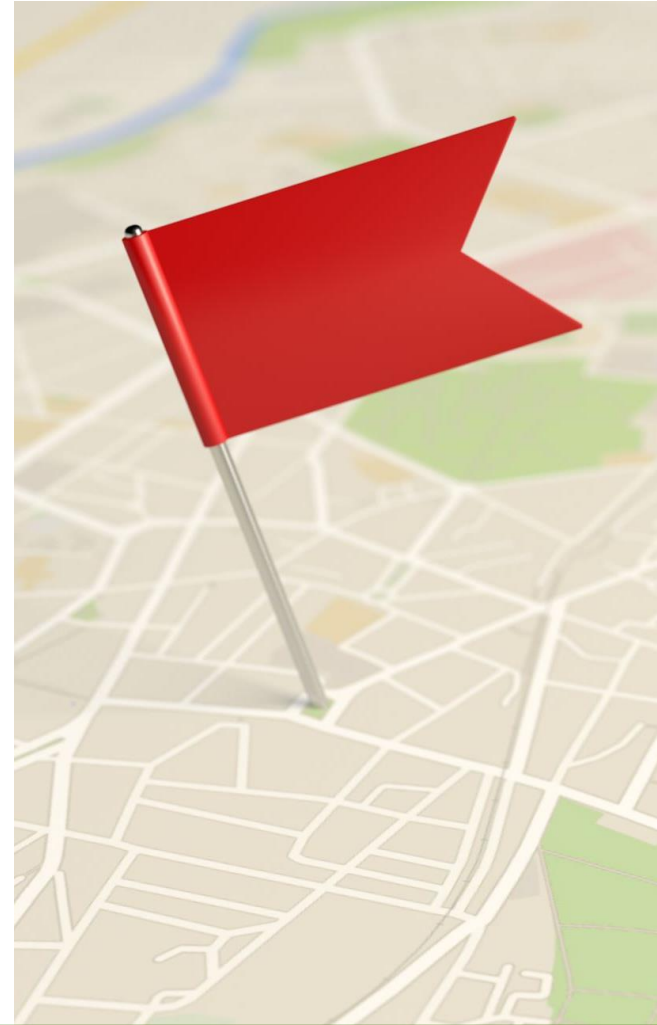


Orienteering Training Guide

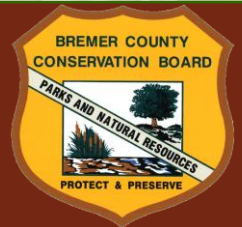
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Welcome to Ingawanis Woodland orienteering and GPS course. There are three different courses. Beginner (1.2), moderate (3.2) , and advanced (5.1) courses. An accurate map is available on the Bremer County website. This is an Eagle Scout project by Joey Schmidt of Troop 90 in Waverly, Iowa. The purpose of this project is to help educate people who are new to orienteering and GPS. This training guide will help you use the tools on the Bremer County website. To complete this you will need a compass, a GPS, or a GPS app for your phone. The first step in this process is to print out the maps. You will use theses to plan your route.



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Pace course and how to use it?

What is a pace course? A pace course is used to measure the distance you covered within a certain number of paces. A pace is 2 steps. If you start with you left foot you would count every time your right foot takes a step. How to use a pace course?

When using the pace course, you will be responsible for your own counting of the steps you do between the 2 points. Begin at the starting point and walk toward point 1 on the map counting your paces along the way. Repeat this for 3 times and take the average. This pace course is 160ft from the starting point. Now divide 160 by the average number of paces. This will give you the distance covered by one pace. You will need to do this before completing one of the courses. There are 2 pace courses, one at Eagle Lodge starting point to beginner one. From the West parking lot go to Advanced point one.

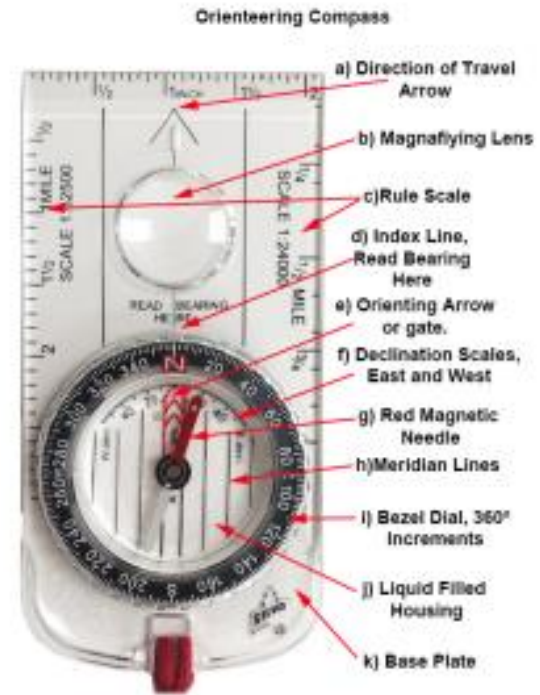


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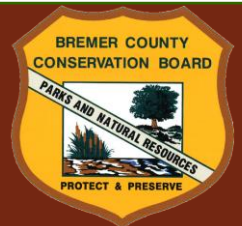


How to use your compass?

