
| July 21, 2022     | Allyship Training                                                        |
| July 28, 2022     | Presenting your research at a professional conference                    |
| August 11, 2022   | Alumni Mixer: Life after your internship                                 |

## Ecological Society of America-Canadian Society for Ecology and Evolution Annual Meeting

Thirteen SIP Fellows elected to participate in the 2022 ESA-CSEE Annual Meeting in Montreal, Canada. The SIP Fellows orally presented their findings, recommendations, and experiences to the greater scientific community during two Social Sessions at the Annual Meeting. Additionally, Andrea Salazar, a 2021 SIP Fellow alumni was brought to the meeting and conducted a poster presentation for their work from the previous year. Annual meetings held by professional societies offer content-rich programs allowing for SIP Fellows to participate in numerous session types that are directly related to their own professional interests.

## Geological Society of America Connects Annual Conference

Nineteen SIP Interns and alumni presented at the 2022 GSA Connects Annual Meeting in Denver, Colorado. The GSA annual meeting provides access to a suite of professional development programming designed to help students and early career professionals get the tools, confidence, and connections they need to advance their STEM and geoscience careers. SIP alumni and SIP supporters at GSA Connects also networked professionally through the annual New Terranes alumni reception for SIP Interns, GSA Congressional Science Fellows, the GSA Geology & Society Division, and GeoCorps™ America.



Group photo of the SIP Fellows and ESA staff Jessica Johnston at the ESA Annual Meeting (NPS Photo)

# SIP Fellows

## Program Summary

SIP Fellows is a competitive internship program for high-achieving upper-level undergraduate and graduate students to conduct rigorous and innovative projects that address novel management needs related to natural resources, park infrastructure, visitor use, and interpretation and education in NPS park and program offices. SIP Fellows is an approved Direct Hire Authority – Resource Assistant program. Fellows who successfully complete the internship and the requirements of their academic degree program are eligible to be hired without competition into permanent positions in select land agencies within the U.S. Department of Interior.

## Program Objectives

- Students gain valuable work experience, develop leadership skills, and explore career paths in the Department of the Interior.
- NPS parks and programs utilize innovative, cutting-edge science to address management challenges in national parks.
- NPS builds the next generation of leaders and a more diverse professional workforce through participation in the Direct Hire Authority for Resource Assistant Internship Programs.



(Left) SIP Fellow Brenton Wilder performing initial tests on the Campbell Scientific data logger and getting excited about a working connection in Cabrillo National Monument, CA. (Center) SIP Fellow Nicole Stevens SCUBA diving with a green turtle in Buck Island National Monument, US VI. (Right) SIP Fellow Chris Poling standing between a flooded lock along the OEC canal in Cuyahoga Valley National Park, OH. (NPS Photos)

## Science Communication Engagement

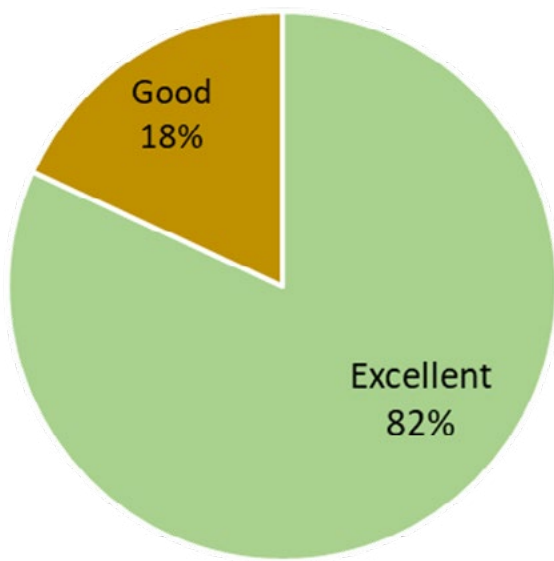
Throughout the summer the SIP Fellow's participated in a series of science communication engagement activities including writing blog posts, developing Instagram posts, and creating TikTok videos of their experience. These frequent opportunities to engage in social media posts allowed other interns, their supervisors/mentors, and the public to see their science all while living and working at a National Park. This fall, after successful completion of the program, the SIP Fellows will serve as guest hosts on ESA's Water Cooler Chats (WCC). The Water Cooler Chats are informal Zoom meetings that provide a platform for scientists and educators to discuss their recent work, educate the public, and share information with each other during an open discussion webinar. The SIP Fellows WCC series will be held from September 2022 – January 2023 and provides the interns an opportunity to get their science out to the public, while also promoting ESA's educational programs, and encouraging future students to apply. In addition to webinars and social media, the SIP Fellows participated in a GroupMe chat to increase program wide communication and to help build a cohort mentality among the group.

