



Saguaro National Park

Saguaro Stewardship Experience



Welcome to the Saguaro Stewardship Experience!

We are thrilled to have you participate in the 2023 Saguaro Stewardship Experience (SSE) volunteer program! With your help, we can protect and restore native ecosystems throughout Saguaro National Park. Our goal is to build an inclusive community that empowers young adults to take an active role in local conservation. Upon completion of this certificate program, volunteers will have gained hands-on experience with a skill set they can use in their daily lives to protect natural resources.

In this program, National Park Service staff will guide and teach volunteers to restore native ecosystems throughout the park. A major component of this program will be invasive plant management. Invasive grasses specifically are the greatest existential threat to Sonoran Desert ecosystems and species. As a volunteer you will aid us in the removal of this invasive species from threatened habitats throughout the park.

You will also have the opportunity to learn about and participate in other major park projects such as Saguaro cactus studies, vegetation surveys and other restoration activities. Here at Saguaro National Park, we want to encourage long-lasting relationships within the park and broader Tucson community. Our National Parks offer many trails to explore and opportunities to form meaningful connections with the landscape. Both East and West districts of Saguaro National Park are located on the [ancestral lands of numerous paleolithic and indigenous peoples](#). Meanwhile, Tucson continues to be the home to the Tohono O'odham and Pascua Yaqui peoples.

This packet includes:

- Safety sheet and Gear List
- Invasive Plants Field Guide
- Necessary Phone Applications (How-to's)

Excursions within the Park

The SSE program wants to provide participants a variety of field work experience and education opportunities. These outdoor excursions will take place off-trail, in often remote areas of the park, where there is limited public access. In order to maintain and protect the natural landscape of the Sonoran Desert all park staff and volunteers must follow “Pack in, Pack Out” ethics, meaning no trash is left behind and our minimal footprint on the environment. We ask all volunteers to be mindful while caring for these special locations and taking photos on their personal devices or sharing on social media without geolocation tags to ensure the preservation of our sites.

Activities in the SSE include:

- Invasive species removal
- Seed collection for restoration projects
- Saguaro monitoring
- Botanical surveys
- Aquatic invertebrate surveys
- Ethnobotanical hikes
- Wildlife Camera Hikes



Skills you will Learn

In the SSE certificate program, the restoration activities will be geared towards providing you with skills and resources that will make you a more aware, and safe outdoors-person. You will learn the following in this program:

- Plant and animal identification
- Survey data collection methods and apps
- Invasive species removal
- Pack-in, Pack-out ethics (Leave No Trace)
- Use of forestry and wildlife tools
- Off-Trail ethics and navigation
- Game camera technical skills
- Desert safety
- Hiking and outdoor skills



Safety Sheet and Gear List

Saguaro National Park is a fun and amazing place to explore. However, safety is always our number one priority. Bringing the proper gear to the field will ensure that you have a safe and enjoyable time during your service to Saguaro National Park. Hazards such as loose rocks, bees, and snakes are all present. There is also an abundance of plants that have thorns and spines. Due to large amounts of sun exposure, taking time to apply sunscreen and keeping your skin covered will help prevent the negative side effects of solar radiation. Proper hydration is also imperative at preventing heat related illness and dehydration sickness. These hazards are avoidable if the proper safety measures are taken. The following items will help keep you safe and comfortable during your service.

What to bring (required):

- Hiking Boots (closed toe shoes)
- Long Pants
- Long sleeved shirt
- Small backpack
- 3-liters of water
- Sun protection (sun screen, hat, UV protective clothing)
- Snacks (salty snacks aid in rehydration!)
- Allergy medications/Epipens (if appropriate)

Safe Attitudes and Language

The SSE volunteer program welcomes participants of all gender, ethnic, socio-economic, sexual orientation identities and backgrounds. To ensure the safety and education of our staff and volunteers we prioritize inclusive, kind and accurate language in the workplace. Whether in the office, work vehicles or in the field we encourage all staff to foster a culture of respect, dialogue and curiosity. Here are some free tools and lessons to browse. The Safe Zone training can be found below for take home reading.

- [Learn » The Safe Zone Project](#)
- [Resources » The Safe Zone Project](#)

ALL ARTICLES, FAQs, ACTIVITIES, & COURSES FOR LEARNERS

Articles Activities FAQs Courses

<p>What does the + in LGBTQ+ stand for?</p>	<p>Defining LGBTQ+: A Guide to Gender & Sexuality Terminology</p> <p>A handy fill e-book that demystifies LGBTQ+ terminology.</p>	<p>I want to add a Safe Zone sticker to my website to let people know I'm LGBTQ+ friendly—how do I do that?</p>	<p>Announcing Online LGBTQ+ Courses at The Safe Zone Project</p> <p>You can start learning online today with our first course, and we'll be releasing more in the coming weeks.</p>	<p>Why do you encourage people to attend in-person Safe Zone trainings?</p>
<p>Can I ask someone how they identify? (Like, about their sexual orientation or gender?)</p>	<p>Demystifying Coming Out</p> <p>A handout (and handy activity) for demystifying coming out as well as some easy do and don'ts when it comes to supporting someone's coming out process.</p>	<p>Self-Guided Foundational Safe Zone Training</p> <p>Foundational LGBTQ+ understanding & inclusion—online, at your pace</p>	<p>Isn't "Queer" a bad word?</p>	<p>Are all transgender people gay?</p>
<p>Why do you include an asterisk in Trans*?</p>	<p>Coming Out Story</p>	<p>Vocabulary Extravaganza</p>	<p>What about advanced workshops? Safe Zone 201 perhaps?</p>	

