

Berry Farm Horse Trails

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Abstract

Berry Farms is a spectacular hiking destination in Humboldt County. It is also a great area to go equestrian riding. Since Berry Farms is an area frequented by pedestrians and vehicles by the nearby timber company we decided to create a map. Our objective was to create a map that illustrated trails, roads, streams, intersections, and where a horse can take a drink of water. We were able to locate three hydration locations on the Berry Farms. Equestrian riders will find this map beneficial when planning a ride at Berry Farms.

Introduction

Humboldt County is known for its beauty, greenery, and its outdoor recreational activities. Humboldt County is also home to a big farming community with a love for riding. With both of these groups there is an equal love and care for animals, especially equestrian animals. Humboldt County has accommodated to the equestrian communities by designated equestrian riding trails. Clam Beach is situated 15 minutes north of Humboldt State University and is home to many trails. East of clam beach is an area known as Berry farm (40° 59' 23" N, 124° 04' 37" W), which has many trails for hiking, biking, and equestrian activities. Our project was to create a map that showed the different trails, creeks, and logging areas in the Berry farm area of clam beach. We accomplished this by investigating different datasets online including the Humboldt County GIS web site. Some of the tools that we used were clip, intersect, and dissolve. We hoped to create a GIS map that showed the equestrian riders where they can ride their horses, and where the horses can drink some water. Also, in case of emergency, this map will show the equestrian riders the quickest and safest way to safety.

Methods

We downloaded data from multiple GIS web sources. Street data was downloaded from the Humboldt County GIS Data Download web page. Rivers and streams data was downloaded from the United States Department of Agriculture, Natural Resources Conservation Service (USDA NRCS)'s Geospatial Data Gateway (GDG) web page. A McKinleyville boundary was downloaded from the United States Census Bureau website. We used the same satellite image from Lab 4. The data was downloaded from the x-drive. All of the data was then projected to North American Datum of 1983 (NAD 83) Universal Transverse Mercator (UTM) Zone 10 North. Streams, roads, and land scape data were clipped using the McKinleyville's zip code. Small trails did not appear on the street data so we manually digitized them and exported them as a new trails shapefile. Trails and roads were grouped together with respect to the road type. We intersected the streams, roads, and trails data to locate areas suitable for water consumption. A map will be created showing different road types, bodies of water, and suitable drinking locations. The points of interested were digitized according to local important landmarks.

Results

The map provides main roads, trails and their names, common land marks, streams, water sources, and present logging areas. The possible routes show in yellow dash line refer to trails that are exist, but not able to see from the satellite image (Figure 2).



Figure 1. Location map of study site in Humboldt Co. CA, USA on December 2014.

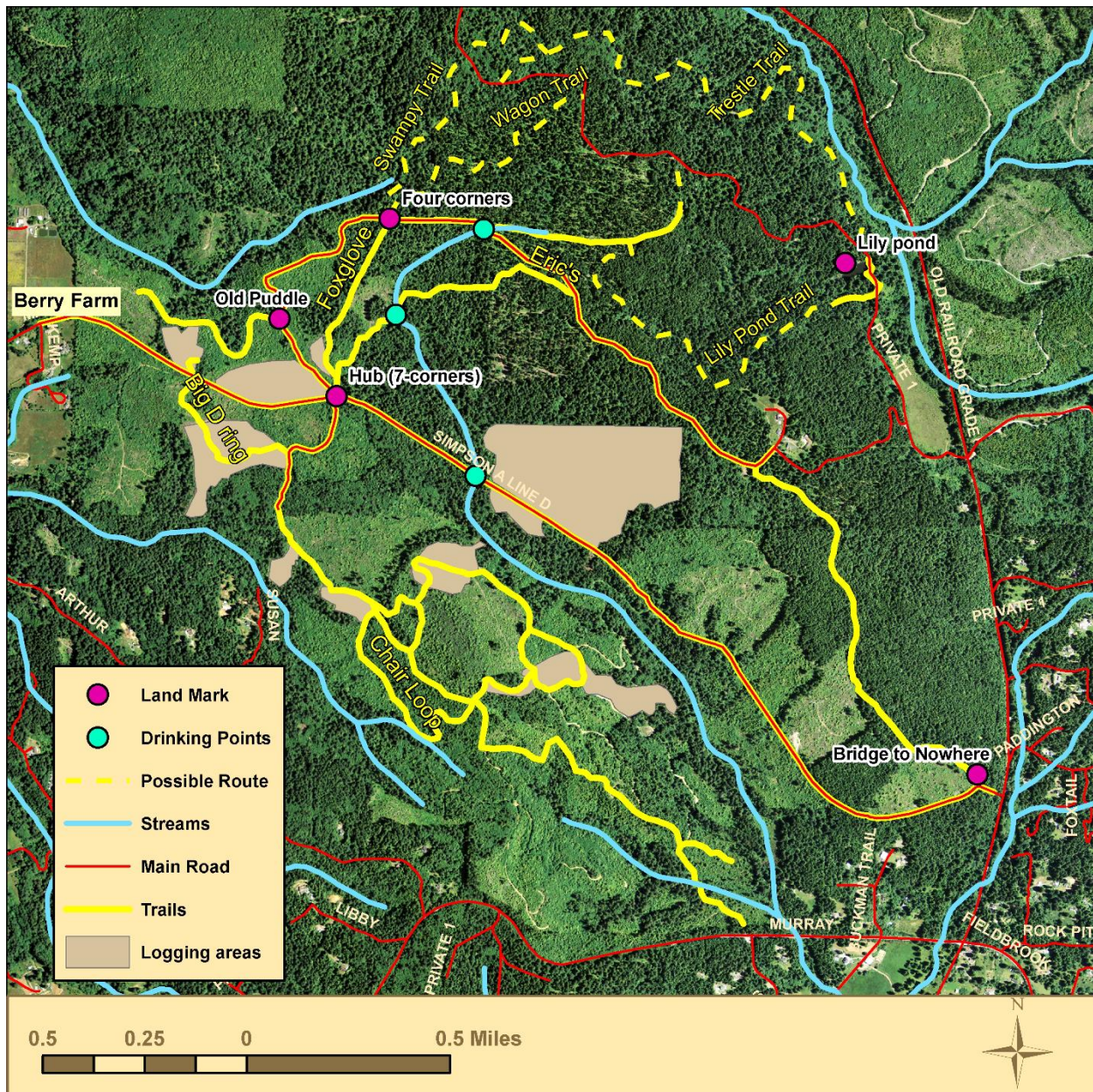


Figure 2. The map of horse trails at the Berry farm, Clam beach, McKinleyville, CA, USA.

Conclusion

This map will be beneficial for any equestrian riders who wish to ride in Berry farm. We hope the map will help clarify trails direction and names. This is the first map that show trails' names, streams, and points of interested all together. It also very beneficial in case of emergency.

Rescuers will be able to locate a casualty faster using the map. For future results, a community can use this map to manage the area. However, this map needs to be check for an accuracy by local riders and community.

We hope the riders and their horses will enjoy the beautiful redwood forest of Berry farm. Riders will enjoy their ride without worrying about unexpected logging machines and /or dehydrated

horses. For future studies Global Positioning System (GPS) should be used to collect these trail data.

The map is a part of the Introduction to Geographic Information Science (GIS) class at Humboldt State University. The use of this map requires a permission from the class instructor, Professor Jim Graham.

Acknowledgement

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