

Mapping info sheet @ 2018 Broward County BioBlitz

Introduction

Official maps of state and city owned parks in Florida can be inaccurate, outdated and they usually miss important details about the parks. In most cases, this causes minor inconvenience for visitors, but it can also create dangerous situations if hikers get lost in larger parks. This mapping activity tries to change this by creating valuable map data of Tree Tops Parks, that will be made available to the public.

Collaborative mapping

Traditional mapping methods are generally time consuming and resource intensive. However, we take a different approach as we rely on **YOUR HELP** and participation. Recent technological developments (internet, GPS receivers, smartphones) make it possible for anyone to become a mapper and produce high quality geographic information.

Mapping platform – OpenStreetMap

OpenStreetMap (OSM) is a collaborative project that aims to provide freely accessible geographic data and maps of the whole world. It is also called the “Wikipedia of Maps” since it is entirely created and maintained by volunteers. No mapping experience or professional background needed, anyone can edit this map and add useful information, such as roads, restaurants, businesses, parks, or even your own house. OpenStreetMap provides a viable alternative to commercial map providers, such as Google Maps. Since it is open, free and is available for everyone, it is used in many places all over the internet, such as Craigslist, Wikipedia, Strava, Weather.com Snapchat, or even Pokemon Go. Once someone edits OpenStreetMap, changes will be available on all services that use its data and maps.

Workflow

Mapping at the BioBlitz uses a hybrid approach where **volunteers are asked to survey the park and record everything** they find worthy to put on the map. Maps reflect verifiable information on the ground, therefore this data collection effort is crucial for mapping. Volunteers utilize pre-painted paper maps, and smartphones to collect data. Once the BioBlitz is over, organizers will collect all data surveyed by volunteers and update the geographic data of Tree Tops Park. The efforts of volunteers therefor will be available on a number of online maps and mobile applications. For the future, updating paper maps at Broward County parks is also planned.

Apps

Logging your locations: By recording your locations in the park throughout the day, we can later reconstruct your walks and hikes. Given that most of the time you will be walking on hiking trails or walking/cycling paths, this data can be used to reconstruct the trail network of Tree Tops Park. Tip: Start logging your trip once you start mapping, put the phone in your pocket and you can forget about it! You can use the following smartphone apps to record and save your GPS tracks:

- “GPSLogger” (Android) or “myTracks - The GPS-Logger” (Iphone).

Photo mapping: Photo mapping is an activity that combines locations and visual information (i.e. photos). If you take photos and save their geographic location at the same time, we can use the photo later to add information on the map. For example, if you see a disabled parking spot, take a photo of it. When reviewing the photo and its location later, the parking spot can be added to the map. Take plenty

of photos of everything you think is useful for building better maps. You can use the following smartphone apps to take photos.

- Your mobile camera. Tip: in your camera settings, make sure to save the location

Optional (advanced):

- Mapillary (iOS and Android). Mapillary is a smartphone/web app that creates a Google Street View like service that relies on volunteers. You need to register at www.mapillary.com, download the smartphone app, which can take photos automatically as you walk or drive. These photos can be used later to edit maps.

Your task

Most importantly, you should enjoy your walk in Tree Tops Park. As a volunteer mapper, your task will be to collect useful geographic information that will be used to create maps. Your contribution can be separated into **passive** and **active** activities.

Passive data collection: To update the hiking trail and walking/cycling path inventory of Tree Tops Park we need to know where these trails are, in other words we need to survey them. Your passive data collection efforts will be logging your locations throughout the day with a smartphone application (see Apps).

Active data collection: While walking on the trails, you may notice some objects that should appear on the map, or may notice some conditions that are worth noting. For example, when you reach a swampy area and the trail continues on boardwalks, you can note this down. You can also take a photo (along with the location) if you see a water fountain. Notes can be taken both in-app and on the paper map.

What to map?

Short answer: everything! All information is useful. Whether you note the name of a hiking trail, or take a photo of the surface of the cycling path, all information has its place on a map. You can take paper notes with approximate locations, or add a map marker in your smartphone app. Here is a (not comprehensive) list of things that you may want to look out for:

Waste baskets	Information signs	Buildings	Playground	Trail blazes
Disabled parking	Turn restrictions	Grilling areas	Toilets	...
Rain shelters	Power outlets	Water fountains	Picnic tables	...

After the mapping session

Hand in your paper maps and digital materials (photos, tracks) to organizers or send them to Levente Juhasz (levente.juhasz@ufl.edu) or Mathieu Basille (basille@ufl.edu) so that your efforts will be used to improve maps of Tree Tops Park.

Useful resources

If in addition to surveying you would also like to edit the map by yourself, you can take a look at the following resources which will teach you how to map. Alternatively, you can also contact Levente (levente.juhasz@ufl.edu) who can help you get started and provide more information.

OpenStreetMap (<https://openstreetmap.org>), OSM Wiki (<https://wiki.openstreetmap.org/>), LearnOSM (<https://learnosm.org/en/>)