

Using GIS to Map Pleasant Ridge Park

Stephen Mowbray

Introduction

This project was designed to create a functional map of Greenville County Recreation District's Pleasant Ridge Park. This map will not only assist the public in guiding themselves around the park, but will also aid park management in maintenance and development of the park. By using GIS, this map can be easily updated and improved upon as new structures and/or trails are implemented into the park's use.

Materials and Methods

Data for this project came from two sources. The first source is the South Carolina Department of Natural Resources GIS Data Clearinghouse found on the web at

<http://www.dnr.state.sc.us/pls/gisdata/>. Data taken from this site includes:

- hydrography (rivers, streams, lakes)
- hypsography (topographic contours)
- park boundaries
- paved roads

The second source of information was primary data collection using a NAVMAN GPS 3450 with a Compaq IPAQ. Data gathered by this method includes:

- campsites
- cabins
- shelters
- bathhouses/restrooms
- park office
- ranger's residence
- hiking trail
- proposed trails
- recreational areas (playgrounds, waterfront)



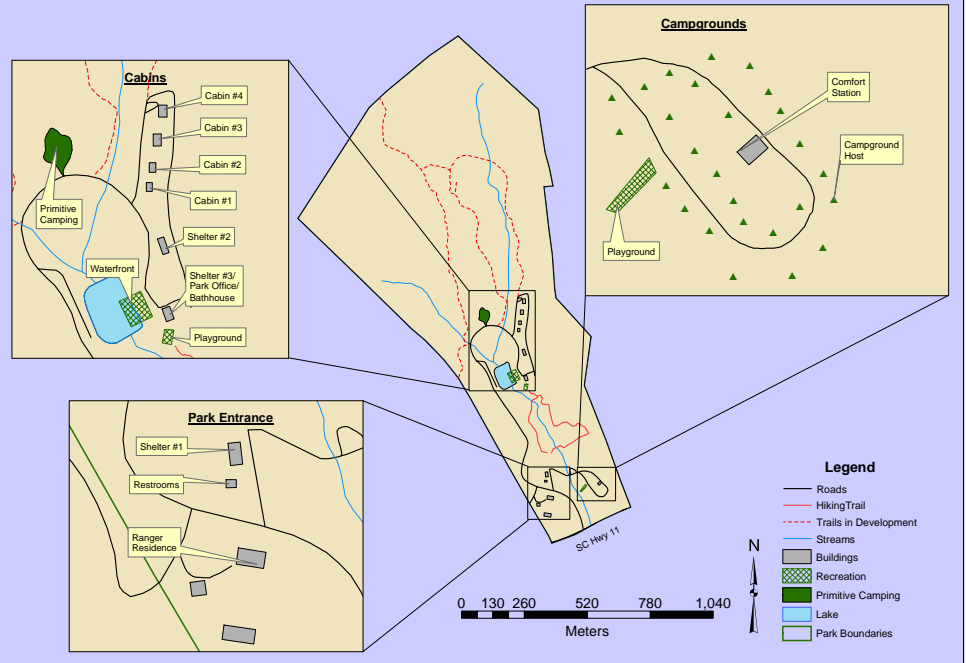
NAVMAN GPS 3450 for Compaq IPAQ

Features from the GPS data collection was added to and edited on ArcMap.

Pleasant Ridge Park Topographic Map



Greenville County Recreation District Pleasant Ridge Park



Discussion

The map of Pleasant Ridge Park will contribute to the overall profitability of the park. Distribution of this map by the Greenville County Recreation District will promote the park and its facilities to the public. With the ability to easily see the park's features, more people will likely want to visit the park. This could increase the park's total revenue if the increased visitation includes shelter and cabin rental, camping, or using the waterfront. As these visitors come to the park, they will be able to easily navigate around the park, which will increase traffic flow efficiency and visitor satisfaction.

Mapping Pleasant Ridge Park has advantages for managing the land as well. The potential for biking and hiking trails in the northern sector of the park lies untapped. The map will not only show the best route for these trails, but will also present areas that may be of concern.

The advantage of this map is that it was created using GIS. This means that the map can be easily updated to include future projects in the park. This may include anything from making a more detailed map for more accurate planning to mapping the floral and faunal diversity in the park. The options are unlimited with GIS.

Projection Information

NAD 1927 UTM Zone 17N

Acknowledgements

Dr. Suresh Muthukrishnan, for use of his GPS and for his GIS assistance in creating this map.

Darien Alston, for assisting with GPS data collection.