



Latino Heritage Internship Program

# LATINO HERITAGE INTERNSHIP PROGRAM

## Diversity Internship Program



<b>NPS UNIT: SAGUARO NATIONAL PARK</b>	<b>PD#: 57</b>
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**Position Title:** Cactus Conservation Biology in Saguaro National Park  
**Position Type:** LHIP Traditional Internship (Public Land Corps)  
**Primary natural resource discipline:** Resource Management  
**Location:** 3693 South Old Spanish Trail, Tucson, AZ 85730

### PROJECT DESCRIPTION

**Position Description:** The goal of this project is to collect baseline data on reproduction in Saguaro National Park’s signature species, the saguaro, as well as the spectacular night-blooming cereus. The LHIP intern will be part of a team that will search for these unusual cacti, photograph their buds and flowers, and collect other data on habitat and environmental conditions. The field work will both tie in with an established climate change monitoring program, and allow for the opportunity to test new ideas.

The saguaro is central to the culture of southern Arizona. The local Tohono O’odham people harvest the fruit in the park each summer, as they have for thousands of years. The park is monitoring the timing of saguaro cactus flowering and the success of fruit. We are finding evidence that flowering is occurring earlier than in the past and is highly dependent on temperature and rainfall. The LHIP intern will work as part of a team, 2-3 days/week, to photograph flowers and fruit of these very tall cacti using a digital camera connected to a very long, telescoping “selfie stick.” They will download, analyze, and interpret the photo data.

The intern will also study the night-blooming cereus. The cereus is a unique cactus with a large underground tuber, an inconspicuous stem that makes it hard to find, and a large, spectacular white flower. The plants bloom at night in early July, often in synchronicity. Saguaro National Park and other local groups celebrate these bloom nights with “Queen of the Night” public events. An inventory of this species in 2020 revealed that they are much more abundant than previously believed. The intern team will create a long-term monitoring program for this plant. They will search for plants in the field; collect data on plant size, buds, flowers, and fruit; analyze data; and help the park stage the 2021 Queen of the Night festival if it is safe to do so.

The intern will also be responsible, with other interns on the team, for creating social media content about these amazing plants, including where our visitors can see them, and steps they can take to help in their conservation.

This position is offered through the National Park Service's Latino Heritage Internship Program in partnership with Environment for the Americas.

### COVID ACCOMMODATIONS

No

## LEARNING GOALS

Our goals are for the intern to be safe, to love coming to work everyday, and to gain skills that will advance their career. Specific learning goals include: 1) Become certified in CPR and Wilderness First Aid; 2) Gain experience in field research and identification of desert plants; 3) Learn data collection skills, including using hand-held computers with GPS; 4) Gain skills in park interpretation and social media; 5) Develop knowledge of NPS mission and history.

The intern will also have opportunities to participate in other natural resource field activities that include amphibian monitoring, spring assessments, forest health monitoring, and wildlife camera surveys, and others.

## MENTORING

This intern will be mentored by park biologist Don Swann and biological technician Nicholas Perkins and work as part a larger team with two other interns, either LHIP or a local Next Gen Ranger intern. We will develop a workplan together at the start of the internship. The intern will receive a pre-season training that includes Wilderness First Aid, desert safety, CPR, field ecology, NPS history, and Operational Leadership. They will also have the opportunity to learn specific skills that align with their interest and career goals. During the season we will make field trips to other national park units in Arizona.

The intern will frequently work with other interns in Saguaro National Park and have the opportunity to cross-train for a few days in interpretation, outreach, or trails if interested. For example, past interns have assisted with the park's Junior Ranger Camp. Additionally, toward the end of the internship, a resume writing and a USA Jobs "How To" workshop will be offered.

## PROJECT RESULTS

NA

## LEADERSHIP

NA

## DHA-RAI OUTCOMES

NA

## NATURAL & PHYSICAL WORK ENVIRONMENT

**Physical Work Environment:** Saguaro National Park is on the edge of Tucson, Arizona, a growing city of nearly 1 million people that is more than 40% Latino. Saguaro National Park is in the heart of the Sonoran Desert and spring and summer temperatures are typically in the 90-100 degree range. The park is about 30 minutes from downtown Tucson, and approximately 20 minutes to a grocery store.

**Work Environment:** This project will be a mix of field and office work (60/40). Additional field work can be arranged if the intern is interested. Field conditions are more intense than many parks, with rocky slopes, natural hazards such as cacti and rattlesnakes, and intense summer heat with daytime temperatures exceeding 105 degrees F in the shade, and evening lows averaging 72 degrees F. We will gradually conditions to the heat if they

are not used to it! Our work division has a large summer intern crew that typically ranges from 10-20 interns who are current students or recent graduates.

**VEHICLE AND DRIVER LICENSE REQUIREMENTS**

Yes - unfortunately there is no public transportation to our park.