

Note, when printing this map make sure you select "actual size", otherwise your map may not be to scale. To verify the correct scale, the 500 meter on the printed scale should measure 50 millimeters (2")

Crowders Mountain State Park Permanent Orienteering Course Instructions

The map.

Scale: 1 :10,000, one centimeter on the map= 100 meters on the ground.

Contour interval: 5 meters, every time you cross a contour line you either gain or lose 5 meters elevation.

Magnetic North Meridians: vertical black lines pointing towards the top of the map or north.

Color coding:

Black: man-made objects and rock features

Blue: water, lakes and streams.

Green: ground level vegetation, the darker the green the slower and more difficult the travel.

Yellow: Several shades of yellow indicate varying degrees of open land from mowed grass to rough open with scattered trees.

Brown: contour lines and earthen features like gullies, ditches, pits and rootstocks.

White: the white areas are open forest with very little or no ground level vegetation.

Red: Start triangle and control locations and numbers.

Take a minute and familiarize yourself with the **legend**. Identify some of the features on the map.

The **Clue Sheet** on the back of map gives control feature descriptions.

Orienting the map.

Stand at the flag pole in front of the visitor's center, facing the parking lot. You are standing in the middle of the **red start triangle**. Hold the map flat with your **compass** on top. Notice the north end of the **magnetic needle** is pointing to your right. Rotate the map and compass until the **north meridians**, four vertical black lines on the map, are aligned (parallel) with the compass needle and the northern end points toward the top of the map. Now the map is **oriented** and matches what you see on the ground. If you look across the parking lot you see an open field. The open field is the yellow area on the map shown just beyond the parking lot. As you travel from control to control, you should always keep the map oriented, reading the map and anticipating what you should see on the ground.

Courses: Visit the control points in numerical order.

White: Beginner course, controls mostly on or visible from trails. Length: 2.5 km.

Control sequence: 7, 5, 19, 17, 16, 14, 13.

Yellow: Beginner course, longer and more controls than white. Length: 3.9 km.

Control sequence: 7, 15, 17, 18, 6, 21, 4, 3, 2, 9.

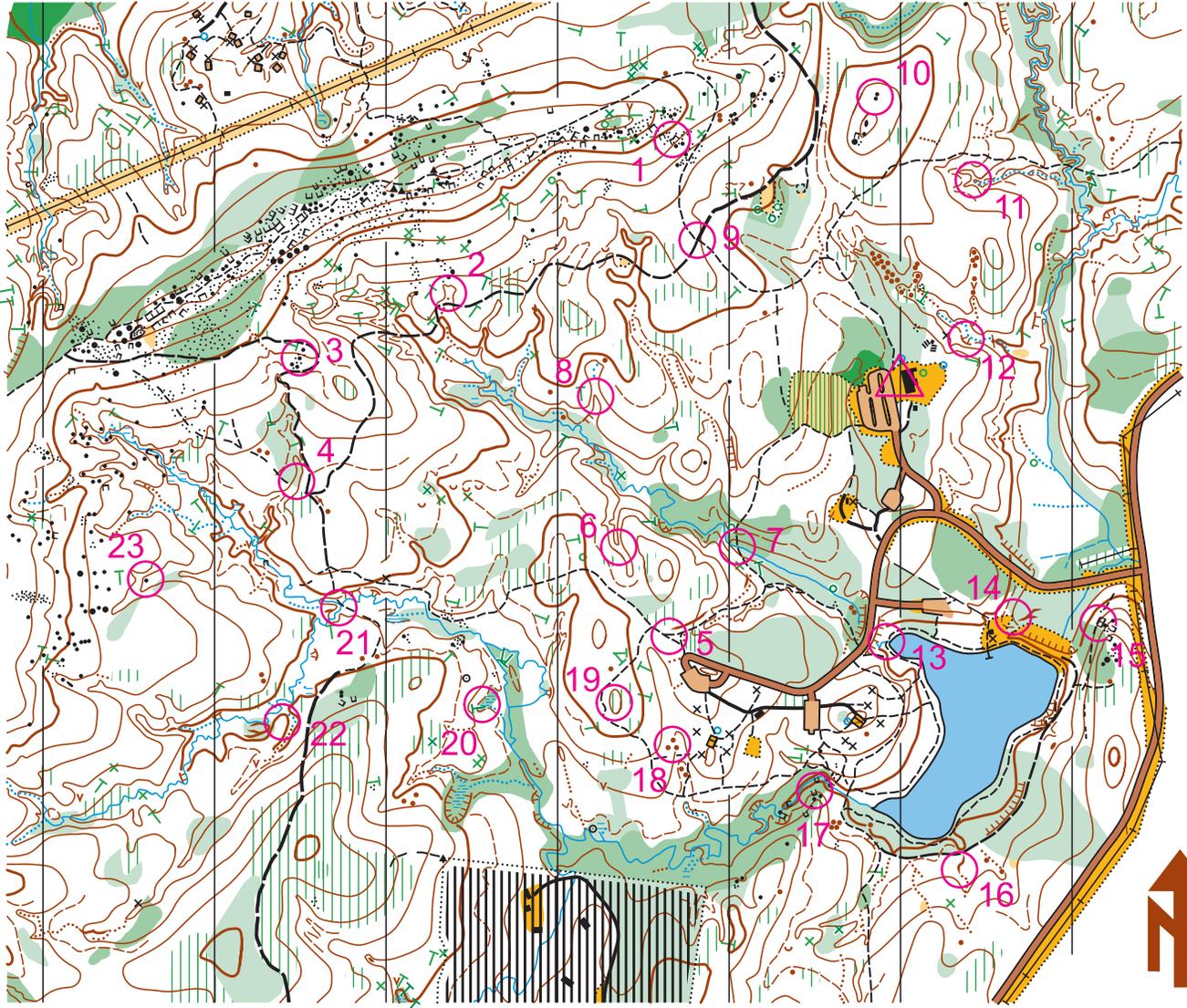
Orange: Intermediate level course, a mix of easy and difficult controls. This course requires off trail, cross country travel. The orienteerer must utilize land features such as streams and reentrants and compass bearings to navigate to the control points. Length: 4.9 km.

