



Trail Post Sign Project



This summer for my Mosaic Project at Prince William Forest Park (PRWI), I was assigned the task to collect GPS coordinate points for all of the concrete trail post signs (TPS) in the park.

This task involved hiking 37 miles of trails and driving through various unpaved roads throughout the park in addition to GIS work.



The purpose of the project was to create individual site maps of all the TPS using GIS-ArcMap. This would enable park staff to break down the park section by section to simplify locating each TPS.



The park plans to use the site maps as a guide to locate and change the current concrete TPS to a more visible brown wooden TPS.

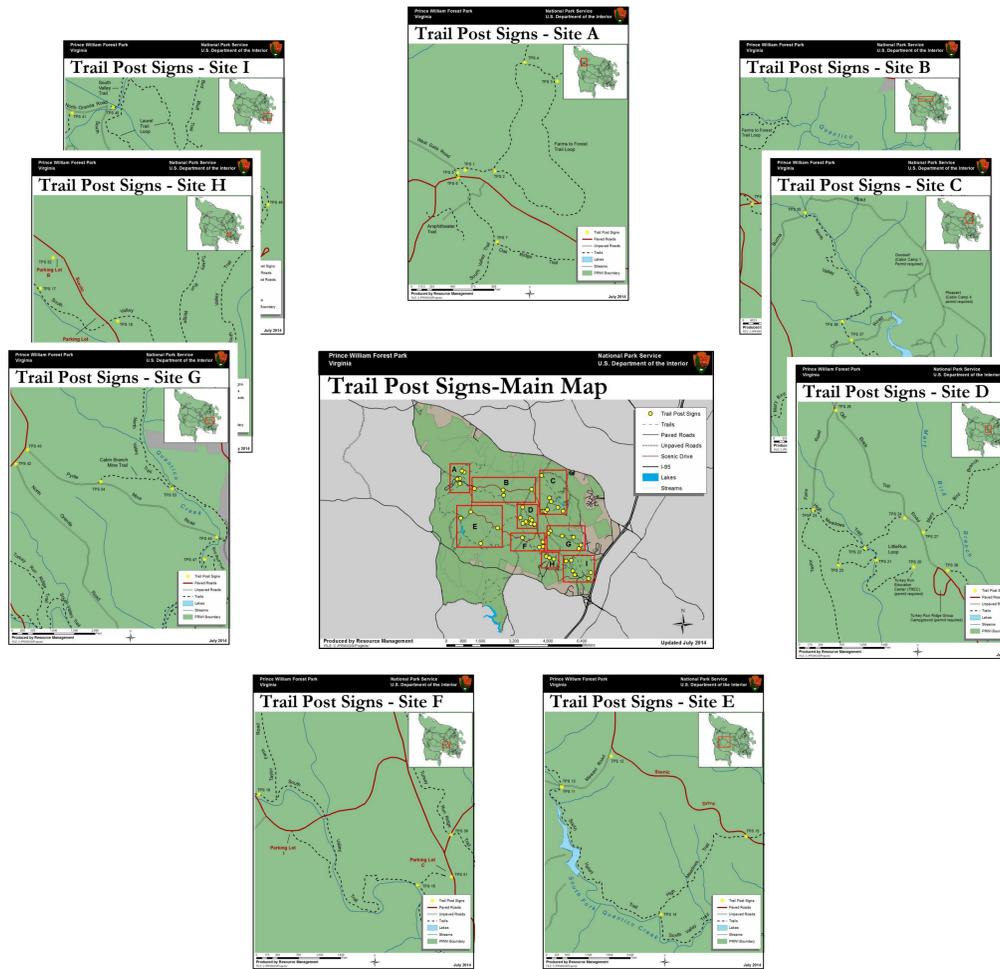
In total, I collected 54 TPS points and made 9 site maps for the park.

This was an exciting project that allowed me to experience all of the serene trails in the park. It also provided me with the opportunity to use state-of-the-art equipment such as the Trimble Ranger and ProXT and ProXR GPS backpacks.



Although hiking the trails in the park and collecting GPS points of all the concrete TPS was a major aspect of my summer, it was not the only task I had to do.

TPS-Site Maps



Natural Resource



Throughout the summer, I assisted the natural resource team in E. coli water quality testing, macro-invertebrate surveying, Isotria (*Isotria medeoloides*) surveying, invasive species surveying, herbicide mixing, and spraying

I also volunteered to survey with the bird, amphibian, vegetation, and I&M water quality teams that visited during the summer.