## SIP Fellow Program Evaluations

SIP Fellows were asked to complete a post-internship evaluation to help the NPS improve the program and intern experience.

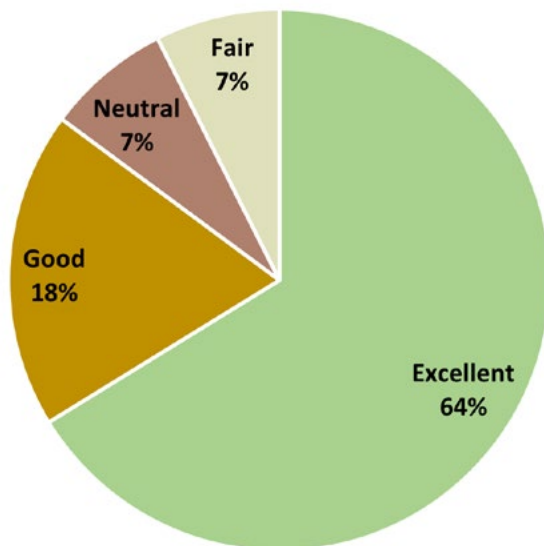
### *Quality of Position Design*

Positions were designed in advance by the supervisors/mentors. Every Fellow rated their position design as either "excellent" or "good." Note: There were zero responses for "Poor", "Fair" or "Neutral"



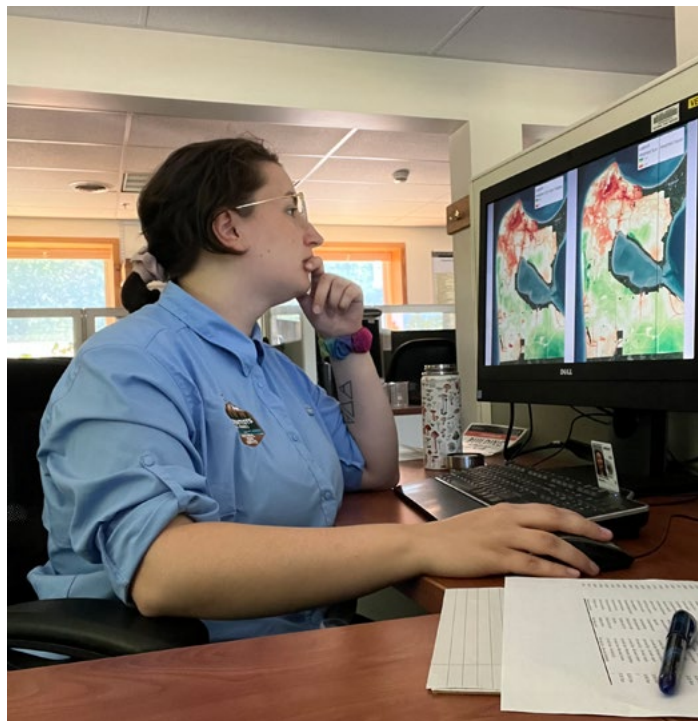
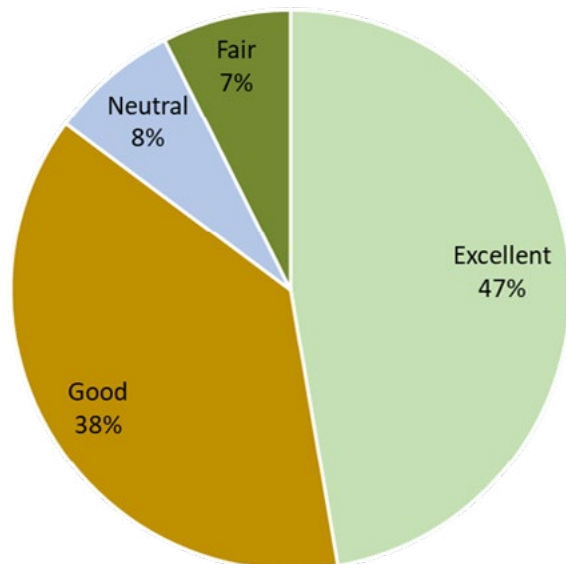
### *Mentoring Goals*