Invasive Field Guides

Below are links to guides on how to identify and remove invasive grasses. These resources were developed by the National Park Service and are incredibly useful to go over before going into the field. Not only do they aid in identification, they also describe where the invasive grasses originally came from and why they pose a serious problem for humans and desert ecosystems. There are actually many invasive grasses in the park; however, the most severe are Buffelgrass and Fountain Grass. These grasses are adapted to catch fire. They are known to generate devastating wildfires reaching up to 1,400 degrees Fahrenheit, which are destructive to nature and humans alike.

[Buffelgrass](#)

[Fountain Grass](#)

Native Plant Guides

In the following link, you will find Saguaro National Parks native Plant guides. There are many species to learn at the park and we do not expect you to learn them all. During this program we will teach you how to identify native and non-native species. These guides are a great starting point for learning the many species that exist within the park's boundaries. This link will take you to the Saguaro National Park Plants page. From there, feel free to explore the series of links to the taxonomic keys of native plants organized by season.

[Plants of Saguaro National Park](#)



Necessary Phone Applications

The following phone applications are necessary tools used by many biological science technicians in their daily work at Saguaro National Park. Before arriving for your volunteer service, you must have *GAIA* and *INaturalist* installed on your phone. Much of our work requires GPS and plant identification skills we will teach volunteers. Please have these apps to follow along as a staff will guide you through. NPS iPads can be available if staff is given notice ahead of time.

[GAIA \(required\)](#)

GAIA is a backcountry GPS application excellent for navigation and transect navigation. There are many advantages to having a designated GPS device, but advancements in smartphone application technology make cell phones a viable tool in resource management. Below is a video that will show you how to use this app!

 [Building a Route on gaiagps.com Webinar](#)

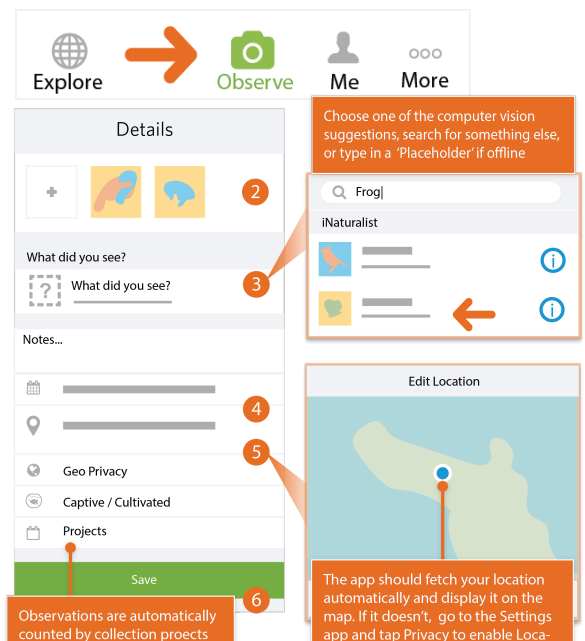
[INaturalist \(required\)](#)

INaturalist is a free, powerful tool for citizen science. We strongly encourage individuals to download this app as a tool for understanding the natural world around them.

It can be used to identify plant and animal species you encounter in your everyday life, not just in the Park. Observations recorded in *INaturalist* can be seen by local Naturalists who help identify and confirm your observation. This data can be used by local projects for real scientific studies. Even National Park staff utilize this application on a daily basis. If you want to increase your understanding of the natural world, we strongly encourage you to download this app and follow along a hands on

How to Make an Observation with your iPhone:

- Tap **observe**.
- Add one or more photos as **evidence**.
- Choose **what** you saw.
- **When** you save it should be added automatically.
- **Where** you saw it should be added automatically. If it doesn't, check Privacy in the Settings app.
- **Save** your observation.
- **Upload** to share with the community. This should happen automatically. If it doesn't, tap the Upload



button. You can turn off automatic upload from the app settings from the Me tab.

- Check back for **activity** on your observation from the community or be notified by email to the address in your account settings

[Merlin Bird ID \(Optional\)](#)

Merlin Bird by Cornell is an excellent app for identifying birds. *Merlin* app can help you identify what birds you encounter in your everyday life based on your observation of size, shape, color, and location. The app allows you to keep track of what birds you have seen and includes lists of all recorded birds in your region. The app can even use audio recordings of bird calls to help identify which species are present.

In order to use the app, you must download it from the app store. Once installed on your phone, you must download one of the associated Bird Packs. Each Bird Pack provides a field guide to the birds of the region with photos, sounds, and helpful ID text for bird species in the region. *Merlin* will tag the best pack for your current location as Recommended. This download can be large so be sure you have sufficient memory space on your phone.