Surveying with the different teams introduced me to a variety of responsibilities and created a new awareness of the natural habitat of plant and animal species.



I learned and assisted them with the field methods they used to collect data for a certain task. It was a great opportunity using the equipment and learning hands on fieldwork.



It was exciting meeting new people when assisting the surveying team. Everyone on the teams had a variety of accomplishments and career goals which inspired me to work hard and set my own goals.

I also learned to pay attention, play an active role, ask questions, and most importantly, stay safe.



I always like to say that the best summer is a summer where one does not limit his or herself!

GPS/GIS Projects



I spent time making friends and helping the natural resource and cultural resource teams with GPS and GIS.

One of my projects, the TREC Campground map, involved taking the DBH and GPS points of all the trees along with other features in the area such as septic tanks, water sources, mounds, stumps, dead trees and fallen logs.

I also completed the RV Site Pad project which involved locating and recording the GPS boundary points for the new RV site near Oak Ridge campground.



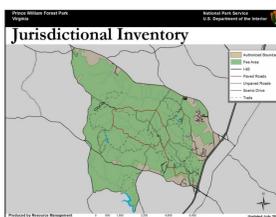
The project required me to record GPS points of the electric, water, and sewer sources. I measured the DBH and used the GPS to locate the trees. The trees will be cut down in the future to clear space for the RV Pad Site.



My third project involved updating the boundaries and authorized areas of the park for the Jurisdictional Inventory map.

The final project I completed mapped out a boundary area for a new parking lot that connected to a new trail in the Chopawamsic backcountry

The projects that I accomplished this summer helped me understand how important GPS and GIS is to the park service. I gained new experiences in the field while collecting data, allowing me to create accurate maps.



These projects allowed me to understand how important it is to be organized. Without organization, the data can easily be lost or misinterpreted.

My Experience

This summer was a great experience!



Taking the Youth Conservation Corps (YCC) out to hike trails and collect TPS points was motivating. I trained them in GIS and GPS which allowed me to take on the role of a teacher and mentor.

Teaching them GIS and GPS not only helped them, but also helped me learn how to efficiently communicate certain tasks that needed to be taught when introducing someone new to GIS and GPS.



Wellness day was gratifying because it allowed everyone to give a lending hand and be an active part of the NPS community. During wellness day we took part in the demolition of the old law enforcement building. We knocked down the interior walls to create more space for a gym that would be reconstructed. Another wellness project we did involved re-organizing the shed that the natural resource team would be using throughout the summer. Our task primarily focused on tearing down the shelves and modifying them to fit in another section of the shed. This modification allowed us to park the new gator in the shed and access the equipment in the shed more easily.



We traveled to other parks such as Harper's Ferry and Wolf Trap for a Youth Summit. We were able to take a whole day out to enjoy our time at the parks and meet other volunteers and interns. At Harper's Ferry, it was great meeting everyone through ice breaking activities. At Wolf Trap we performed in front of the volunteers and interns from other parks. We ended up winning for best choreography and best in show.



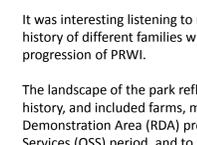
Cultural Resource



Navigating through the forest with the cultural resource team and a GPS to find cemeteries was always adventurous.

When I assisted the cultural resource team, we surveyed the cemeteries in specific locations throughout the park.

Once we found a cemetery, we identified the condition of the gravesite, recorded the data and took photos of the site.



It was interesting listening to my peers talk about the history of different families who lived during the progression of PRWI.



The landscape of the park reflected the progression of history, and included farms, mines, the Recreational Demonstration Area (RDA) program, the Office of Strategic Services (OSS) period, and to what it is now today.



An exceptional attraction about the park was the pyrite mine. I found it fascinating learning about the history of the pyrite mine from my peers and hiking the trails to search for the historic railroads, mines, and shops. It was exciting to see old foundations of buildings and learn what their purpose was during that time period.



It was entertaining scanning for pyrite along the trail and discovering it unexpectedly. I also enjoyed learning about how miners made sulfur and glass from the pyrite.

I remember the first time I walked the pyrite mine trail, I did not find any pyrite, but now I can spot it in a split second!

