



J. B. Starkey Park Orienteering Course Material

An Eagle Scout Service Project by Chris Edgar



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Overview / Description:

Orienteering is the sport of using a compass and/or a map to navigate your way between checkpoints along an unfamiliar course. Orienteering has been likened to a scavenger hunt in the woods, but it's much more than that! Orienteering provides:

- Mental Challenges
- Fun
- Lifetime skills
- Physical Activity
- Excitement!

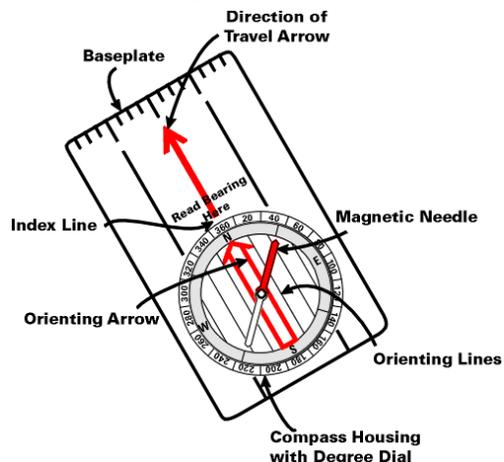
The J. B. Starkey Park orienteering course consists of three multi-leg course route combinations between 14 markers placed throughout the field located south of the corral area. Using only a compass (and optionally the maps in this document), the participant can complete the route of choice by navigating the correct bearing and distance for each course leg.

The markers have a triangular sign with square sides on which the upper right triangle is orange and the lower left triangle is white, this is the universal marker for orienteering (please see figure below right for an example).

Each marker has an engraved plate on top of it which tells the user the direction (bearing in degrees) and the distance (in yards) between that marker and next for the selected course. The three courses (A, B, & C) differ in distance from one to three miles and utilize the markers in a different order. Please note that the A and B courses do not use all of the points.

The course is a great family activity which can be completed by people of all ages and the only thing needed is an orienteering-style compass that has a direction of travel indicator and a rotating bezel around the compass housing to mark and set bearings like the one shown below.

Type of Compass to use on the course



Course Marker



How to use the course:

1. The starting point for all courses is located at marker (AX) under the big tree by the corral parking lot (you can't miss it). Just bring your compass and plenty of water to drink and that is all you need to enjoy this activity.
2. The distance between the first two markers on the A and B courses is 100 yards. If you are unsure of your pace (how far you walk each step), you can check it by counting the number of steps it takes you to go 100 yards and simply calculate how many steps you should take to navigate between the other markers on the course for the given distance.
3. For beginners I recommend that you try the A and B course before moving on to the more challenging C course.
4. All three courses eventually end up where you started at marker (AX) near the parking lot. Courses can be combined for longer hikes. For example, a five mile hike would be completed by doing the B & C courses consecutively (two and three miles, respectively).
5. Know how to use a compass! There are many great books and online references available on this subject. For a good overview, I recommend *The Backpackers Field Manual* by Rick Curtis. An excerpt of **Chapter 6 - Wilderness Travel** is available on line through this web link at:

<http://www.princeton.edu/~oa/manual/mapcompass.shtml>

6. GPS (Global Positioning System) locations for each marker are provided in this document for reference, or to be used as a variation on course navigation.
7. You can create your own course variations by using the distance matrix in the back of this document. The distance and bearing from each marker to all other markers are there for you experiment!
8. While using the course several safety precautions must be taken:
 - Do **NOT** cross any paved roadways, fences, ponds/lakes, or power lines!
 - Do **NOT** disturb, disrupt, taunt, harm, or feed the wildlife in any way, shape, or form!
 - If you get lost or can't find the next marker, return to the last marker you were at and try again.
 - Always travel with a buddy (I recommend a group of 3 but 2 people minimum)
 - Wear clothing appropriate for the weather conditions and terrain (and a high SPF sunscreen!). Open-toed foot ware is NOT recommended.
 - Always bring plenty of water to drink. Drink water even if you're not thirsty to prevent dehydration.

