

OUSA 2025 Junior National Orienteering Championships & North Texas Spring-O

Course Setter and Mapper Notes

Update: March 14, 2025

Welcome to historic Sid Richardson Scout Ranch, where “Orienteering meets the Wild West.” The camp sits on a peninsula surrounded by Lake Bridgeport and is the site of a Civil War outpost for the Buffalo Soldiers.

Course Setter Notes

Map statistics

The camp has been re-mapped for the Junior Nationals; read additional notes from mapper Jon Campbell below. The map contour interval is 5m. Maps for white, yellow, orange, and brown will be printed at 1:7500. Maps for green, red, and blue will be printed at 1:10000. Waivers from OUSA standard scales were granted due to intricate terrain and rock detail.

Trails

See map notes. Some trails are disappearing from disuse. Many trails are marked with rock cairns and some have ribbons.

Water

Lake Bridgeport’s level can vary and is currently low; most streams and ditches are dry and even some marsh areas are dry. While lake shore routes may seem tempting, they are normally slower.

Hazards

Running through unfamiliar terrain is always dangerous. Notable terrain hazards include high cliffs and earth banks, steep slopes, barbed wire, loose rocks, holes, and leaf-hidden hazards. Many plants have a spine or barb: mesquite trees (1-3” spikes), prickly pear cactus (see right), greenbrier vine, and pencil cactus (see below right). It’s the worst, with tiny, hairy spines; don’t even brush against it. (Bring duct tape to remove it later.)

Special note: With all these hazards, robust leg protection is needed. The camp has been the site of the Texas Junior Orienteering Camp (TJOC) for years and many students have resisted wearing gaiters. My response: ***“Anyone not wearing leg protection at Sid is not a serious competitor.”***

The camp also has many oil and gas production wells and equipment. These facilities may seem abandoned but can start with no warning and potentially startle you. Please respect signs warning about this equipment.



Competitive course statistics

Course	Scale	Length (km)	Climb (m)	Controls
Day 1 White	1:7500	2.35	80	11
Day 2 White	1:7500	2.24	85	11
Classes on White: F-10, F-12, ISPF, M-10, M-12, ISPM, F/M-White				
Day 1 Yellow	1:7500	3.20	117	14
Day 2 Yellow	1:7500	2.79	98	12
Classes on Yellow: F-14, ISIF, M-14, ISIM, F-Yellow, M-Yellow				
Day 1 Orange A	1:7500	4.16	165	12
Day 2 Orange A	1:7500	4.29	144	13
Classes on Orange A: M-16, ISJVM, ICJVM, M-Orange				
Day 1 Orange B	1:7500	4.02	160	12
Day 2 Orange B	1:7500	3.94	135	12
Classes on Orange B: F-16, ISJVF, ICJVF, F-Orange				
Day 1 Brown A	1:7500	4.20	164	12
Day 2 Brown A	1:7500	4.31	188	15
Classes on Brown A: F-18, ISVF				
Day 1 Brown B	1:7500	3.99	166	11
Day 2 Brown B	1:7500	4.13	183	13
Classes on Brown B: F70+, F75+, F55+, F60+, F65+, M65+, M70+, M75+, F-Brown, M-Brown (Updated 3/14)				
Day 1 Green A	1:10000	5.58	229	16
Day 1 Green A	1:10000	5.64	223	18
Classes on Green A: M-18, ISVM, M50+, M55+, M60+, M-Green				
Day 1 Green B	1:10000	5.35	242	14
Day 2 Green B	1:10000	5.39	209	17
Classes on Green B: F-20, ICVF, F35+, F40+, F50+, F-Green				
Day 1 Red	1:10000	7.54	316	21
Day 2 Red	1:10000	7.97	316	23
Classes on Red: F21+, M-20, M35+, M40+, M45+, ICVM, M-Red				
Day 1 Blue	1:10000	9.02	365	25
Day 2 Blue	1:10000	9.34	317	23
Classes on Blue: Blue Classes: M21+				

Controls

The controls will be marked with the traditional orange and white bag. All bags will have a plastic pin punch and an electronic box. All boxes, **except start**, will be Air enabled.

Everyone must manually punch a Start box.

Shooting ranges and COPE areas

Shooting Ranges and COPE areas are part of the active course terrain during the meet. You can ignore signage restricting access to these areas.

Safety bearing

Safety bearing is uphill (away from the lake) toward the main road that runs down the spine of the peninsula.

Out of bounds

There are a few small out-of-bounds areas around the residences and maintenance areas.

We hope you enjoy the challenge of our unique terrain!

-- Ralph Courtney, Course Setter

Mapper's Notes

2023-2024 Updates, Jon Campbell

This edition of the Sid Richardson Scout Reservation orienteering map represents a complete overhaul, with a LiDAR basemap (contributed by Matt Robbins, OCIN) and full field check of the most interesting portions of the map and overview field-checks of the sparse portions of the map—all guided by previous editions of the map. A lot of effort went into capturing the intricacies of this great terrain—the cliffs, rock, contours, vegetation. Enjoy!