A bearing is an angle measured clockwise in degrees on your compass from your location to another point either on the ground or on your map. If you are taking a bearing from your map, it is called a Map North Bearing make sure there are no metal objects close to the compass that would distort the magnetic needle on the compass. Position the orienteering compass, centered at chest level to your body. Point in the direction of travel arrow, located on the front of the base plate on your compass, at some point you are heading toward. (DO NOT point it toward your body.)



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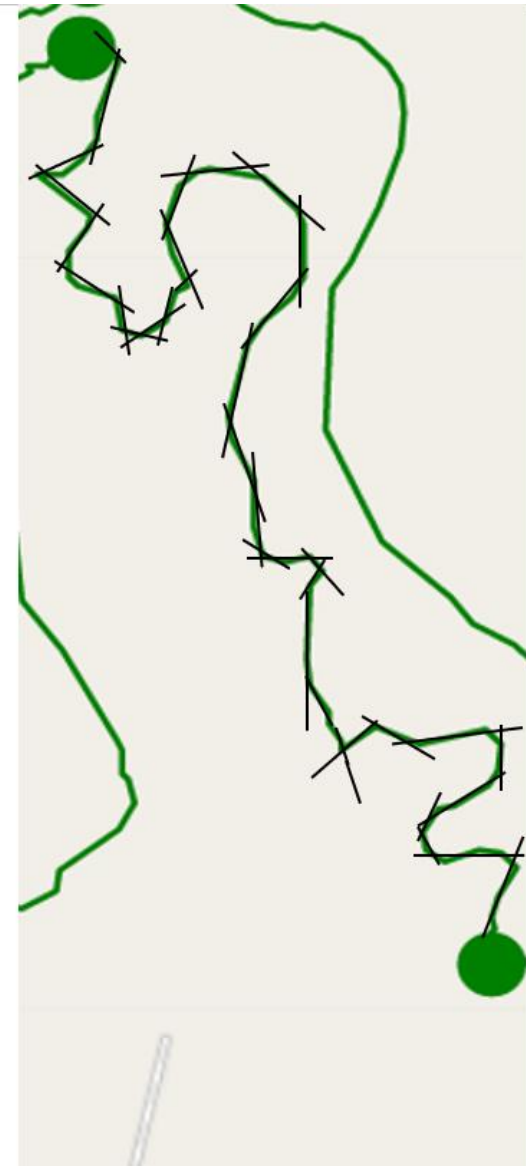


Control points

Control points are points marked on the map that you are trying to get to. The points are marked physical with trail signs. You are trying to look for an orange and white sign. They will have numbers and what course you are on. Use your map and scale on the side of your compass and measure the distance between start point and point one. Use this scale to determine the distance between all your waypoints.