Control sequence: 6, 15, 17, 20, 22, 23, 3, 8, 1, 10, 11, 12.

This suggested course sequence is just a guide to get you started. You can mix and match the controls and order visited to design your own courses, depending on your desired level of difficulty. Easier controls are on or near trails. Harder controls are farther off trails. Permanent orienteering courses provide different courses options to continue to challenge and practice navigation. For further information on Orienteering or to participate in Orienteering Meets visit www.carolina-ok.org.

CROWDERS MOUNTAIN STATE PARK

Permanent Orienteering Course



- LEGEND**
- paved road
 - paved area, gravel area
 - dirt road
 - vehicle trail
 - wide footpath
 - small footpath
 - indistinct footpath
 - narrow firebreak or tree cut
 - powerline
 - uncrossable fence
 - fence
 - building
 - man-made object
 - cliff
 - boulder: small, large
 - stony ground
 - boulder field, boulder cluster
 - bare rock
 - lake, pond

- crossable swamp or marsh
- indistinct marsh
- large stream
- small stream
- intermittent stream
- trickle
- spring, misc. water feature
- distinct vegetation boundary
- open land
- rough open, with scattered trees
- forest: easy, slow, difficult, fight
- undergrowth: slow, difficult
- contour
- form line
- gully, dry ditch
- earth bank
- knoll, small knoll
- rootstock
- out of bounds

Scale 1 : 10000
 0 100 200 300 400 500m

Contours 5 meters

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Permanent					Crowders Mountain Permanent Course
Start	△	■		○	Start Building West side
1		▬		⌒	Cliff On top
2		∩			Re-entrant
3		▲			Boulder
4		∩			Re-entrant
5		⋄	∟		Path Junction
6		∩			Re-entrant
7		⋄	⊗	⋈	Path Crossing Stream
8		∩			Re-entrant Lower part
9		⋄	⊗	⋄	Path Crossing Path
10		▲	.3		Boulder Height .3 m
11		∩	∟		Re-entrant Junction
12		⌒		○	Earth bank North side
13		⋄		○	Footbridge Northwest side
14		⋄		♂	Vegetation boundary Northeast edge
15		▬		○	Cliff West foot
16		∧			Gully Upper part
17		▬		○	Cliff North foot
18		•		⋄	Knoll Between
19		○		⌒	Hill On top
20		≡		○	Marsh Southwest side
21		⋈	∟		Stream Junction
22		⌒		○	Spur Northeast part
23		▲	1.5	○	Boulder Height 1.5 m East side