

# El Caño Archaeological Park: Biodiversity

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### Introduction & Background

El Caño Archaeological Park is one of the most important Pre-Columbian sites in Panama. It was initially excavated in the late 2000s, revealing a complex social structure headed by elite warrior clans.

Fundación El Caño, the organization that oversees and conducts research at the site, is engaged in a comparative study of local biodiversity from Pre-Columbian times to the present. In support of this project, WPI students are collecting, identifying, and preserving flora species from the park, which will form part of a comparative database. With this information, archaeologists will better understand Pre-Columbian agricultural practices and how human activities have resulted in environmental change.





## Methodology

To gauge the size of the park, the Flora Team traversed the perimeter of the park on foot and worked its way towards the center. This expedition showed that the park had little diversity of flora despite the abundant plant life. As a result, the team set a goal to identify 50 species and collect 25 specimens.









Specimens for curation in the El Caño museum were preserved according to botanical/archival standards. To craft an herbarium press, two sheets of plywood compressed several pieces of cardboard. The plant samples were placed in newspaper placed between the cardboard. The press was secured with mechanical clamps and the newspaper was changed every few days. After two weeks, the dried and pressed plants were removed and glued to watercolor paper. The team printed labels detailing species information and fixed them on plastic page protectors that contained the herbarium specimens. The specimens were placed in a binder and delivered to the sponsor for curation.

#### Results & Observation

Upon scaling the park, the team discovered that there was less diversity of flora than anticipated.

Nevertheless, the team was able to identify 44 specimens, 32 of which were collected and preserved.

These samples were placed in a binder and delivered to the El Caño staff.

The park featured a variety of species, but most are considered to be invasive or weeds. This suggests that the plant life of El Caño has changed greatly since Pre-Columbian times.

Specimen Breakdown:

- 9 Trees
- 2 Vines
- 19 Forbs/Herbs
- 3 Shrubs
- 6 Subshrubs
- 5 Graminoids



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