SIP Fellows and their supervisors/mentors outlined different ways in which to build a mentoring relationship. Eighty-two percent of Fellows responded that their relations with their supervisor/mentor was "Excellent" or "Good". Fourteen percent responded that their relationship was "Neutral" or "Fair". Note: There were zero responses for "Poor."



### *Overall Internship Experience*

Eighty-five percent of SIP Fellows surveyed reported a "Good" or "Excellent" overall experience. Fifteen percent of Fellows reported either "Neutral" or "Fair". Note: There were zero responses for "Poor"



SIP Fellow Meagan Fairfield-Peak working on a computer, comparing two maps that were the outputs of the GIS model in Sleeping Bear Dunes National Lakeshore, MI. (NPS Photo)

## SIP Fellows Bios



### Alex Ramirez Landaverde

*Science Communication Assistant, Everglades National Park*

I am currently pursuing a degree in Biological Sciences/Environmental sciences with a minor in Psychology at Arkansas State University. I was born in Jalpan de Serra Queretaro, one of the most important biosphere reserves of Mexico. Having spent the first decade of my life in a natural reserve exposed me to the beauty of nature and conservation. I have memories of swimming with my friends in unpolluted waters, taking hikes with my grandma, enjoying the birds singing, and other moments that marked my love for the natural world. I am often times asked if I even like my career. With certainty I can look back at my memories and remember those feelings when I experience nature, and without doubt I can answer such questions; yes, I love my career, yes, I love nature, and yes, I will dedicate my entire self so that many more generations to come can experience beautiful encounters with Mother Earth.



### Allyson Mars

*Hydrology Assistant, Greater Yellowstone Network*

I am a Master's student at Utah State University studying stream ecology and biogeochemistry. My thesis project focuses on identifying drivers of greenhouse gas emissions from natural and man-made streams. This summer, I worked in Bozeman, Montana with the Greater Yellowstone Inventory and Monitoring Network (GRYN). I analyzed long-term monitoring data to inform park managers about important water quality trends at one of these locations. This experience required me to use my aquatic ecology skills to help mitigate natural resource issues facing our public lands. In my free time, you can usually catch me outdoors exploring Utah through skiing, trail running, and camping across the state.



### Benjamin Harper

*Planning Assistant, Denver Service Center*

I am currently a master's student in the Climate and Society program at Columbia University. I am passionate about creating equitable climate policy and using climate information to build resiliency in communities and ecosystems. I have a background in water management and salmon conservation in rural Northern California, and I have also worked with the city of Oakland, California on its Equitable Climate Action Plan. This summer I worked with the Denver Service Planning Center to integrate climate change into parks planning processes, helping to assess vulnerabilities to climate impacts in parks and implement management strategies. I also have an interest in climate justice, and helped integrate justice, equity, diversity, and inclusion into parks planning frameworks.



### Elizabeth Rush

*Ecology Assistant, Yosemite National Park*

In 2020, I completed my bachelor's degree in Environmental Science with a focus on Environmental Health from George Mason University. I am currently a graduate student studying Conservation Medicine and Planetary Health at George Mason University, where my studies focus on the intersection of human, animal, and environmental health. I am interested in examining the role of biodiversity in disease emergence, but I also have a passion for insect community ecology and pollinator conservation.