J.B. Starkey Wilderness Park Orienteering Course Marker Locations



Control Marker	Decimal Format (GPS)	
	Latitude	Longitude
AX	28.25270	-82.640550
GW	28.25185	-82.640791
LE	28.25036	-82.641848
TQ	28.25061	-82.642919
BV	28.25021	-82.645855
FJ	28.24718	-82.645390
PZ	28.24908	-82.647330
YH	28.24912	-82.644362
ZS	28.25154	-82.643018
VO	28.24953	-82.642072
CR	28.25060	-82.644342
KI	28.25267	-82.643643
ZF	28.25201	-82.647386
QB	28.24959	-82.647863

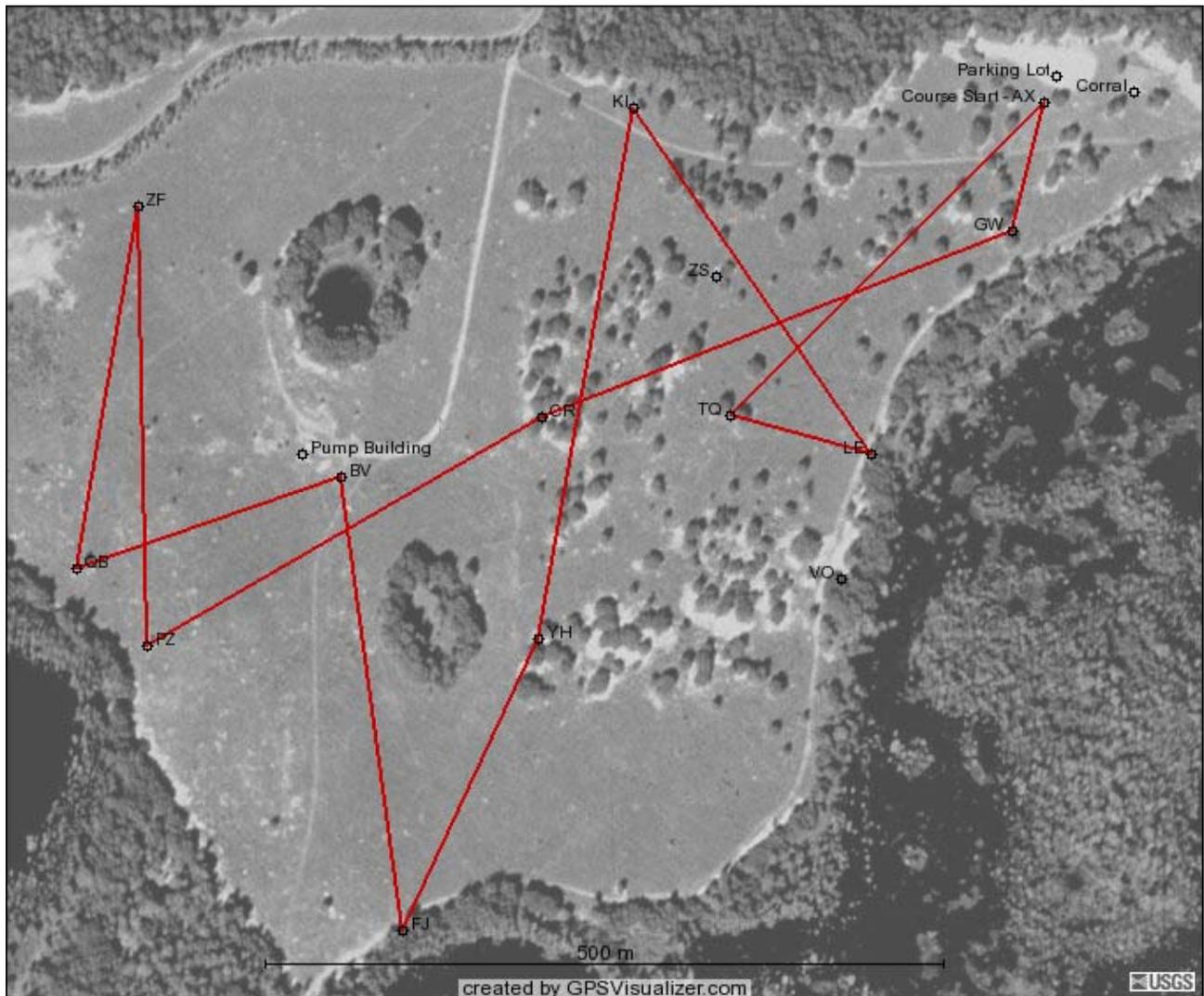
Map Datum is WGS 84

J.B. Starkey Wilderness Park Orienteering Course (1 Mile)



