

Natural Resource and Park Management Research Program

The goal of the Natural Resource and Park Management Research Program is to build a relationship between Master and Undergraduate level students with Memorial Park staff and to use research to inform decision making related to park care and maintenance, as well as bring 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 operation practices and research. 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 an urban 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.

Interns work directly with the Conservation Director and Park 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, fall, and spring semesters. 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 2 reports, 2 videos, and 2 fact sheets. They will also make a formal presentation a workshop at the end of the semester. During the Fall and Spring semesters, students may apply for part-time internships during which students work 10 -20 hours per week.

Fall 2016 Priority Projects:

- Capture and catalog (e.g. geocoding and map) key park operations features throughout the park and related data.
- Assist in updating the Emergency Management plan,
- Update maintenance software, Main Trac, and train MPC staff.
- Creation of a user friendly and efficient data repository and related meta data from existing research and case studies to support future research and decision making.

On-going Projects:

- Conservation and archiving of historical records such as newspaper articles, personal correspondence, event materials, photos, and other documents.
- Provide support and input for methodology and data collection of animal migration patterns at road crossings.



- 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 sets and assist in developing a common nomenclature for future data development.
- Ground truth biodiversity index with existing catalogs and knowledge of native species in Memorial Park.
- Pilot test selection of research stations for both macro and micro sites and issues that require monitoring within the Park.
- Research and review processes for operations, safety, and purchasing for effectiveness and efficiency.

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 or related fields

Program Timelines:

Fall 2016

- For consideration, please apply by August 26, 2016.
- Interviews will occur August 29, 2016.
- Fall intern program: September 19 November 30.
- Fall Research Presentation Workshop: November 16, 2016.

Spring 2017

- For priority consideration, please apply by October 7, 2016.
- Interviews will occur November 9 11.
- Spring intern program: February 13 April 28. Note: interns will have one week of unpaid leave for Spring break.
- Spring Research Workshop: TBD



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:
 - o GIS, Google maps, Google earth
 - Microsoft Excel, PowerPoint, Publisher
 - o 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 (d) Fall and Spring part-time applicants should also send their work availability (number of hours, days, and times. to Jay Daniel, Park Director, at jdaniel@memorialparkconservancy.org.