2017 – GEOSCIENTISTS-IN-THE-PARKS
PROJECT DESCRIPTION

NPS UNIT: BIG THICKET NATIONAL PRESERVE	**PD #: 2017080**

Position Title: GIS Technician – Land Management Specialist
Position Type: GIP Intern
Primary natural resource discipline: Multidisciplinary
Location: Kountze, Texas

PROJECT DESCRIPTION AND WORK PRODUCTS

Position Description:

INTRODUCTION

The Big Thicket National Preserve (Preserve), established in October 1974, was the first National Park System "National Preserve". It was created specifically to protect a unique group of ecosystems featuring a remarkable amount of biodiversity. That biodiversity is now confronted by several threats that require a quick but thoughtful response. Big Thicket has 436 miles of exterior boundaries that were once somewhat protected by neighboring timberlands. Recent divestitures of approximately 1.5 million acres in East Texas and Louisiana and subsequent sales to investors now expose fragile ecosystems to subdivisions, commercial development, trash dumping, herbicides, pesticides, fertilizer, and invasive species.

POSITION DESCRIPTION

The internship will focus on the ownership and property rights of non-federal land adjoining the Preserve. The data collected by the intern will form the basis for future land management decisions by the preserve and the Big Thicket Natural Heritage Trust. The intern will establish the methodology for an ownership inventory that may take several years to complete.

QUALIFICATIONS

- Ability to use ArcGIS and online GIS (e.g. ArcGIS Online, Google Maps) for developing, managing, and displaying spatial data, including mapping, querying, and illustrating encroachment locations.
- Ability to interpret real property records and conduct land records research.
- Ability to use standard office software such as Excel, Word, etc. Experience with MS Access desirable.
- Understanding of land ownership records (e.g., Assessor Parcel Numbers, and Public Land Survey System (PLSS) - based property legal descriptions) is desirable, but not necessary.
- Good data organization skills and detail-oriented.
- Ability to work collaboratively with other in a group with a diverse backgrounds and skills.

Upon successful completion of the GIP internship, the participant is eligible for an AmeriCorps Education Award. This position is offered through the National Park Service's Geoscientists-in-the-Parks Internship Program in partnership with Environmental Stewards and The Geological Society of America.

Work Products: Deliverables will include ownership maps and associated rights and resources including mineral & water rights, and natural/cultural resource protection associated with property bordering the Big Thicket National Preserve.

QUALIFICATIONS

Introductory Mapping and Geospatial Information System knowledge is a core competency for the intern's project. Additional skills for the intern's success include the ability and willingness to gather property ownership and property attributes from a variety of sources including other public and private offices and databases.

The applicant must be a U.S. citizen or U.S. permanent legal resident ("green-card-holder") between the ages of 18 and 35 years old. Prior to starting this position a government security background clearance will be required.

VEHICLE/DRIVER'S LICENSE REQUIREMENTS

Applicant must have a valid driver's license and a good driving record. The applicant will need a personal vehicle for commuting between the housing and the park as well as a valid driver's license for work. The intern will not be required to have a vehicle for work, it is recommended that she/he have one for shopping and recreation.

If the GIP is required to drive a park vehicle for their position, a driving records search will be performed and the GIP's ability to drive a park vehicle will be contingent upon the results. Examples that will preclude a GIP from driving a park vehicle include DUIs, multiple moving vehicle violations, suspended or revoked license, or three or more accidents (regardless of fault) in the last 3 years.

HOUSING

On site housing will be provided at no cost to the participant. The ranch house is a 3 bedroom 2 bath home. Two of the bedrooms share a common bath, and the master bedroom with en suite. The master bedroom is handicapped accessible. The Ranch House sleeps 2 per room, with all beds being twin in size. Bedding and Towels are NOT provided. The intern may share a bedroom with another seasonal. The Kitchen has all of the basics, pots, pans, glasses, cutlery, toaster, coffee maker etc. Limited internet is available via a park provided "hot-spot". The Ranch House has no TV and would have very limited signal if a resident was to bring their own. The Ranch House is located approximately 12 miles from Big Thicket National Preserve Headquarters.

Although housing will be provided, the intern is responsible for buying and cooking their own meals. Housing will be located in Warren, Texas which is approximately 22 miles north of Kountze, Texas. Kountze, Texas contains several small restaurants such as Subway, Sonic, Dairy Queen, A Bank, Dental Office, Grocery Store, and several small convenience stores and gas stations. A Walmart is located within 20-25 miles of the Ranch House. The closest large city is Beaumont, TX. Beaumont contains all of the essentials such as Hospital, Restaurants, and Malls, Departments Stores etc. We are also located approximately 2 hours from the Houston, Texas, the 4th largest city in the US. Although the participant will not be required to have a vehicle for work, it is recommended that she/he have one for shopping and recreation.

INTERNSHIP START/END DATES

Start Date: 5/22/2017
End Date: 8/11/2017
Number of weeks: 12
Are these dates flexible? Yes

STIPEND PAYMENT

$3,600 for 12 weeks

HOUSING PAYMENT

TRAVEL ALLOWANCE

$250

PHYSICAL/NATURAL & WORK ENVIRONMENT

Physical/Natural Environment: Big Thicket National Preserve consists of 15 land and water corridor units, totaling just over 112,000 acres dispersed over 3,600 square miles in southeast Texas. Known as the "Biological Crossroads of North America", the area has a temperate climate and an average rainfall of 45 inches. The Headquarters is located near Kountze, TX which is about 110 miles from Houston. Summer temperatures range from 80 to 100 degrees with high humidity and winter lows in the 20s.