## Brenton Wilder

*Natural Resource Management Assistant, Cabrillo National Monument*

I'm a PhD student in the Department of Geosciences at Boise State University where I focus on quantifying changes to seasonal snowpack due to anthropogenic global warming and disturbances such as severe, high elevation wildfires in forested ecosystems. In my research I use a combination of airborne/helicopter lidar, physics-based modeling, and field spectroscopy to answer research questions relevant for downstream communities and ecosystems. As a Scientist in Parks Fellow at the Cabrillo National Monument, I focused on a totally different form of precipitation – fog! As a Fellow, I helped install weather cameras, meteorological stations, and leaf wetness sensors to get a better idea of the role fog plays in plant phenology, especially during the warm spring and summer months when rainfall is sparse.



## Isabel McIntyre

*Night Skies Assistant, Lyndon B. Johnson National Historic Park*

I am a recent graduate of Mount Holyoke College, where I double majored in Astronomy and Biological Sciences. Throughout my time studying these subjects, I have had opportunities to conduct research ranging from identifying genetic markers associated with root traits in oat plants to studying the hot dust content of distant galaxies! This fall, I will be attending Arizona State University to pursue my PhD in Astrophysics and continue studying galaxy evolution. One of the most exciting weeks of my life was going on an observing run at the McDonald Observatory in West Texas, where the sky was darker than I had ever seen before and I could see countless stars and the band of the Milky Way.



## Jalyn Gearries

*Biology Assistant, Grand Canyon National Park*

My name is Jalyn Gearries and I am halfway through my MS of Climate Science and Solutions at Northern Arizona University. I am concurrently pursuing two graduate certificates in Greenhouse Gas Accounting and Science Communication. My program is a non-thesis Professional Science Master's Program (PSM), which allows me to focus a lot of my time on developing a wide array of knowledge on climate and environmental science. I am primarily interested in plant science and land management science, which brought me to apply for the Biology Assistant position at the Grand Canyon National Park. Not only do I have a deep-rooted passion for the park, as it is only about an hour and a half from my home of Flagstaff, AZ, but I am also passionate about the National Park Service itself. of my life was going on an observing run at the McDonald Observatory in West Texas, where the sky was darker than I had ever seen before and I could see countless stars and the band of the Milky Way.



## Laura Hancock

*Biology Assistant, First State National Historical Park*

I am Laura Hancock, a PhD candidate within the Organismic and Evolutionary Biology Program at the University of Massachusetts Amherst (UMass). At UMass, my research focuses on understanding the spatial patterns of wildlife in New England and the western U.S.A. — and understanding what driving processes create the patterns we see. I am especially passionate about the conservation of bats and helping the public to understand the fascinating biology behind these captivating creatures. In my non-research time, I am passionate about undergraduate mentoring, pushing for inclusive higher education policies, and joining the languages & worlds of scientific research and federal policy development.



### Chris Poling

*Natural Resource Management Assistant, Cuyahoga Valley National Park*

I am a Masters student at Kent State University majoring in Environmental Biology. My main career focus is botany and native plant conservation. In my free time I love scouring state and national forests for state listed plant species and tending to my native plant gardens back home. I'm basically a massive professional plant nerd! Having grown up less than fifteen minutes from the Cuyahoga Valley National Park (CVNP), my early life was full of wonderment and curiosity about the natural world. I consider CVNP to be the very place which fostered my love of nature and I am honored to that I got the opportunity to survey wetlands along that very canal system. During my surveys of the canals, I collected data on various ecological aspects of the wetlands that occur, such as their borders, hydrological influences, habitat type and of course my favorite thing, plants.



