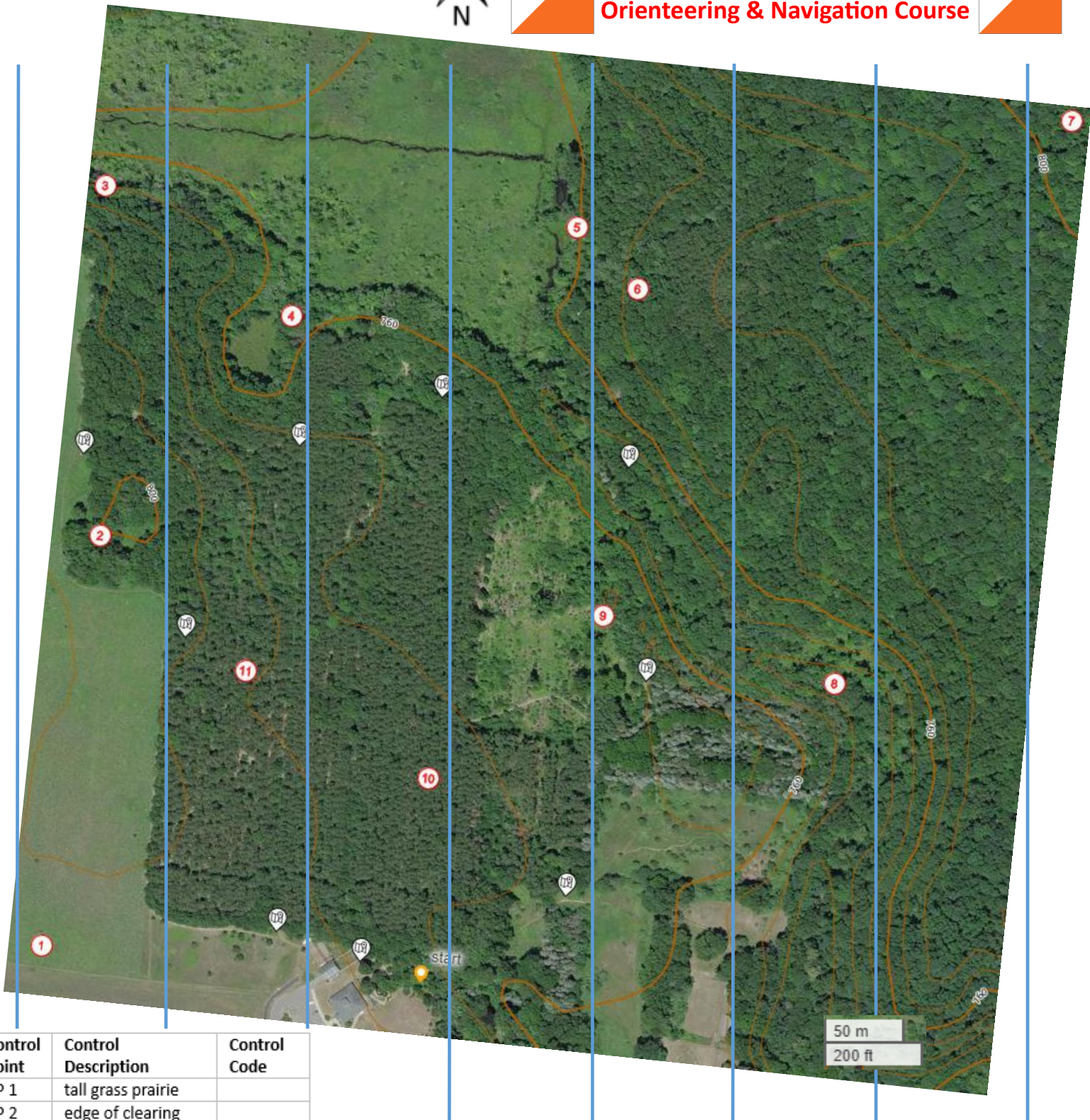




Wittenbach Wege Center Orienteering & Navigation Course



Control Point	Control Description	Control Code
CP 1	tall grass prairie	
CP 2	edge of clearing	
CP 3	bluff over wetland	
CP 4	vernal pond	
CP 5	observation deck	
CP 6	log cabin	
CP 7	mixed oak forest	
CP 8	creek overlook	
CP 9	oak savannah	
CP 10	pine plantation	
CP 11	patch of grass	