The duty station of this position is Village Mills, Texas (near Kountze, Texas) located about 35 miles north of Beaumont, Texas. Kountze is a small town with some amenities, however, the city of Beaumont lies in the southeast corner of Texas, along interstate 10, about 80 miles east of Houston. With a current population of 115,570, Beaumont is the most populated city in the Metropolitan Statistical Area, which includes Hardin, Jefferson and Orange counties. Beaumont has a semi-tropical climate which draws residents and visitors year-round for birding, fishing, hunting, boating, swimming, camping, and other outdoor recreation. To view information about hotels and motels in Beaumont and surrounding areas, bed and breakfast, campground, historic sites, museums, movie theaters, night spots, sporting events, casinos and gaming, festivals, art galleries, restaurants, parks, shopping centers and malls, and other attractions, please go to http://www.cityofbeaumont.com

Driving to park sites can include high-speed roads as well as gravel and dirt roads. Field work may require moderately strenuous hiking through woody vegetation with high heat and humidity in the summers. Potential field hazards include poisonous snakes, poison oak/ivy, ticks, bees, yellow jackets, and fire ants.

Work Environment: Office work will be in the main park headquarters building approximately 6 miles outside of Kountze, Texas. The building is a comfortable modern office building with an open plan so that there are opportunities to interact with staff from all divisions on a daily basis. Driving to park sites can include high-speed roadways, dirt and gravel roads. Field work may require moderately strenuous hiking through woody vegetation with high heat and humidity in the summers. Potential field hazards are poisonous snakes, poison oak/ivy, ticks, bees, yellow jackets, and fire ants.

MENTORING AND LEARNING GOALS

Mentoring: The intern will be guided by the Chief of Resource Management, Herbert Young how to utilize the information found on landsnet (an internal park service website with land, deed, tract and maps related to BITH). Herbert will also demonstrate how various counties have GIS Tax Database information online and will work with the intern to explore the unique aspects of each county website. Herbert has conducted similar Tax Record “desktop survey” for work he completed as the Permits Coordinator for the Blue Ridge Parkway. Introductions to staff outside of the preserve will also be included in this internship. Some of those introductions would include the Gulf Coast Inventory and Monitoring Network Staff via a variety of modes (conference calls and possible face to face meetings) to allow the intern to better understand the jobs and duties of GIS professionals within the NPS. The intern would also be introduced to all park management to better understand the roles and relationship their jobs play in the operation of the preserve. The Chief of Resource Management would also educate and explain how to apply for the various types of federal jobs using the USAJOBS website. This overview of how the system works would provide an intern a better understanding of Job Series, Grades, Steps, Time in grade etc, and provide examples of federal resume building techniques specific to USAJOBS. The intern would also have the opportunity to interact with soon to be hired Resource Management Staff (Park Biologist as well as the Environmental Protection Specialist). The intern would also have an opportunity to observe and participate with the Resource Management Division at Big Thicket National Preserve in daily interactions with the various offices including the office of the Superintendent, Administration, Law Enforcement, Maintenance, Interpretation and Education, and IMR/WASO staff members.

The intern would also meet either face to face, or via phone the various partners such as the Big Thicket Natural Heritage Trust, Big Thicket Association, and Thicket of Diversity to better understand how partners work with Big Thicket National Preserve to better achieve the goals of the National Park Service.

Big Thicket National Preserve should also learn the results of the UNESCO designation for its Biosphere Reserve Status, and the intern would be able to participate and better understand the roles Biosphere Reserves play in the world. Depending on the outcome of the UNESCO decision, the intern could also assist in gathering data to answer follow-up questions from UNESCO, or simply be able to attend and facilitate educating our partners to the benefits of a Biosphere Reserve designation.

The intern will take classes offered at the park during their internship, which could include first aid, defensive driving, operational leadership, as well as introductions to any systems/programs Resource Management uses which may include: CMS, ICMS, IRMA, PEPC, ASMIS, PUPS, ParkAtlas, etc.

If the intern is interested in other programs (e.g., Interpretation and Education, Field Inventories/Surveys etc.) she/he will be given time to participate with those field crews.

The NPS Washington Service Office (WASO) will provide guidance on how the internship advances the UNESCO Biosphere Reserve program and the goals of the Big Thicket Association.

Learning Goals: The Intern will learn essential and universal land management techniques including property description, location, associated rights and covenants including water and mineral rights, protected area regulations and cultural resources designations. This knowledge will be acquired by mastering cooperative relationships with local, state and federal agencies and the Preserve's non-governmental partners. These professional contacts include the Texas Water Rights Commission, the Texas General Land Office and the State Historic Preservation Office. The intern will also be involved in applying the lands data to the Preserve's strategies for resource protection, extraction and interactions with neighboring jurisdictions. They will work with park professionals from different disciplines on a range of Preserve management issues including encroachment, mineral and water rights, and habitat protection. The intern will learn the workplace skills of meeting expectations, organization, ability to collaborate, responsibility and dependability. Internships are expected to provide a positive work environment by working with a group of people who care about and are dedicated to their work.

SUPERVISORS	
Primary Supervisor: Herbert Young	**Secondary Supervisor:** Pat Mangan
Title: Chief of Resource Management	**Title:** Special Assistant
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Park or Program Website: http://www.nps.gov/bith	**Park or Program Website:** http://www.nps.gov/waso