

## **Brazos Bend State Park - Hale Lake Orienteering**

### **WHAT IS ORIENTEERING?**

Since ancient times, rough maps of the Earth and simple compasses have guided explorers, warriors, and pioneers like Lewis and Clark, Marco Polo, and Christopher Columbus, from one point to another. Often, their map and compass skills would keep these men from disaster. Orienteering has been a vital skill for humans for thousands of years and is also a sport. In 1919, a Swedish scout leader, Major Ernst Killander, decided that compasses and maps could be used for fun as well as survival and navigation. Thus, sport orienteering was born. Since then, the sport's popularity has grown steadily. The International Orienteering Federation was formed in 1961, and the United States Orienteering Federation followed in 1971. Orienteering is now a recognized sport at the Olympic Games, and thousands of people participate in the sport each year in local clubs and competitions. There are more than 60 clubs in the United States alone. The Boy Scouts of America has long included orienteering in its program, from local patrol events to national Boy Scout orienteering contests drawing more than 1,000 participants. u

This course was built in 1990 by Ms. Ginger Gard of the Houston Orienteering Club. The original course that was built is an orienteering course that covers over eight miles and consists of 19 posts. For this Eagle project, I have refurbished the orienteering course and made a new map. Using some of the old course, I have made a smaller orienteering course that covers a little more than two miles. This orienteering course was designed to help Scouts earn their First Class requirement #2, and to be available to any one that is interested in orienteering.

### **HOW TO USE THIS COURSE**

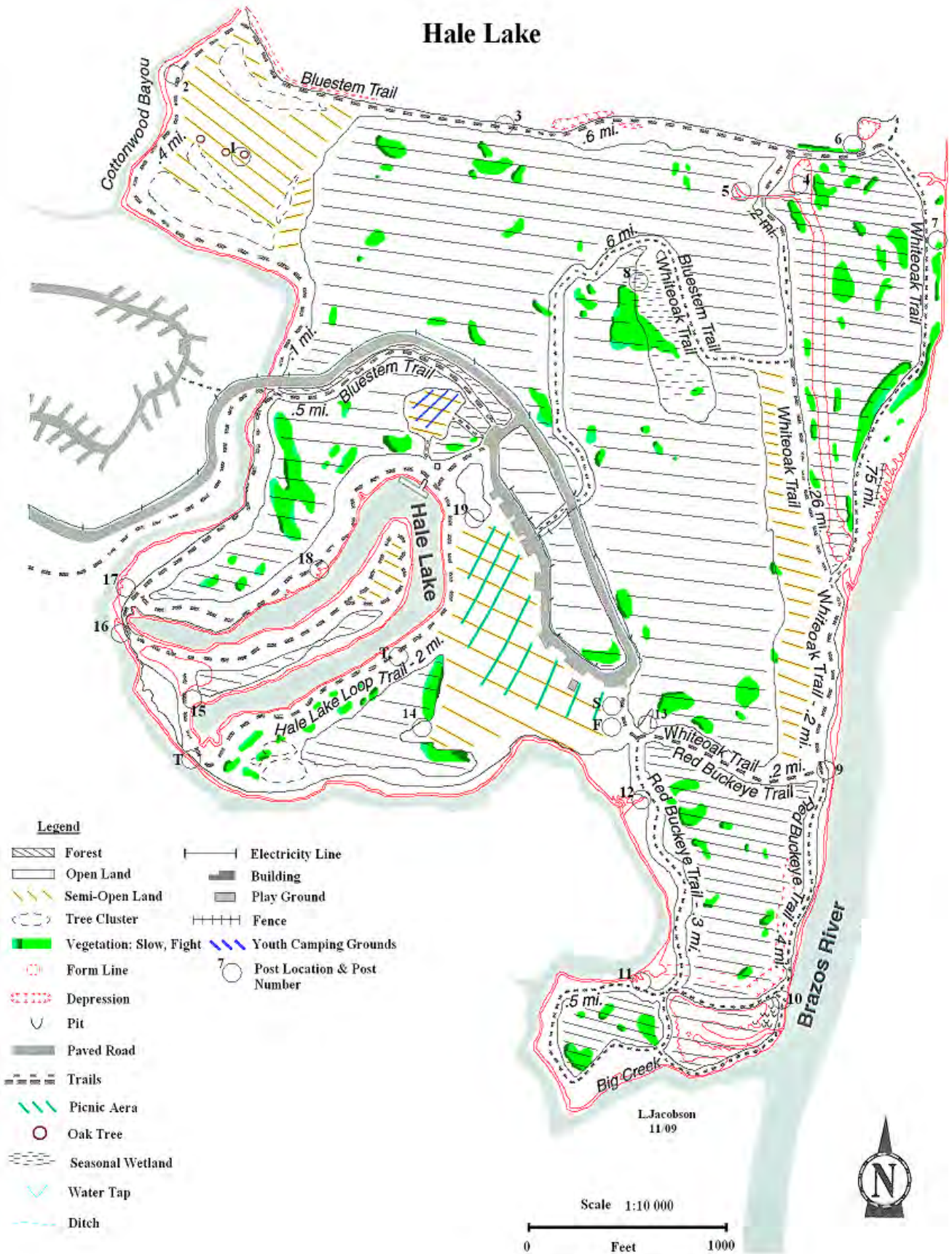
**You will need:** Orienteering worksheet and compass.\* **For GPS:** the GPS coordinate sheet.\* The challenge of this course is to find the control points, which are numbered posts (some brown and some white). There are at least three ways to use this course. One, by using the map and its legend for a line of sight and geographical point of interest survey to locate the control points. Two, by using GPS readings to locate the control points. Three, for control points 14 through 19, using compass degree readings and distance to locate the control points.

