

POSITION ANNOUNCEMENT:

FUTURE PARK LEADERS of EMERGING CHANGE

The National Park Service (NPS) is pleased to support the *Future Park Leaders of Emerging Change* (FPL) internship program as a pathway for exemplary students in higher education (advanced undergraduate students and graduate students) to apply their skills and ideas to park-based challenges and solutions. The program offers 12-week paid internships which allow students to gain valuable work experience, explore career options, and develop leadership skills through mentorship and guidance while helping to advance NPS efforts on emerging management issues. Successful students may be eligible for non-competitive hire into federal positions for which they qualify following completion of all academic requirements.

Understanding and Mitigating Cultural Resource Coastal Climate Vulnerabilities at Jean Lafitte National Historical Park, Barataria Preserve, Louisiana

National Center for Preservation Technology and Training
Archeology and Collections
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PROJECT SUMMARY

Losing critical wetlands along Louisiana's coast is resulting in the rapid and unprecedented destruction of archaeological sites and traditional cultural properties (TCPs). Coastal erosion, subsidence, relative sea-level rise, storm surges, and anthropogenic alterations of landforms and hydrology have devastating, yet poorly understood, impacts on these unique features of the human environment. This investigation will document and examine the ways the cultural record is affected by coastal land loss and shall serve as a comparative analog for similar deltaic environments worldwide.

INTERNSHIP PROJECT BACKGROUND

The goals of this research are to provide support for Jean Lafitte National Historical Park, Barataria Preserve's assessments, consultations, and analyses by identifying past, present and potential future effects of coastal land loss on archaeological sites and TCPs. The scope of study aims to study of the ongoing effects of coastal land loss on archaeological sites and TCPs. The primary objectives are to:

- Create a social history and social geography of coastal Louisiana, including culturally important sites that are either now submerged or at risk for submergence.

- Create a GIS database on the effects of land loss on archaeological sites and TCPs that incorporates multiple lines of evidence, including archaeological data with predictive models of coastal land loss and relative sea-level rise.
- Draft reports, professional presentations, and a public outreach presentation illustrating the impacts of the project.

INTERNSHIP PROJECT DESCRIPTION

Louisiana's coast is in crisis. Among the places of interest are terrestrial sites and culturally significant locations endangered by storm surge inundation, coastal erosion, subsidence and relative sea-level rise in Jean Lafitte National Historical Park, Barataria Preserve. TCPs include sites of memory, places, practices and beliefs connected to the history, language and identity. Among the most conspicuous sites are earthen mounds and shell midden constructed during the Woodland and Mississippi periods (800 BCE–1700 CE). While some sites have been known to archaeologists for a century or more, others have only recently been recorded and few have been extensively studied.

The FPL intern will produce a Geographic Information System (GIS) database that will record and assess the effects of coastal land loss and sea-level rise on archaeological sites and TCPs. Sources of data will include site reconnaissance and monitoring, previous investigations and archival documentation as well as the Climate Change Response Program's data. Information on coastal geomorphology and wetlands ecology will inform on the direct and indirect future effects of land loss on cultural landscapes. GIS data resulting from this project will be integrated into the Mississippi River Delta Archaeological Mitigation Program (MRDAM), which is a broad coastal mitigation program across the Louisiana Gulf Coast. Jean Lafitte parks and regional office staff will use this information to make informed management decisions about TCPs, site protection and mitigation strategies, and cultural resource documentation in the face of climate change.

The FPL intern will produce a report that incorporates future estimates of coastal land loss and risk matrix of archeological resources. Having a manageable and transferrable GIS database that will allow for a rapid assessment, field reconnaissance, and update to a broader mitigation plan is crucial for ongoing efforts to salvage endangered data sets from archaeological sites on the cusp of global environmental impacts related to climate change that will affect Jean Lafitte National Historical Park, Barataria Preserve, such as relative sea-level rise and subsidence.

Reports to be produced and delivered to Jean Laffite National Historical Park, Barataria Preserve and NCPTT include six bi-weekly reports and one draft and final report. The draft final report will incorporate all of the results of the investigation and include a social history and social geography of the Jean Lafitte National Historical Park, Barataria Preserve. An abridged version of the final report will be produced as a pamphlet for public education and outreach.

The pamphlet will not disclose confidential information or site locations. All maps, audio, video, photographs and digital data files will be submitted to NCPTT and Jean Lafitte National Historical Park, Barataria Preserve as deliverables during the concluding week of the investigation.

- Six bi-weekly reports
- One draft and one final report
- GIS database and spatial analysis
- Maps, photographs, and digital data files
- Pamphlet for public education and outreach
- PowerPoint slide shows for professional conference presentations.
- At least one public presentation as a component of public outreach of the program

QUALIFICATIONS

The successful candidate will be:

- Be in good academic standing, studying ecology, anthropology, geology, or a related field
- Have experience in GIS mapping
- Have a clear interest in cultural resources management
- Possess an ability to communicate and write effectively
- Possess an ability to work independently and on multiple complex tasks

LEADERSHIP DEVELOPMENT

Through partnerships, consultations, community outreach, and support for graduate and undergraduate research, the MRDAM Consortium is promoting public education and advancing cultural resource management planning on Louisiana's imperiled coast. The NPS supervisor will provide technical and project management guidance and intern mentoring at all stages of the project. In addition, prospective FPL candidates will continue to work under their academic advisor to receive independent study credit hours at their university, if possible.

The FPL intern will have the opportunity to directly contribute to the integration of culturally significant archeological sites, cultural landscapes, and sacred sites in the Jean Lafitte National Historical Park, Barataria Preserve. The intern will develop analytical skills towards archeological data modeling as well as scientific field research. Additionally, the FPL internship will afford the applicant opportunities to engage with and present information to NPS staff and stakeholders on resource protection which will serve as a model for other deltaic basins and at-risk National Parks.

DATES OF POSITION

Approximate dates of internship: 05/03/2020 – 07/31/2020

Are dates flexible: YES

If flexible, what is your time frame for project completion: 3/30/2020 – 12/31/2020

COMPENSATION

This initiative supports one student at \$16/hour for 12 weeks, or 480 hours.

HOUSING & TRAVEL

The FPL provides a travel stipend to all interns to supplement the cost of student travel to the park site. Natchitoches is the oldest town in Louisiana and is a college town and there are usually plenty of sublets and short-term rentals available. Commuting is brief and no daily travel consisting of more than 50 miles is required

WORK ENVIRONMENT

The National Center for Preservation Technology and Training is located on Northwestern University's campus in Natchitoches, Louisiana. Concerning fieldwork opportunities: potential environmental hazards that will be addressed during orientation include heat, venomous snakes, stinging insects, poison ivy, and mosquitoes. Work will be conducted primarily at NCPTT with occasional travel as needed to the Jean Lafitte National Historical Park, Barataria Preserve.

CONTACT INFORMATION

NCPTT Supervisor:

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