Map Symbol Primacy

Sid Richardson Scout Ranch occupies a large peninsula with smaller branch peninsulas. There is a lot of relevant orienteering detail that is challenging to show on a legible map. The priority to show clearly:

- The shape of the land itself (contours: brown on the map & water (blue on the map; lake edge and streambeds)
- Major linear features (black lines on the map): both manmade (roads, trails, fences, pipelines, powerlines) and natural (bands of cliff and rock)
- Prominent point features (black point features on the map): buildings, boulders, etc.
- Vegetation in a general sense (white, yellows, greens)
- Vegetation in detail (same white, yellows, greens). See notes below.

Trail system. The footpaths on the Scout reservation show various levels of use and maintenance.

- **Footpaths on the map** will be the ones that offer faster running than the surroundings and easier navigation, such as trails that are heavily used, well maintained, and marked with a combination of short stone cairns and plastic flagging hung from branches.
- **Footpaths not on the map:** There are many game trails that may be prominent for short sections but then fade away. Cattle were most recently run on the southeastern portion of the map, and this area has the remains of many cattle paths. These short trails offer little navigational value or speed advantage over their surroundings and have been omitted unless they are consistently visible and long (>100m) and will be shown with an indistinct trail symbol (507).
- **Mountain bike trails:** North of the main camp dining hall is a large valley that is used for mountain biking. It has a heavy forked trail system, some bike “trick” obstacles, and trails that fade into or out of existence in “off trail” sections.
- **Where's this trail on the map?** Many trails have fallen into disuse, with a faint trail bed and/or no markings. Or, a section of the trail has been rerouted and the old section is being overgrown. If these are long (>100m), prominent in the area, and actually “go somewhere,” they may be shown as a trail segment, since they offer speed and navigation advantages. In other cases, they will be omitted for more prominent local detail. In many cases, they exist on the map as a runnable vegetation corridor of forest (405, white) or rough open (403, light yellow) rather than as short trail segments. In a number of places, a new section of trail is planned and flagged, but there is no footpath at all—flagging by itself is not a trail and is not on the map.

Pipelines, powerlines, and neighboring roads/trails

- Pipelines are shown with “prominent line feature” (528). In the terrain, these may be visible for some distance, then plunge below ground or under vegetation where they are not visible. They are not mapped where not visible/prominent. They are also not mapped when directly adjacent to roads as the road itself is the important feature, and frankly, they both don’t fit.
- Powerlines are not shown along roads or in the developed areas of camp, but are very important navigationally when cutting through clearings, scrub, or woods. In fact, in places where powerlines and minor trails run next to each other, or a powerline, pipeline, and trail are together, the powerline is shown on the map because up close you can see and navigate along all of them, but the powerline is often visible from far away.

Oil Infrastructure

There is plenty of oil infrastructure besides the pipelines. The largest enclosures are mapped as “area that shall not be entered” (520, olive green), sometimes with a bounding fence symbol. Other prominent infrastructure is too small to be shown this way. Instead, oil pumpjacks are shown with a Black X (prominent manmade feature) and other infrastructure (storage tanks, valves, etc.) is shown with a Black O (prominent manmade feature). Many of these are surrounded by fencing, but the fencing is omitted from the map.

Rock features, including square & rectangular boulders!

- **IOF standard cliffs** (uncrossable, 201 and crossable, 202) have round edges and together with boulders make for interesting orienteering detail on this map. **Mapped boulders** (204) are prominent and 1m or higher from at least one direction. **Large boulders** (205) are 2+ meters high.
- **Square and rectangular boulders.** A unique part of the geology of this area results in rock with very square edges. You will likely encounter huge square or rectangular boulders. By themselves, these are mapped with normal (round) boulder symbols. But in areas near cliffs or others of their kind, the round boulder symbol has been replaced with black squares or rectangles as gigantic boulders (206). These are often exaggerated and drawn to shape (IOF calls it “plan shape”), and the interesting part is navigating between them. You’ll see how useful that true-to-life square depiction is, over the normal round boulder or triangle boulder field/cluster. But wait, doesn’t a square boulder look just like a building on the map? Sure does. Luckily, the camp doesn’t have buildings near these things, so it’ll be quite clear from context.
- **Boulder cluster & boulder field.** Numerous boulders too close together to individually map are shown as a **boulder cluster** (207, equilateral triangle) or with the **boulder field** (208, scalene triangle) symbols. In some cases (e.g., near a trail), a single boulder field triangle may substitute for a boulder cluster triangle, because it fits better.
- **Stony ground (210)** is used to show areas with decreased speed due to rock underfoot; for example, at the end and below a series of cliffs. It is also used in a small 3 or 4 “dot” configuration as a catch-all to show prominent rocky “things” that don’t qualify otherwise as a cliff, boulder, knoll, etc.