Method three is the best way for helping achieve the Boy Scout First Class requirement #2. The Hale Lake orienteering course is a beginner/intermediate course, which starts at post S and finishes at post F. First, use the S and F posts at the start of the White Oak Trail to measure your number of steps for 100 feet. Then, double check your stride by measuring a second time. You will use your steps in walking the noted distances between compass settings. Beginning at Post S, follow the noted compass bearing and go the directed number of feet. Continue in this manner and you will find the first control post # 14. Follow the compass bearings and distances to find the consecutive posts numbered through 19, and finish at post F.

In my opinion, the most important Orienteering is done by using the Holy Bible as your guide for life's journey.  
Luke Jacobson; BSA Troop 220; 2010  
u Boy Scouts of America - Orienteering Merit Badge Pamphlet (2008 Printing)

**\*Hale Lake Map, GPS Coordinate Sheet, Orienteering Worksheet available at the Interpretive Center and at the Brazos Bend State Park website.**

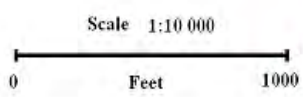
# Hale Lake



## Legend

- |                         |                             |
|-------------------------|-----------------------------|
| Forest                  | Electricity Line            |
| Open Land               | Building                    |
| Semi-Open Land          | Play Ground                 |
| Tree Cluster            | Fence                       |
| Vegetation: Slow, Fight | Youth Camping Grounds       |
| Form Line               | Post Location & Post Number |
| Depression              |                             |
| Pit                     |                             |
| Paved Road              |                             |
| Trails                  |                             |
| Picnic Area             |                             |
| Oak Tree                |                             |
| Seasonal Wetland        |                             |
| Water Tap               |                             |
| Ditch                   |                             |

L. Jacobson  
11.09



## Orienteering Worksheet

Start at Post S going  
to Post 14

<u>Degrees</u>	<u>Feet</u>
(1) 220°	400'
(2) 270°	315'
(3) 230°	90'
(4) 280°	180'

From Post 14  
to Post T

<u>Degrees</u>	<u>Feet</u>
(1) 100°	72'
(2) 0°	400'
(3) 260°	350'

From Post T  
to Post T

<u>Degrees</u>	<u>Feet</u>
(1) Follow on trail going West until you get to the second Post T	

From Post T  
to Post 15

<u>Degrees</u>	<u>Feet</u>
(1) 330°	200'
(2) 0°	100'

From Post 15  
to Post 16

<u>Degrees</u>	<u>Feet</u>
(1) 330°	270'
(2) 305°	208'
(3) 345°	50'
(4) 290°	40'

From Post 16  
to Post 17

<u>Degrees</u>	<u>Feet</u>
(1) 75°	30'
(2) 360°	180'
(3) 60°	155'
(4) 320°	200'

From Post 17  
to Post 18

<u>Degrees</u>	<u>Feet</u>
(1) 140°	425'
(2) 70°	900'
(3) 40°	100'

From Post 18  
to Post 19

<u>Degrees</u>	<u>Feet</u>
(1) 10°	400'
(2) 60°	500'
(3) 125°	400'
(4) 160°	240'

From Post 19  
to Post F

<u>Degrees</u>	<u>Feet</u>
(1) 150°	525'
(2) 130°	560'

Finish

## GPS Coordinates of Each Post

Post 1 29° 22.978 N  
095° 33.372 W

Post 2 29° 23.039 N  
095° 35.430 W

Post 3 29° 23.067 N  
095° 35.056 W

Post 4 29° 23.005 N  
095° 34.651 W

Post 5 29° 22.973 N  
095° 34.705 W

Post 6 29° 23.020 N  
095° 34.457 W

Post 7 29° 22.912 N  
095° 34.429 W

Post 8 29° 22.864 N  
095° 34.749 W

Post 9 29° 22.460 N  
095° 34.616 W

Post 10 29° 22.253 N  
095° 34.650 W

Post 11 29° 22.180 N  
095° 34.821 W

Post 12 29° 22.406 N  
095° 34.840 W

Post 13 29° 22.464 N  
095° 34.815 W

Post 14 29° 22.461 N  
095° 35.105 W

Post 15 29° 22.475 N  
095° 35.410 W

Post 16 29° 22.547 N  
095° 35.463 W

Post 17 29° 22.617 N  
095° 35.459 W

Post 18 29° 22.606 N  
095° 35.238 W

Post 19 29° 22.638 N  
095° 35.053 W