

USAFA Sherwood Forest - Mapper's Notes for Use at RMOC's 11Sep21 Meet
Version Date: 2021.09.06

IMPORTANT SAFETY NOTES:

- There is reported to be one male black bear and one female black bear (brown in color) with a cub residing on this map, and there is one known mountain lion in the greater area. Making noise is the best way to not surprise these animals and thereby avoid contact. Familiarize yourself with what to do in case of a wild animal encounter.
- Approximate or known locations of animal dens are marked with a purple "X." Keep an eye out for these on the map and do not linger nearby.
- Be on the lookout for small (1-4m) lengths/piles of old barbed wire, especially along the upper parts of the southern slope. These are not mapped. Lengths of barbed wire along the ground, where observed, are mapped as ruined fence for safety purposes.
- IN CASE OF EMERGENCY: call 911, blow three blasts on your whistle, pause, repeat until help arrives.
- IF YOU ARE LOST/SAFETY BEARING: generally going uphill and west will return you to the area near the athletic fields from which you will have started. Also, for a reference/reorientation point, there is a big orange windsock atop a ridge on the south-central part of the map ("T" symbol) that is visible from most higher and open parts of the map.
- For non-emergencies (lost, likely to miss the 4pm deadline to return and download, etc), please call Asst. Meet Director Galen Moore at 303-260-8319 or Meet Director Maiya Anderson at 719-393-2180.
- ALSO: in the center of this map is a very active archery range. The range has agreed to shut down on 11Sep21 for RMOC's orienteering meet. The approximate boundary of the range is mapped with an enclosing thin purple line. For future reference, do not enter the range area without making prior arrangements with the Academy Archery Club. Contact Dennis "Scotty" Scott at 719-339-5303.

MAIN THINGS TO KNOW ABOUT THIS MAP:

- The map covers about 4.4sqkm (gross) in the southeast part of the USAFA grounds. The western section of the part of the map used for the 11Sep21 meet consists of a shallow drainage valley bounded by two W->E sloping ridges. The northerly ridge drops off about 35m on its north side the longer southerly ridge drops off about 65m forming the long, steep slope on the south side of the map. The terrain breaks into several ridge/valley systems and into more complex landforms toward the east. The map is bounded by Community Center Drive, Stadium Blvd., and Pine Drive. Developed areas west of the main football field are not used for the 11Sep21 meet.
- The steep slopes, especially on the south side of the map, are largely covered in **rocky ground**. Since the steepness impacts runnability more than the rockiness, rocky areas have only been mapped where they are locally significantly rockier than their surroundings.
- About 1/3 of the land is forest or rough open scattered trees. Very roughly half of the land has blobs of Scrub Oak (i.e., it's all over the place...), some blobs are small and loosely scattered (generally not mapped), some are dense and quite large.
- **The Scrub Oak** will likely be the biggest challenge when running off-trail on this map; the physical individual blobs of Scrub Oak are widespread, complex, and mostly '410 Veg: fight.'
- Of the roughly 1,300 blobs mapped, nearly all of them are > 100sqm in area, with a smaller number in the 65sqm-99sqm range. There remain many, many smaller blobs that have not been mapped in the interest of map legibility. Particularly dense areas of these smaller blobs are mapped with '408 Veg: walk' or 406 Veg: slow to indicate that visibility is poor and, although you'll usually be able to move at close to normal running speed, you'll have so much juking left or juking right to get around the individual blobs that your effective speed across such areas will be substantially lower than if it were 405 Forest.
- 405 Forest will often contain some unmapped scrub oak and therefore will not always be as fast as implied, and green-shaded areas will not always be as slow as implied.
- Thin parts or 'waists' in blobs of Scrub Oak are either small gaps or narrow enough that it's worth a little fight to cut through. Linear gaps through both 408 and 410 as shown on the map are generally good routes through the veg. Many of these waists and gaps are technically thickness and gap violations under ISOM 2017-2, but the

alterative over-generalization and plastering larger areas with dark green would have been uninformative. Having said that, very few individual blobs are so distinct or identifiable as to be useful navigationally or as control features.

- **Vehicle tracks and footpaths** inside the archery range have been observed to come and go in a matter of weeks due to rapid growth of grass, target relocations and partial range closures. Vehicle tracks and footpaths used as control features have been verified, other vehicle tracks and footpaths' prominence may not match their symbolization. Less distinct vehicle tracks are mapped as some form of footpath. 2-3 game trails have been mapped as footpaths because of their size and navigational significance, the many other game trails have not been mapped. In some cases, a vehicle track becomes a footpath, a footpath becomes a less distinct small footpath, and footpaths become game trails, etc. Best efforts have been made to capture the differences.

