

## **POSITION ANNOUNCEMENT:**

### **GEORGE MELENDEZ WRIGHT INITIATIVE FOR YOUNG LEADERS IN CLIMATE CHANGE**

The National Park Service (NPS) is pleased to announce the *George Melendez Wright Initiative for Young Leaders in Climate Change* Initiative (YLCC) to provide a pathway for exemplary students in higher education (graduate students and advanced undergraduate students) to apply their skills and ideas to park-based challenges and solutions. The Initiative offers 12-week paid internships which allow students to gain valuable work experience, explore career options, and develop leadership skills through mentorship and guidance while helping to advance the NPS response to climate change. Successful students may be eligible for non-competitive hire into federal positions for which they qualify following completion of all academic requirements.

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### **Valuation of National Park Service Landscapes for Climate Change Sensitivity and Adaptation**

Indiana Dunes National Lakeshore  
Porter, IN 46304

Planning for the future in national parks is needed for landscape scale restoration, fire management, and conservation and connectivity to support biodiversity as climate change continues to impact both natural and cultural resources. The intern will complete assessment of data by acquiring, processing, and analyzing necessary satellite imagery, developing a sensitivity measure based on primary productivity to weather fluctuations and climate, and developing maps showing the spatial pattern of climate sensitivity in the five parks (APIS, INDU, ISRO, PIRO, SLBE). Evaluation of primary productivity in response to temperature and precipitation variation by habitat will be one measure of climate change impacts.

#### **PROJECT DESCRIPTION**

The intern will complete assessment of productivity and sensitivity by acquiring, processing, and analyzing necessary satellite imagery, developing a measure of resilience based on sensitivity of primary productivity to fluctuations in weather and climate and developing maps showing the spatial pattern of sensitivity within and adjacent to the five parks (APIS, INDU, ISRO, PIRO, SLBE). The work will contribute to the larger project that will integrate five higher levels of habitat value to provide five parks with an improved framework and broader perspective for basing management decisions for communities threatened by climate change: 1) sensitivity to change, 2) productivity, 3) vulnerability to species loss, 4) richness, and 5) spatial context.

Required tasks:

1. Knowledge of and use of mapping programs such as ARCGIS;
2. Assess biological data acquired from five parks located along a latitudinal gradient;

3. Knowledge of and use of statistical packages such as SPSS and R, as well as Microsoft Office software. Knowledge of statistical modeling techniques is desirable;
4. Ability to communicate orally and in writing and produce reports;
5. Ability to work in outdoor environments and carry equipment up to 40 lbs;
6. Ability to work in a collaborative environment with various DOI staff and scientists.

## **QUALIFICATIONS**

Student should have a strong background in GIS tools for analysis, ecology, and in landscape conservation issues and biological diversity. Student should be able to work flexible hours. Ability to use visual and design programs such as Adobe Suite is a plus for NPS bulletin production.

## **LEADERSHIP DEVELOPMENT**

The DOI staff (primarily NPS and USGS) will mentor the student to assure that he/she obtains guidance in the project implementation. Student should be flexible and able to incorporate critical/creative thinking skills to execute the project. The student will have professional development opportunities to present results at scientific meetings, such as George Wright Society Conference and the Ecological Society of America. The student will obtain skills for future employment associated with resource management in government service.

## **DATES OF POSITION**

Flexible dates between May and October 2015. USGS and GLREC may have funding to extend the project as needed.

## **COMPENSATION**

This initiative supports one student at \$14 / hour for 12 weeks, or 480 hours.

## **HOUSING**

Housing is available at Indiana Dunes National Lakeshore at no cost to the student. Other parks such as SLBE will have free housing available, depending on the time and how long the intern would need lodging. A housing stipend will be provided if necessary.

## **WORK ENVIRONMENT**

The intern will work primarily in the office conducting image processing and GIS analysis, although short field trips to the parks for information gathering will be done. The intern should be able to carry equipment up to 40 lbs in both level and hilly terrain. Equipment will be provided by NPS and USGS for the project. Work site transportation will be provided by NPS and USGS in order to execute the project. Security and safety training will be provided by the NPS.

**CONTACT INFORMATION**

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