



Maricopa County

Parks and Recreation Department

Spring 2023 Natural Resource Internship **Maricopa County Parks and Recreation Department** **(3-5 positions)**

Maricopa County Parks and Recreation Department (MCPRD) is one of the largest park systems in the nation, with over 120,000 acres. The parks include high-quality natural areas and open space within the Sonoran desert upland habitat, which is considered one of the most unique deserts in the world. To properly steward and manage these large parks, staff needs information on the park's current biodiversity, the methods in which the species are utilizing the park's natural resources. Also important in managing the land is to know what effects climate changes and wildfires are having on the species within the park system. To answer some of these questions we are looking for interns to complete the tasks below.

Maricopa County Parks and Recreation Department (MCPRD) Natural Resources is providing some great opportunities, we are seeking interns to help document the natural resources within the parks.

Tasks of Natural Resource Intern (Interns will be assigned to one of the following tasks depending on interest, the project need, and expertise of the individual) :

Tasks1-3

1. **Desert Defenders/GIS (2-3 Interns, February-May):** Requires hiking in the mountains at the parks.
 - a. Conduct field hikes while mapping invasive species. Who doesn't love to hike? Using a smartphone app, (Arc GIS-based Invasive Species Map app) map invasive species at select parks, to support the park's Desert Defenders program.
 - i. Select a group (parks).
 1. Group 1 West Valley: White Tank Mountain Regional Park, Estrella Mountain Regional Park, and Buckeye Hills Regional Park Preserve.
 2. Group 2 North Valley: Cave Creek, Spur Cross Ranch, Hassayampa River Preserve.
 3. Group 3 East Valley: McDowell Mountain Regional Park, Utery Mountain Regional Park, and San Tan Regional Park.
 - b. Data analysis using Arc GIS Online platform. Creating maps and showing trends.
 - c. Co-lead Invasive Species Removal Events
 - i. The intern co-lead a DD Invasive Species removal event providing a safety talk, explaining why and what we are doing, and why it is important to perform these conservation efforts.
2. **Eco-database (1 intern, February-May)** Requires attendance at Lake Pleasant to perform the data entry.
 - a. Review Animal Camera data, identifying species, recorded data on the park's Eco database (Microsoft Access),
 - i. View all Animal Cam data, organize, label files and delete pics with no data.
 - ii. Enter all wildlife data into the parks Eco database
 - b. Eco-Blitz

- i. Download iNaturalist data from the parks EcoBlitz, organize, label, and upload data into the parks Ecodatabase.
 - c. Inventory Data
 - i. Review and enter data for all r research and monitoring projects completed within the parks and enter data into the Eco database. Includes Christmas bird counts, frog monitoring plant surveys, etc.
- 3. Post Fire Assessment Report: (1 Intern, February-June)** Preferably Master Level or Keystone Project. Can do the work remotely.
- a. Reviews post-fire data collected in 2020 and creates a report with statistical analysis of the data. Determine fire effects, short term, long term on desert communities. Include short and long-term fire effects on tree, shrub, and cacti species, long-term expectations on these plant communities based on other similar research, and determine if there are correlations between precipitation (summer vs winter) and invasive species and/or wildfires.
 - b. Prepares presentation slides relating to research and may be requested to give a presentation to Park Staff and/or Commissioners.

All Project and Intern Requirements:

- a. Meets biweekly with the MCPRD Natural Resource Specialist (this can be virtual).
- b. Provide a monthly schedule for park visits (if included with the project)
- c. Coordinates and communicates with MCPRD staff to coordinate any park visits (fee waived) and sign in the volunteer worksheet.
- d. Provides volunteer worksheet monthly to the parks Natural Resource Specialist (Juanita.Armstrong@maricopa.gov) and the Parks Volunteer Coordinator (Bill.Klewer@maricopa.gov)
- e. Assists with other natural resource-related duties for the Maricopa County Parks and Recreation Department, as needed.

Organization: Maricopa County Parks and Recreation Department (MCPRD)

Website: <https://www.maricopacountyparks.net/>

Type of Internship: Unpaid internship, course credit encouraged, includes 2-3 positions that will be working at several parks, one position that will work out of Lake Pleasant-Park Headquarters office, and one position that will mostly be remote with teams(virtual) or in-person meetings weekly/or biweekly.

Time Commitment: Approximately 15-20 hours a week. The internship is expected to last approximately 16-17 weeks February-May(credit can be earned for the internship) beginning on Tuesday February 7, 2023 (Mandatory Kick Off Meeting). Timeframes can be condensed to fit a compressed schedule. Basically will include 2-3 days per week with five-six hour daysfor a total of 15-20 hours/week.

Intern Outcomes: Upon completion of these projects, interns will become knowledgeable about the region's native biodiversity, will improve their species identify skills, learning many new plants and animals. Develop a better understanding of the Sonoran desert ecosystems, wildfire impacts, and complexities of climate and biodiversity. The interns will improve their GIS online skills, learn how to use smartphone apps that help biologists manage the lands. Become familiar with several Invasive species and their correlation with wildfires. Task 1 Interns will also improve their Arc-GIS and leadership skills.