Control point

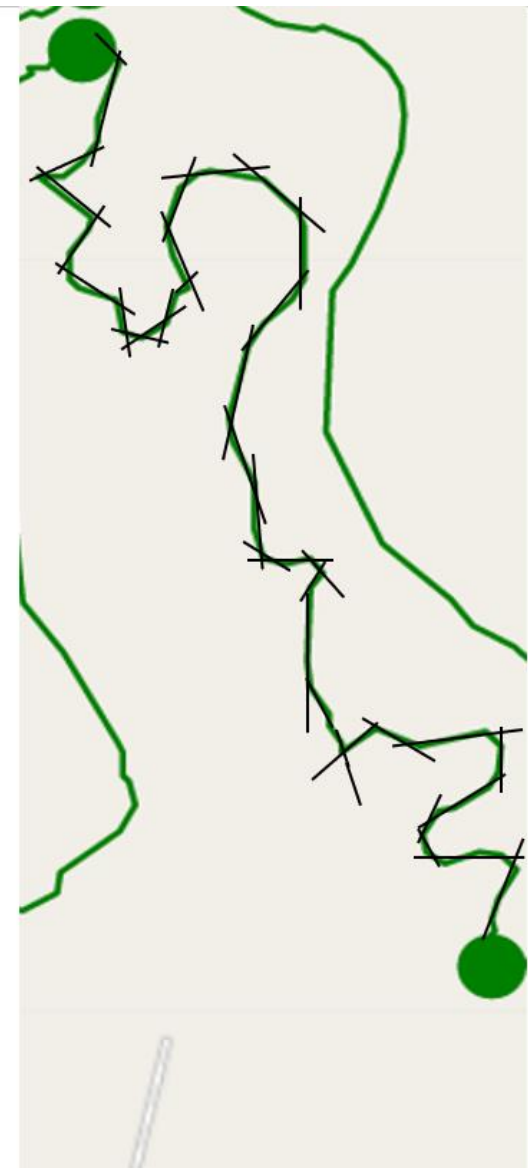


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Waypoints

Due to the twisting and winding of the trails. Waypoints are necessary to direct you into a point of travel. You will develop your own waypoints as indicated here. Printing this map and using a straight edge and a compass you can easily develop any set of way points to complete the trail courses. There maybe many waypoint needed created to get between the control point. This type of Orienteering mimics backpacking and hiking on established trails. Practicing and perfecting your skills will enable you to know accurately where you are, stay on course, and arrive at your intended destination.



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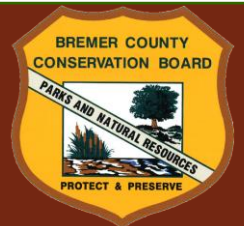


What to do with waypoints and Control Points?

Once finished with creating the waypoints, lay your compass on the map with the North direction pointing to North on the map. Now rotate you map and compass together until North on the compass is in line with magnetic North needle. Now your map is oriented correctly. Next, line your compass with the map waypoint line that you created. Record the angle of this heading. Repeat this until you have recorded all your waypoints between the control points.



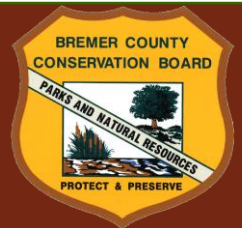
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Getting started on the trail

Now that you have everything layed out, you are ready to begin orienteering. Begin at the starting point which there are two. The first starting point is near the Eagle Lodge parking lot indicated by the orienteering sign that includes the map. The other starting sign is at the West parking lot and is indicated simaliarly as the Eagle lodge orienteering sign. Now rotate your compass bezel to your first way point heading. Position the orienteering compass, centered at chest level to your body. Rotate your body and compass until the red magnet needle is in the orienteering arrow or gate (red in the shed). Pick an object in the horizon that a lines with the direction of travel arrow on your compass and begin walking counting your paces. Repeat this until you reach your first control point and now you are orienteering.

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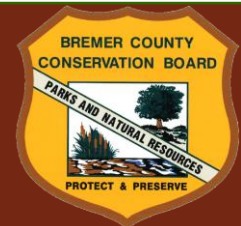


GPS method

As an alternative, these courses may also be completed with GPS and a map. You have options here. You may choose a handheld GPS unit, or you may download an app for your phone, such as Gaia GPS. Then simply download the GPS map and coordinates and program the points in you unit and begin your route. Reminder, to stay on the trails.

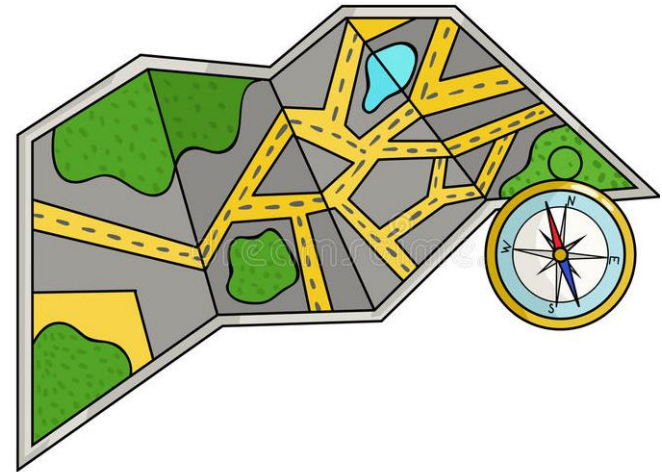


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Simplified Orienteering

Finally, as another option is simplified orienteering. In this method you print out the map and follow the trail until you come to an intersection. At that point, you will orient your map to determine the proper path. To orient your map, lay your compass on the map with the North direction pointing to North on the map. Now rotate you map and compass together until North on the compass is in line with magnetic North needle. Now you can pick your direction of travel. This method is chosen for speed. The downside is that you may not know exactly where you on the trail until you come to an intersection. This can be a minimal disruption or larger depending on your situation.



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