





MOSAICS IN SCIENCE DIVERSITY Internship Program

2019 - PROJECT DESCRIPTION

NPS UNIT: INDIANA DUNES NATIONAL LAKESHORE - GREAT LAKES RESEARCH AND

PD #: 2019507

EDUCATION CENTER

Position Title: Biology Assistant

Position Type: DHA Resource Assistant

Primary natural resource discipline: Biological resources

Project keywords: fieldwork, entomology, pollinators, education, restoration ecology, taxonomy, curatorial,

survey

Park or Program Website: https://www.nps.gov/rlc/greatlakes/index.htm

Location: Porter, Indiana

DIRECT HIRE AUTHORITY RESOURCE ASSISTANT OVERVIEW

The Mosaics in Science Diversity Program is focused on persons that are under-represented in STEM fields. Students and recent graduates that are African American, Latino/Hispanic, Asian, Pacific Islander, and Native American are encouraged to apply for these internships. In order to be eligible for a DHA-RA Internship, participants must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") and currently enrolled in an undergraduate, graduate, or PhD degree program at an accredited institution of higher education during the summer internship. Persons enrolled in a certificate program do not qualify for DHA positions.

The DHA Resource Assistant Internship (DHA-RA) is a unique internship opportunity within the Department of the Interior (DOI). The objective is to build a pathway to employment in the DOI for exemplary students in higher education. DHA-RA interns will apply natural resource science expertise to NPS management and build a network with federal employees throughout the internship. The internships are designed to develop the participant's technical and creative thinking abilities, leadership skills, and problem-solving capabilities. DHA-RA interns will receive a weekly stipend of \$480, park-provided housing or a housing allowance, and paid travel expenses. DHA-RA interns who successfully complete the internship requirements receive a 2-year eligibility period starting from the date of their degree during which they can be non-competitively hired by the DOI. Successful completion of the internship does not guarantee that the participant will be hired into a federal position.

PROJECT DESCRIPTION AND WORK PRODUCTS

Position Description: Goals of this project are twofold: develop pollinator education materials for Great Lakes park units and collect data on native pollinator diversity and abundance at Indiana Dunes National Lakeshore. The Biologist Assistant/Pollinator Steward intern will participate in both initiatives. The intern will work with Great Lakes Research and Education Center (GLREC) staff and park interpreters to develop programs and materials to educate the public about the ecosystem benefits provided by native bees, and how they can support native pollinators. Additionally, the intern will work with the GLREC research coordinator and U.S. Geological Survey scientists to collect data for a pollinator research project in the park and provide management recommendations. Specifically, the intern will be tasked with 1) organizing a citizen science "Bee Blitz" activity to assist U.S. Fish and Wildlife efforts for locating populations of the endangered Rusty Patched bumble bee; 2) reviewing existing BMPs and adapting them for Great Lakes park units; 3) developing educational materials,

interpretive programs, and social media content on native pollinators; 4) conducting field work using standardized protocol; and 5) processing samples and preparing specimens for identification by experts.

This position is ideal for a highly motivated student with an interest in biodiversity issues, entomology, conservation research, and science communication.

This position is offered through the National Park Service's Mosaics in Science Internship Program in partnership with Environment for the Americas and Greening Youth Foundation.

Work Products: The intern will collect and process insect specimen data as part of a research project to better understand the native pollinator community at Indiana Dunes. Furthermore, information on the diversity, distribution, and abundances of native bees will help the park assess habitat quality and inform active management strategies currently underway to promote native bee habitat. The intern will produce BMP documents, educational materials, interpretive programs, and social media content on native pollinators. Park staff and volunteer citizen scientists will receive training on how to contribute valuable data on the distribution of native bees throughout the park by participating in a "Bee Blitz". Educators will learn about native pollinators and be provided with educational materials that can be used in the classroom.

QUALIFICATIONS

The intern is required to be currently working toward an undergraduate or graduate degree in general biology, natural resources, environmental science, agriculture, or a related field and have at least a 3.0 GPA. The ideal candidate will have an interest in environmental education and be enthusiastic about working outdoors and collecting data. A willingness to work with insects and conduct field surveys is essential. The intern should demonstrate the ability to work well in a team as well as independently. Desired qualifications include a course or background in entomology, and strong oral and written communication skills.

The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") between the ages of 18 and 35 years old. Prior to starting this position a government security background clearance will be required.

VEHICLE/DRIVER'S LICENSE REQUIREMENTS

Applicant must have a valid driver's license and a good driving record. The intern will need to carpool with other seasonal staff or use a personal vehicle to commute between housing and the worksite. The intern will need to occasionally drive a government vehicle to access field sites.