### MacKenzie Conant

*Natural Resource Management Assistant, Rocky Mountain National Park*

The who, what, when, where, and why components of visitation to the National Parks are constantly evolving. Research into these baselines and trends are essential to protecting the mission of the National Park Service. This past summer I served as the field lead for Rocky Mountain National Park's Trail Encounter Project, working to better understand visitors' quality of solitude while in the backcountry. My passion lies in outdoor recreation facilitation and visitor-use management. I consider myself an avid outdoor recreationalist, hiking, and biking in my free time between research and classes as I pursue my M.S. from the University of Maine in Forest Resources with a specialization in Conservation Science. I am based in the Human Dimensions of Natural Resources lab where I conduct both qualitative and quantitative research.



### Meagan Fairfield-Peak

*GIS Assistant, Sleeping Bear Dunes National Lakeshore*

I am a Geography and Environment Systems graduate student from the University of Maryland Baltimore County. Before graduate school, I received my bachelor's in Environmental Science from Harrisburg University of Science and Technology and joined the workforce after graduation. With extensive experience in GIS as a geoenvironmental technician, I am interested in forest restoration monitoring and overall landscape management decision support, which will be the main theme of my thesis research. I enjoy hiking and playing disc golf in my free time, but a game with family and friends is always a great time!



### Motusaga Vaeoso

*Natural Resource Management Assistant, War in the Pacific National Historical Park*

Talofa lava, I am a graduate student at the University of Guam pursuing my Master's Degree in Biology with an emphasis in marine biology. After receiving a B.Sc. in Biology from the Chaminade University of Honolulu, I decided to work for the American Samoa Government with the Department of Marine and Wildlife Resources and Coral Reef Advisory Group for seven years. I served my community in various capacities, including conducting annual coral reef monitoring surveys, managing related research projects, coordinating education and outreach opportunities for diverse audiences, and facilitating climate resiliency planning with local communities. My passion and respect for the marine world stem from growing up on a tiny island in the south pacific, American Samoa, and it deepened when I discovered underwater photography.



## Nicole Stevens

*Natural Resource Management Assistant, Christiansted National Historical Site*

I have always been called to nature, especially to all the diverse critters that run, swim, crawl, and hop across our planet. I completed my undergraduate degrees in biology and earth science from Johns Hopkins University where I studied fish communities in Panama, geological formations and fossils from Nevada, primate dentition from museum collections, and performed dietary analysis using stable isotopes of the Turks and Caicos Rock Iguana. I continue to work on Caribbean lizards through my PhD program in Ecology and Evolutionary Biology at Texas A&M University. I am incredibly passionate about wildlife, and I am excited to get more experience with hands-on conservation work and outreach projects. In my free time, I enjoy hiking, herping (looking for reptiles and amphibians), and playing with my guinea pigs.



## Rowan Fay

*Ecology Assistant, Shenandoah National Park*

My name is Rowan Fay, and I am a third-year at Oregon State University. I am double majoring in Ecological Engineering and Sustainability and am originally from Astoria, Oregon. I am currently involved in undergraduate research, working with the OSU Extension of Fisheries and Wildlife to update out-of-print literature on species endemic to the Pacific Northwest. I spent this past summer as a volunteer research ecologist with Operation Wallacea on the Yucatan Peninsula of Mexico, specifically in the Calakmul Biosphere Reserve and Akumal Bay. Primarily, I studied the effects of severe flooding and drought periods on water sources within the reserve and their implications on the distribution of large mammals, herpetofauna, bats, birds, and insects throughout the reserve. In Akumal Bay, I studied the effects of tourism on the bay ecosystem. Our research paved the way for new legislation to protect corals, seagrasses, and sea turtles. I am very passionate about conservation and restoration and hope to someday work for the Natural Resources Conservation Service on river and stream restoration projects.



SIP Fellow Isabel McIntyre pointing up at the night stars in Lyndon B. Johnson National Historic Park, TX. (NPS Photo)

# Financial Contributions

## Special Thanks to Sally and Bob Newcomb

Sally and Bob Newcomb began supporting the Geoscientists-in-the-Parks Program (now SIP) in 2007 through their partnership with the Geological Society of America Foundation (GSAF). They hoped to encourage aspiring scientists to grow and challenge themselves by pursuing once-in-a-lifetime work experiences in the unique setting of Denali National Park and Preserve, Alaska.