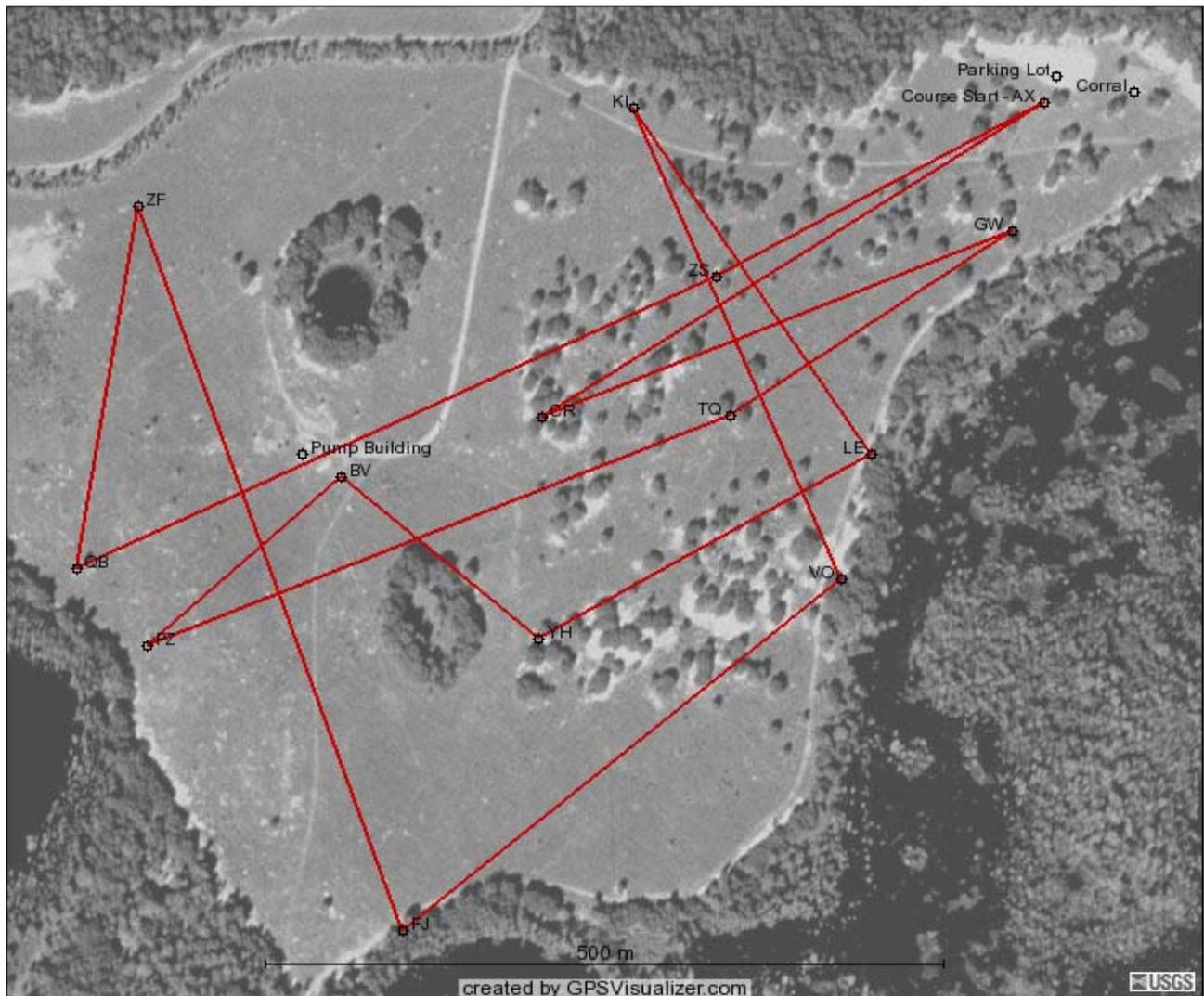
Course Leg	Control Marker		Distance	Bearing
	From	To		
1	AX	GW	100 Yards	204°
2	GW	TQ	270 Yards	245°
3	TQ	LE	120 Yards	105°
4	LE	ZS	190 Yards	322°
5	ZS	YH	330 Yards	206°
6	YH	CR	180 Yards	358°
7	CR	KI	260 Yards	016°
8	KI	AX	330 Yards	094°

J.B. Starkey Wilderness Park Orienteering Course (2 Miles)