- Keep an eye out for **prickly pear cactus and yucca**, they will find a way to poke through your clothing and shoes. Don't try to remove prickly pear with your fingers – carry a comb, tweezers or find a pair of small sticks to get them out. Dress to prevent **grass seeds** from getting into your shoes.

- All feedback about the mapping content, symbolization, and style will be welcome, please catch me after the meet or scan your map with comments and e-mail it to me at galen.a.moore@gmail.com. Thank you.

ADDITIONAL MAPPER'S NOTES:

100. Landforms

- Dams are mapped as Earth walls. Ditch & earth wall in combination are mapped as Erosion gullies or Small erosion gullies. The distinction is not perfect. Short sections of earth walls are mapped as minimum, form line hills rotated so that their longer axis aligns with the direction of the short earth wall.

- At the top end of some erosion features there can be found what is a Small depression or Pit but for the open side where the erosion feature starts. Such features are mapped as Small depression or Pit according to the steepness of the feature's sides.

- The main W -> E streambed has sections that are difficult to cross or are uncrossable due to the steepness of the sides. Earth bank indicates impossible or very difficult to cross, and Erosion gully indicates difficult to cross. The streambed has been mapped with 306 Minor/seasonal water channel to give continuity where it is neither stony nor steep-sided.

- There are a handful of small ≥ 1 m high, 2-4m long earth banks mapped using the minimum earth bank symbol. They are often topped with unmappably small blobs of scrub oak, making the runnability criterion moot, but they make good reference points from lower ground.

200. Rocks

- Portions of the main W -> E streambed are lined with large rocks and are mapped with 211 Stony ground, walk.

- There are uncrossable, 2-5m high vertical drop-offs mapped as cliffs in the SE part of the map. Some of these/parts of these are arguable earth banks, but their uncrossability warranted use of the cliff symbol.

- Some of the Boulder clusters may consist of one true, >1 m boulder and a number of <1 m boulders. Many of these have been changed to show just the true, conforming boulder, others remain as candidates for inspection and correction.

300. Water

- It's not likely that orienteers will encounter any navigationally relevant water features, other than a pond near the Start/Finish area.

- There are two triangular-ish shaped, 2x2m plastic water tanks with water in them. These are mapped with 311 Well, fountain or water tank.

- In the SE part of the map, there is one +/- 2m circular dry water tank set below ground level, it is mapped with 530 Prominent mmf-ring. Being that it <1m below ground level it is not truly prominent, but having it on the map will help it not become prominent in an unfortunate way.

400. Veg

Nearly all of the 410 Veg: fight has been mapped using computer code that processes the LiDAR. It tends to do a better job depicting the scrub oak outside of forested areas.

- Prominent standing but dead or mostly dead trees, as well as multi-meter tall trunk remnants, are marked with a green "X."

500. Man-made

- Archery range warning signs are not shown on the map because they don't form a continuous, always-visible boundary line. Signs are at the corners of the boundary line and throughout the range. None are mapped.

- Features marked with the black "X" Man-made feature symbol include: 2m high Old Land Nav course signs, >1m utility marker poles, 2.2m high fixed target backstops, large blue road signs, large concrete blocks, and >1m electrical boxes.

- Features marked with the black "O" Man-made feature include Culverts, other > 1m water-related features and Parcourse stations. Grade-level drains are not mapped.

- Where there are multiple Man-made features in one small area, only one of them is mapped.

- Staircases too short to be mapped with three steps, even with exaggeration, are omitted and just included as part of the trail of which they are a segment.

- Most footpath bridges have been mapped, sometimes with exaggerated length.

- Man-made features that are NOT mapped include: surface-level features, features < 1m in height or depth, picnic tables, speed limit, warning, and other smaller road signs, tall light towers (like those around the baseball and turf fields), street lights, and very small/short bridges which, if mapped, would impair legibility.

- A few lengths of navigationally relevant animal trails on the northern slope have been mapped. There are many animal trails that have not been mapped. Most animal trails do not follow contours for very long.

- The developed area to the west has too much detail to show at 1:15,000 scale and is included for reference only. Forgiveness for gap violations in the developed area is presumed. :-)

600. Technical

- Magnetic North-south lines are shown in light blue.

700. Course Planning

- 709.004 – out-of-bound line is used to show the boundary of the archery range for reference. The range has agreed to shut-down for our event and has notified its members. There is no physical feature indicating the boundary line itself.