**“Keeping up with the interns, reading their reports, going to their papers and posters at GSA meetings, all have been very rewarding as well as just plain fun, giving us a view of the world we could never otherwise have, as well as introducing us to a series of talented and dedicated young people.”**

**- Sally Newcomb**

The program warmly recognizes Sally and Bob Newcomb for their support of SIP opportunities that help the next generation of stewards meet today's challenges. The Newcombs have partnered with GSAF to support 48 SIPs at Denali National Park and Preserve over the last 15 years.

## Park Associations

In FY22, eight park associations contributed to SIP projects throughout the service. The SIP program would like to thank the Grand Canyon Conservancy, Friends of the Florissant Fossil Beds, Isle Royale & Keweenaw Parks Association, Shenandoah National Park Trust, Protectors of Tule Springs, Zion Forever Project, Alaska Geographic, and Badlands Natural History Association.

## Conclusion



SIP Intern Scott Kottka writing labels for identified fossil specimens at Hagerman Fossil Beds, ID (NPS Photo).

The Scientists in Parks Program had a successful year managing 253 interns in 152 parks and offices in every DOI region. Scientists in Parks participants provided demonstratable benefits to NPS units, program participants, and the public by completing critical natural resource management needs in parks. They also received benefits of a professional development webinar series, potential qualifying hours toward the Public Lands Corps Non-Competitive Hiring Authority or the Direct Hire Authority, and either a career workshop, conference experience, or education award stipend.

The SIP program and park units promote the stewardship of public lands and encourage the next generation of park leaders. Funding from the NPS Natural Resource Stewardship and Science Directorate, regions, parks, networks, central offices, park associations, and the substantial cost share by the program partners has leveraged NPS funding to complete highly critical science positions for the NPS, training for America's youth, and furthering the NPS mission. These internship opportunities will help grow a stronger and more diverse STEM workforce in the NPS and throughout the American workforce.

The program implemented, and continues to develop, administrative time-savers for both SIP administrators and supervisors/mentors. SIP is also improving hiring authority messaging and professional development resources to reach our goal of hiring more participants into the federal public land agencies.

# Acknowledgements

The National Park Service would like to acknowledge the contributions of the 253 outstanding Scientists in Parks participants! Every SIP provided valuable research, analyses, and essential natural resource science work that furthers the goals and objectives of the NPS and grows each participant professionally.

NPS is also grateful for the wonderful supervisors and mentors who provided essential support for the program by identifying positions, overseeing the participant's work, ensuring position success, and providing mentoring and guidance to help the participants grow technically and professionally.

Park associations, parks, NPS Directorates, networks, and regions provided funding for SIP positions throughout the Service. This funding greatly increased the park's ability to bring participants to parks and central offices while gaining valuable work experience.

The NPS Youth Programs Division provided valuable input and guidance to help improve and grow the SIP Program. Special thanks to Youth Programs Division Chief, George McDonald, for his continued support and feedback on the program and Ernestine White for her invaluable knowledge and dedication in supporting the internship programs.

The SIP Program would like to thank Ray Sauvajot, Guy Adema, Stephanie Gaswirth, and Harold Pranger with the Natural Resource Stewardship and Science Directorate, for their ongoing support of the program.

The SIP Program would like to recognize their financial and administrative support for the support the future

generation of park stewards. Stuart Moll, Jennifer Strona, Jeremy Stadler and their team for working patiently with us to get the SIP Portal running and fix all the unforeseen needs that accumulated once it was active.

GSA provided support advertising and recruiting candidates to help the NPS find the best and brightest Interns and managed the program's online application system. The NPS sincerely appreciates the great work of Matt Dawson and Lesley Petrie.

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SIP Intern Daniel Brogde using radio telemetry equipment to track California Condors in the High Peaks at Pinnacles National Park, CA. (NPS Photo)



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