Course Leg	Control Marker		Distance	Bearing
	From	To		
1	AX	GW	100 Yards	204°
2	GW	CR	410 Yards	248°
3	CR	PZ	370 Yards	250°
4	PZ	ZF	355 Yards	358°
5	ZF	QB	300 Yards	190°
6	QB	BV	230 Yards	074°
7	BV	FJ	370 Yards	174°
8	FJ	YH	260 Yards	026°
9	YH	KI	440 Yards	012°
10	KI	LE	340 Yards	148°
11	LE	TQ	120 Yards	285°
12	TQ	AX	360 Yards	046°

J.B. Starkey Wilderness Park Orienteering Course (3 Miles)



Course Leg	Control Marker From	Control Marker To	Distance	Bearing
1	AX	ZS	300 Yards	242°
2	ZS	QB	570 Yards	246°
3	QB	ZF	300 Yards	010°
4	ZF	FJ	625 Yards	164°
5	FJ	VO	455 Yards	052°
6	VO	KI	420 Yards	340°
7	KI	LE	340 Yards	148°
8	LE	YH	310 Yards	242°
9	YH	BV	210 Yards	310°
10	BV	PZ	210 Yards	230°
11	PZ	TQ	510 Yards	072°
12	TQ	GW	270 Yards	065°
13	GW	CR	410 Yards	248°
14	CR	AX	480 Yards	062°

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Orienteering Course Marker Locations**

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AX	28.25270	-82.640550
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KI	28.25267	-82.643643
ZF	28.25201	-82.647386
QB	28.24959	-82.647863

Map Datum is WGS 84

**Starkey Park Orienteering Course Control Markers
Distance in Yards / Bearing to Each Marker**

To Control	From Control															
	AX	GW	LE	TQ	BV	FJ	PZ	YH	ZS	VO	CR	KI	ZF	QB		
AX	0 0°	100 24°	316 26°	358 46°	643 62°	848 38°	848 59°	596 43°	299 62°	418 23°	479 62°	330 94°	736 83°	869 64°		
GW	100 204°	0 0°	213 32°	272 65°	577 70°	750 41°	776 64°	505 49°	241 81°	313 26°	409 68°	320 108°	705 92°	805 70°		
LE	316 206°	213 212°	0 0°	118 105°	429 88°	540 45°	606 75°	307 62°	190 142°	103 13°	268 96°	340 148°	626 109°	650 82°		
TQ	358 226°	272 245°	118 285°	0 0°	317 81°	493 32°	507 72°	237 40°	113 175°	160 326°	152 89°	260 163°	506 110°	544 77°		
BV	643 242°	577 250°	429 268°	317 261°	0 0°	371 354°	209 50°	207 310°	343 242°	412 282°	168 254°	381 218°	273 143°	227 74°		
FJ	848 218°	750 221°	540 225°	493 212°	371 174°	0 0°	311 138°	260 206°	587 206°	455 232°	430 195°	692 196°	624 164°	394 138°		
PZ	848 239°	776 244°	606 255°	507 249°	209 230°	311 318°	0 0°	317 269°	549 237°	565 265°	369 250°	587 222°	355 178°	83 137°		
YH	596 223°	505 229°	307 242°	237 220°	207 130°	260 26°	317 89°	0 0°	327 206°	249 259°	179 178°	437 196°	477 137°	378 99°		
ZS	299 242°	241 261°	190 322°	113 355°	343 62°	587 26°	549 57°	327 26°	0 0°	265 338°	182 51°	152 160°	470 97°	570 66°		
VO	418 203°	313 206°	103 193°	160 146°	412 102°	455 52°	565 85°	249 79°	265 158°	0 0°	276 118°	417 156°	643 118°	619 91°		
CR	479 242°	409 248°	268 276°	152 269°	168 74°	430 15°	369 70°	179 358°	182 231°	276 298°	0 0°	261 196°	367 118°	396 72°		
KI	330 274°	320 288°	340 328°	260 343°	381 38°	692 16°	587 42°	437 12°	152 334°	417 340°	261 16°	0 0°	408 79°	586 50°		
ZF	736 263°	705 272°	626 289°	506 290°	273 323°	624 344°	355 358°	477 317°	470 277°	643 298°	367 298°	408 259°	0 0°	299 10°		
QB	869 244°	805 250°	650 262°	544 257°	227 254°	394 318°	83 317°	378 279°	570 246°	619 271°	396 252°	586 230°	299 190°	0 0°		