

Natural Resource and Park Management Research Program

The goal of the Natural Resource and Park Management Research Program is to build a relationship between Masters/Undergraduate students and Memorial Park staff in the use of research to inform ecological restoration, park care, and maintenance decision making. The objective is to bring academic skills and resources to Memorial Park, benefiting all Houstonians.

The Natural Resource and Park Management Research Program interns will focus on real-world operations, maintenance, and program development experiences that bridge research and practical application. The primary focus of the program is on the ecological restoration and natural resource management associated with the Memorial Park Master Plan implementation and day-to-day care of the urban wilderness park.

Objectives for each student include production of meaningful data sets, review of and input on developing reliable and systematic methodological designs, and producing relevant manuals, lab notebooks, reports, videos, and presentation materials. Specific research projects are flexible and will be matched to each student to ensure successful experiences. Potential projects are listed below.

Interns work directly with the Conservation Director. Interns also have the opportunity to shadow relevant staff and work with them as needed.

Priority will be given to full-time, 10-week, paid internships in the summer 2018. Interns spend 20% time in operations and park management, 20% time shadowing Conservancy staff, and 60% time on research projects. Interns will complete weekly reports on research progress and develop a written report and compendium of data, maps, etc. They will also make a formal presentation at the end of the summer. During the Fall and Spring semesters, students may apply for part-time internships during which students work 10 -20 hours per week.

Summer 2018 Potential Projects:

- Map and catalog (e.g. georeference) key park operations features throughout the park and related data
- Assist in developing and initiating a rapid assessment monitoring plan for habitat management
- Assist in updating the Emergency Management Plan
- Assist in developing Hazard Risk Management Plan
- Assist in developing and completing a Trail Assessment Plan
- Assist in mapping cultural resources and historic infrastructure

On-going Projects:

- Develop and pilot test geocoded, photo mapping methodologies to time stamp and monitor key ecological restoration and cultural heritage views in Memorial park.
- Conduct tree inventories.
- GIS support to migrate and combine existing data into geodatabase.
- Research and review processes for operations, safety, and purchasing for effectiveness and efficiency.



Program Timelines:

- For consideration, please apply by March 30, 2018.
- Interviews will occur April 12 and 13, 2017.
- Summer Intern program: May, 21 July 27, 2018.
- Research Presentation Workshop: July 27, 2018.

Who Should Apply:

Undergraduate and Masters students studying:

- Parks and Recreation
- Natural Resource Management
- Planning
- GIS
- Forestry/ Urban Forestry
- Biology
- Botany
- Wildlife and Fisheries
- Soil

- Horticulture
- Watershed management
- Project Management
- Industrial Engineering
- Anthropology
- Communications
- Library science, museums, or historical studies and related fields

Interns should:

- Have ability and willingness to work outdoors in a variety of weather circumstances.
- Have ability to lift 50 pounds.
- Have a basic understanding or interest in the urban natural environment.
- Have writing, research, and technology skills.
- Have the ability to engage in problem solving and work independently and as part of teams.
- Contribute at least two key project specific skills such as:
 - GIS, Google maps, Googleearth
 - Microsoft Excel, PowerPoint, Publisher
 - Knowledge of plants, trees, wildlife, soils, etc.
 - Photography skills.
 - Experience in archival processing, conservation techniques and digitization related to library, museums, or historical studies.
 - Data collection or analysis experience.
 - Other relevant project skills.

Interested candidates should send a (a) letter of interest addressing your skills, level of interest, and potential contributions, (b) your resume, and (c) 3 references electronically to Carolyn White, Conservation Director, at <u>cwhite@memorialparkconservancy.org</u>.