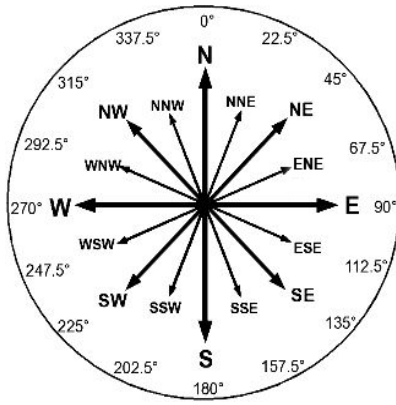


Bear Branch 5-Mile Hike Instructions



Note: All bearings noted below are Magnetic North (MN) and whole degrees. The declination for the area is 10°54' west of true north or approximately 11°. Complete the various questions below.

Start at the Bear Branch Nature Center Parking lot and stand at the South side of the Observatory.

1. Refer to the **“Know your Distances”** instruction sheet. Stand in front of the Observatory Door and use a tape measure to measure 100 feet on the grassy part of the parking lot. Go through the exercise to determine how many steps and time it takes YOU to walk 100 feet. Fill out your answer on the sheet’s chart. Calculate and enter your steps and time for some of the other distances on the chart based on the first entry.
2. Next, using your map and compass, orient your map and visually confirm the orientation with the surrounding structures, roads, and other landmarks.
Question: What landmarks can you identify visually that relate to the map?
3. From the Observatory structure, look to the SSE (South South East) end of the parking lot and look for the connector trail sign that takes you down to the **“Pavilion”**.
4. At the South East (SE) corner of the pavilion, using your map and compass orient your map.
5. From the pavilion head 238 degrees along the **“White Connector Trail”** for about 125 meters or 411 feet.
6. From the trail post, head approx. 180 degrees and follow the Vista Trail (White) for about 215 feet or 65 meters.
Question: What is the closest Cardinal point on a compass that equates to 180 degrees?
7. Stop at the next trail post. You will notice that the Vista Trail will turn or bear left. Orient your map and answer the next question to determine how long you will follow this same trail for about 850 feet or 260 meters until the trail makes a significant turn NNW.
Question: Use your distance/steps/time chart How long should it take you to walk 850 feet?
8. Walk the distance based on time until the trail makes a significant bend toward NNW.
9. Orient your map and take note of where you are on the map.
Question: What is the direction or bearing in degrees for **“NNW”**?
10. Take note of the current time of day. Follow the trail for another 627 meters or 0.39 miles at an approximate bearing of 331 degrees. **Question:** Based on your **“Know your Distances”** chart, what time will you expect to arrive at the Raptor Mews? . How close were you with your estimate?
11. From the ENE (East North East) side of the Raptor station, you will see the trail post for the Green Trail. Follow the Green Trail heading 267 degrees for about 450 feet or 137 meters where the Green Trail will turn NNW. Stop at that turn and orient your map. Notice the **“Restricted Area”** signs. Orient your map and take notice of the Restricted Area boundaries on your map.
Tip: Boundary markers, pipeline, powerlines and other features can help you determine where you are on the map.
12. Continue to follow the Green Trail NNW along the woods on your left and the open fields on the right.
13. The Green Trail will take you to the Martin Cabin. 150 feet before you get to the cabin, you will pass the junction of the Yellow Trail. Stop and check out the Martin Cabin.
14. Go back to the Yellow Trail junction and follow the Yellow Trail North.
15. Using just your map and compass, continue along the yellow trail and other trails to complete the hike.