"you are here" signs



control point markers



blue lines: N/S orientation lines (adjusted 5.8 degrees W for declination error)

Map Date: June 2024

This course was designed and constructed by Ben Vonderheide and volunteers from BSA Troop 102 of Lowell, MI as his Eagle Scout project.



What is Orienteering?

Orienteering is a cross-country race in which participants use a detailed map and a compass to navigate their way between checkpoints along an unfamiliar course. The sport was founded by Major Ernst Killander, a Swedish scout leader who decided that compasses and maps could be used for fun as well as survival and navigation. The first orienteering competition was held in Stockholm in 1919 with 150 contestants fanning out across the city. The International Orienteering Federation was formed in 1961 and Orienteering USA followed in 1971. Orienteering is now a recognized sport at the Olympic Games. Thousands of people participate in the sport each year in local clubs and competitions, with over 60 clubs in the United States alone.

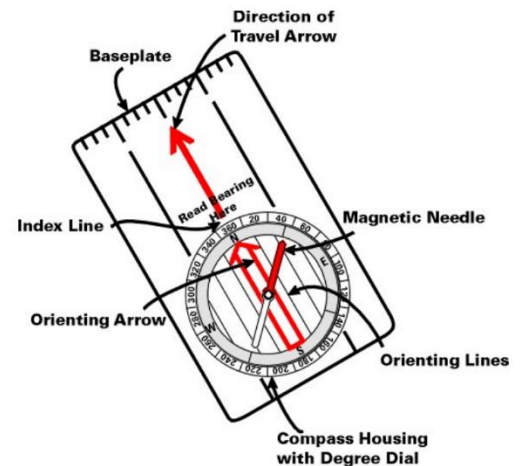
How to Use a Compass

To go in a desired direction: Rotate compass housing to align with that direction (e.g. west or 270 degrees) to set your "bearing". Hold compass parallel to the earth and rotate your body so that the magnetic needle (which always points north) is aligned with the orienting arrow on the housing ("red in the shed"). Follow the direction of the travel arrow on the compass (keeping "red in shed"). Tip: Avoid wearing a metal belt when using a magnetic compass.

To determine what direction you are facing: Point the direction of travel arrow in the direction you are facing and rotate the compass housing until the needle is aligned with the orienting arrow.

How to Navigate with Compass & Map

- 1. Find the bearing from point X (where you are) to point Y (your destination)**
 - Align the edge of the compass with your starting (X) and finishing (Y) points.
 - Rotate the compass housing until the orienting lines on the compass line up with the N/S orientation lines on the map. North on the compass degree dial should match N on the map. Read bearing.
- 2. Orient the map**
 - Rotate the map and compass together until the red end of the compass needle points north (red in the shed).
- 3. Navigate from point X to point Y**
 - Follow the direction of the travel arrow on the compass (the arrow on the baseplate, not the red end of the compass needle) while keeping the needle aligned with the orienting arrow on the housing. Use objects such as trees in the distance to follow rather than always looking down at compass.



Avoiding Common Mistakes

- Remember that orienteering only works if you know where you are (X).
- Ensure that you are lining up the compass with direction of travel arrow pointing from X (where you are) to Y (your destination) and not Y to X.
- When you rotate compass housing to line up N/S lines on compass with those on the map, make sure that north on the compass matches north on the map.
- Make sure you estimate how far you must go (refer to the distance scale represented on the map).
- Try counting your steps or paces (every other step) in the woods to get a good idea of how far you are going. Also, measure how long it takes you on average to travel 100, 200, 400, 800 yards in various types of terrain.