- **Vegetation mapping.** Besides beautiful terrain and intricate rock detail, there is a full range of vegetation at Sid Richardson—much of it thorny. Much of the thorniest vegetation grows in distinct blobs. Although it could be very well generalized away with a “scattered tree/bush” symbol, many of these blobs are large enough to be shown in their own right. Much 2023-2024 mapping update effort went into showing the vegetation well: generalizing where appropriate, but elsewhere capturing the detail of small clearings and thickets, runnable corridors, etc.
- **Open forest** (405, white woods), **open land** (401, bright yellow), and **rough open** (403, light yellow) are all fast with good visibility. They may also contain small clumps of other vegetation (tree, bush, clearing, etc.), which are too small to map or navigate with and are easy to run around. In a few cases, there are distinct clearings which should be rough open (403), but are too small and are thus “rounded” to open (401) per IOF. You will no doubt get the sense of clearing—don’t agonize over short or long grass underfoot.
- **Open with scattered trees** (402, bright yellow with white dots) and **Rough open** with scattered trees (404, light yellow with larger white dots) are used sparingly. **Open with scattered trees** is primarily the mowed but shaded camping areas (usually surrounding a latrine building). In both areas, running speed is quite high, as it is easy to work around the scattered trees. In contrast, the few places where rough open with scattered bushes (404.001, light yellow with medium green dots) is used, you will find the running slower and visibility reduced—these are typically too-small thickets you’re running around.
- **Vegetation: slow run** (406, light green) comes in two main flavors. One is the typical full-height forest that has an understory slowing you down and reducing visibility. The other is a former clearing where the scrub has grown back and slows you down/reduces visibility. In both cases, there may be small patches of thicker or thinner vegetation, too small to map, that are generalized away, but despite the blotchiness, you’ll find the overall area to match light green.
- **Vegetation: fight** (409, dark green), on the other hand, will be impenetrable, mainly due to thorns.
- **Vegetation: walk** (408, medium green) will not be fast at all, but you will be able to judiciously pick your way through. Like with small clearings, small thickets may be “rounded up” to a darker shade of green for clarity. For the very smallest, prominent thickets, clearings, or copses, the IOF specs allow only dark green, bright yellow, or white, so these are used if “omission” wasn’t appropriate.
- **Hunting stands.** These are mapped with the small tower (525, black T) symbol and represent very prominent wooden stands built in trees or newer metal hunting towers at clearing’s edge. There are many more old, decaying wooden stands overwhelmed by vegetation. Ironically, you have to “hunt” for these older hunting stands, and thus, they aren’t prominent and are not mapped.
- **Pits & trenches.** The aforementioned geology that resulted in square boulders and right-angle cliffs shows up in other areas as **rocky pits** (203.1, black V). There is even a mapping oddity of a few **long trenches** (215, thin black double line)--see if you can find any of these cartographic “Easter eggs.”

- **Seasonal streams, ditches, gullies, and earthen banks.** These water features will likely be dry, although you'll be able to see that water runs there. So a dry watercourse will either be shown as a **seasonal water course** (306, dashed blue line) or a **dry ditch** (108, brown dotted line) with the difference being not the presence of water but the depth—ditches are 0.5m(+) in depth and could easily obscure a standard-height control marker.
- **Gullies** (107, thick brown line with tapered ends) are at least a meter deep and are difficult and slow to climb down into and back out. Avoid them.
- **Earthen banks** (104, brown comb or brown “cliff with tags”) are steep and slow but generally passable. These are often at the lake's edge or on the outside corners of major streams. If the earthen bank is so steep/high that it is uncrossable, it is mapped per IOF as an uncrossable cliff (201), even if there is no rock at all.
- **Fences.** The long fences shown on the map are the remains of a cattle-running operation in the southern end of the map. They are generally 3 or 4 strands of barb wire, and could be crossed with a delay most anywhere. They are shown with **fence** (516, thin black line with single tags) and the much-faster-to-cross gates are shown with the **crossing point** symbol (519). The **ruined fence** symbol (517, thin black broken line with tags) is used sparingly and only when you are more likely than not to notice the fence when crossing. Again, if you have to hunt for the remains of a fence, it is no longer prominent and no longer mapped.
- **Manmade features.** The developed portion of the camp has a high density of other manmade point features: signs, benches, tables, small pavements or sidewalks, campfire rings, etc. These are omitted from the map for clarity. There's plenty of other stuff around to navigate with that is more prominent and consistent with the rest of the map.
- **Lake edge.** Obviously, this fluctuates with water level, and in the shallows near land, a small drop in water level may expose a large area of now-dry land. Depicted is a “typical” water level (from many years of imagery), not the high-water level, which you can surmise from the cliff/earth bank heights. The exposed land may be slow and rocky underfoot or fast and smooth, and some areas have (unmapped) boulders that'll emerge from the waters. Assume the shore edge is very slow to traverse along for any appreciable distance unless a course setter indicates otherwise in their notes.

-- Jon Campbell, Mapper