HOUSING

For interns living outside commuting distance, park housing is provided at no cost to the participant. Housing is available in shared lodging with two months advanced notice. Park houses are furnished and have wifi, however tenants will need to provide their own towels and bedding. Interns will have a private bedroom, but will share bathroom, kitchen facilities, and common areas with other staff, some of whom may be of a different gender. No pets are allowed. There is also off site rental housing in the nearby communities of Porter and Chesterton, but the participant would be responsible for all cost incurred.

INTERNSHIP START/END DATES

Start Date: 5/20/2019 **End Date**: 8/8/2019

Eleven weeks of the internship will be in the park. A mandatory Career Workshop will be held in Washington DC

from August 4 – 8, 2019. **Are these dates flexible?** Yes

STIPEND PAYMENT

\$5,760, all travel and housing costs will be covered

PHYSICAL/NATURAL & WORK ENVIRONMENT

Physical/Natural Environment: Indiana Dunes National Lakeshore is located at the southern tip of Lake Michigan approximately 50-60 miles southeast of Chicago, Illinois. Small towns and resort communities on the beaches of

Lake Michigan and farms interspersed with large tracts of woodlands and wetlands surround the Lakeshore. An abundance of cultural and recreational activities are available year-round. The area has weather typical of the Midwest, with temperatures normally ranging from 0 degrees in the winter to 90 degrees in the summer.

Work Environment: The GLREC has an office and laboratory space at the Indiana Dunes National Lakeshore headquarters. The USGS has a separate facility approximately 5 miles east of the park headquarters. The intern will be expected to work independently with basic supervision by the mentors. Work is performed both indoors and outdoors in all types of weather. Assignments may be performed in potentially hazardous areas including steep slopes, rocky terrain, swamps, and forests. Field work includes potential exposure to extreme weather conditions, poisonous plants, biting insects, ticks, and wild animals. The park will provide safety training in use of facilities and equipment. The intern will be provided with tick prevention guidelines and equipment. USGS or NPS will provide DOI computer security training. The intern will have access to USGS and NPS computers after security training is obtained.

MENTORING AND LEARNING GOALS

Mentoring: The intern will work closely with the GLREC staff, and collaborate with USGS scientists, park interpreters, and natural resource managers. The intern will be encouraged to participate in other natural resource projects and contribute to a variety of public outreach programs such as the Indiana Master Naturalist program, and other citizen scientist projects. Additionally, there will be networking opportunities with scientists from the Field Museum, local universities, environmental organizations, the Dunes Learning Center, educators, and the regional conservation consortiums, Chicago Wilderness and Indiana Dunes Ecosystem Alliance. Through job shadowing and other interactions, the intern can explore various career options in both science and education fields. The mentors will provide assistance with USA Jobs, resume writing, and information about NPS science careers. There are numerous informal park activities the intern may participate in including brown bag lunches, employee picnics, and guided hikes. The intern will be able to participate in training opportunities for park staff. Orientation and safety training will be provided with other summer interns and seasonal staff at the park. The GLREC research coordinator will provide oversight for the project. The supervisor/mentor will develop a detailed workplan and Leadership Development and Mentoring Plan in collaboration with the selected intern. Learning Goals: The intern will gain hands on experience in research and science communication. By participating in both research and educational activities, the intern will be able to explore a variety of career options and develop skills important to both fields. The intern will gain valuable communication skills by preparing and presenting programs on native pollinators to park staff, educators, citizen scientists, and the general public in both professional and informal settings. The intern will receive training in research methods including standard sampling protocols for conducting bee and butterfly surveys, specimen processing, basic insect identification and taxonomy, and data management. Through interactions with seasonal and permanent park staff, the intern will learn about NPS culture. The intern will develop leadership skills valued by federal agencies and other employers.

LEADERSHIP DEVELOPMENT

The intern will have opportunity to develop the leadership skills needed to work in a collaborative environment, navigate complex issues, and execute and complete projects. This project will allow the intern to hone their interpersonal skills, communicate and listen to multiple stakeholders, solve problems, and demonstrate flexibility/adaptability when encountering unexpected challenges. GLREC mentors will support and guide the intern as they cultivate their research skills and learn how to communicate science effectively to management and the general public. The intern will be encouraged to be proactive, ask questions and seek new information from others, think critically, and work both independently and collaboratively.

PRESENTING PROJECT RESULTS

The intern will prepare a technical report based on project results that will include recommendations for management. They will also have the opportunity to present their project to park staff and other conservation professionals during a "brown bag" lunch. Data resulting from the intern's work may also culminate in publication in a peer reviewed journal.