Please submit your resume and a statement or letter expressing your interest to Juanita Armstrong, Natural Resource Specialist at Juanita.Armstrong@maricopa.gov by **January 13, 2023.**

About Maricopa County Parks

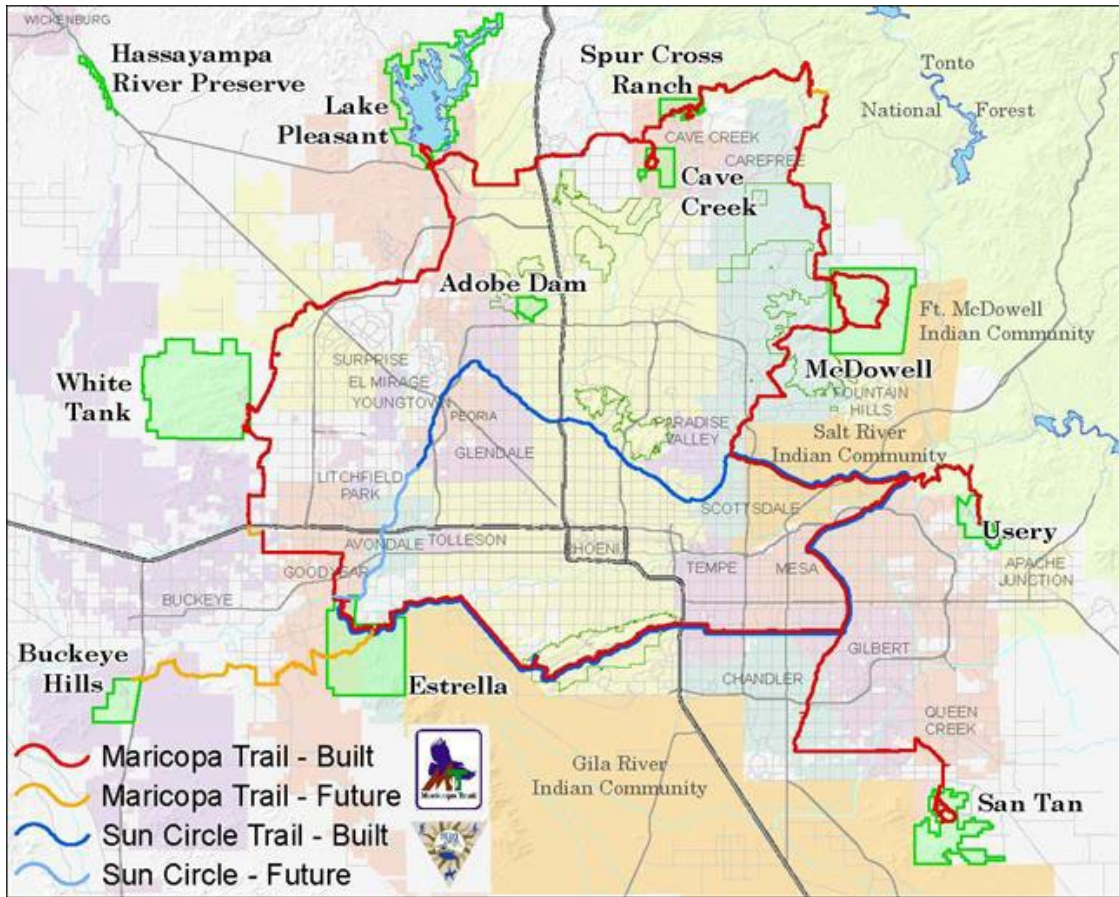
Maricopa County is home to one of the largest regional parks systems in the nation with over 120,000 acres of open space parks that include hundreds of miles of trails, campgrounds, nature centers, and the Desert Outdoor Environmental Learning Center at Lake Pleasant.

Currently, there are 12 regional parks in the system which were visited by over 2.4 million people in 2018. Whether you're planning on hiking along a barrier-free trail, enjoying the scenic Sonoran Desert views on horseback, or peddling rigorously up a trail on a mountain bike, the parks offer a variety of opportunities for all types of users, ages, and comfort levels. Best of all, Maricopa County's regional parks are all within a 45-minute drive from downtown Phoenix! Our pristine Sonoran Desert park system includes the following parks and trails:

- Adobe Dam Regional Park
- Buckeye Hills Regional Park
- Cave Creek Regional Park
- Desert Outdoor Center
- Estrella Mountain Regional Park
- Hassayampa River Preserve
- Lake Pleasant Regional Park
- McDowell Mountain Regional Park
- San Tan Mountain Regional Park
- Spur Cross Ranch Conservation Area
- Usery Mountain Regional Park
- Vulture Mountains Recreation Area
- White Tank Mountain Regional Park
- Maricopa and Sun Circle Trail

Vision: Our vision is to connect people with nature through regional parks, trails, and programs, inspire an appreciation for the Sonoran desert beauty and natural open spaces, and create life-long positive memories.

Mission: Our mission, through responsible stewardship, is to provide quality parks, trails, programs, services, and experiences that energize visitors and create life-long users and advocates.



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