

ORIENTEERING MAPS EXPLAINED

There are a number of things you need to know about orienteering maps.

1. **Magnetic north**

Maps are drawn to magnetic north (not geographic north).

This makes it easy to align the map to north with a compass

2. **Map symbols**

Special orienteering symbols and colours, defined by the International Orienteering Federation (IOF), are used.

(eg) Runnable forest is white, open farmland is yellow.

A legend is often not printed on the map. You are expected to know what the colours and symbols mean. (See following page.)

3. **Accuracy and Detail**

Although orienteering maps are drawn to a scale they are also drawn from the "eye of the runner". Features obvious to a runner may be shown bigger than they really are.

An orienteering map will show a lot more detail than many other maps. When running a course you need to "simplify" the map in your mind.

4. **Scale**

Standard scales of 1:15,000 or 1:10,000 are most commonly used, with 1:7,500 often used for novices. Short course sprint event maps can use bigger scales of 1:5,000 or more. The scale of the map will be printed on the map.

5. **Contour interval**

Standard contour interval is 5m, with a thicker contour line every 25m. Maps with complex contours are sometimes drawn with 2.5m contour intervals. Form-lines can be used between the contour lines to show the shape of the land. The contour interval used will be printed on the map.

(The above notes do not apply to maps used in rogaining or mountain marathons.)

The standard IOF mapping symbols are shown on the next page.

Note:

- The most common symbols are shown, some symbols are missing.
- The symbols shown on the map are **not** the same as the symbols used on the control description sheets for your course.
- Ignore the symbol numbers, they are only used by fieldworkers and cartographers.

The definition of all IOF mapping symbols is available from the IOF website, (follow the link on the club website.)

100 - Contour features

	101	Contour line
	102	Index Contour line
	103	Form line
	106	Earth bank
	107	Earth wall
	108	Small earth wall
	109	Erosion gully
	110	Small erosion gully
	112	Small knoll
	113	Elongated knoll
	115	Small depression
	116	Pit

500 - Man-made

	502	Major road (Road wider than 5m should be to scale!)
	503	Minor road (Road 3-5m wide)
	504	Road (Maintained all weather road width < 3m)
	505	Vehicle track (Poorly maintained road for slow vehicles width < 3m)
	506	Footpath (Large path or old vehicle track, distinct on ground)
	507	Small path (Small path or temporary forestry extraction track)
	508	Less distinct small path (Less distinct 507)
	509	Narrow ride (Linear break in forest < 5m wide)
	519	Stone wall (< 1.5m)
	520	Ruined stone wall
	521	High stone wall (> 1.5m)
	522	Fence (< 1.5m)
	523	Ruined fence
	524	High fence (> 1.5m)
	525	Fence/wall crossing point

200 - Rock / Boulder

	201	Impassable cliff (can be shown without tags)
	202	Rock pillar/cliff (when drawn to scale)
	203	Passable rock face (can be shown without tags)
	204	Rocky pit (not to scale)
	205	Cave (not to scale)
	206	Small boulder (not to scale)
	207	Large boulder (not to scale)
	208	Boulder field
	209	Boulder cluster
	210	Stony ground (Single dots randomly placed)
	211	Open sandy ground Slow run sand/gravel with no vegetation (If fast run use 401, 402)
	212	Bare rock Runnable area with no vegetation (If grass/moss on rock use 401, 402)

300 - Water

	301	Lake / Uncrossable lake (Black bank line shows uncrossable bit)
	302	Pond / Uncrossable pond (If < 1mm sq do not show bank line)
	303	Waterhole (Small water filled pit, not to scale)
	304	Uncrossable river / canal / watercourse (Draw to scale, must be > 3m wide) (Break in bank line at fords, crossing points)
	305	Crossable watercourse (2m to 5m wide, if > 5m wide draw to scale)
	306	Crossable small watercourse (Less than 2m wide, includes drainage ditches)
	307	Minor water channel (Natural or manmade, may be a dry channel)
	308	Narrow marsh (Marsh < 5m wide)
	309	Uncrossable / dangerous marsh (Bank line must surround edges) (May combine with vegetation symbols)
	310	Distinct Marsh (Crossable) (May combine with vegetation symbols)
	311	Indistinct Marsh (Crossable) (May combine with vegetation symbols)
	312	Well - watertrough
	313	Spring
	314	Special water feature

400 - Vegetation

	401	Open land (80-100%)
	402	Open land with scattered trees (If less then 10mm sq use 401)
	403	Rough open land (Can combine with 407, 409)
	404	Rough open land with scattered trees (If less than 16mm sq use 403)
	405	Forest easy run (80-100%) Good visibility
	406	Forest slow run (60-80%) Low visibility, dense trees (Can combine with 407, 409)
	407	Undergrowth slow run (60-80%) Good visibility
	408	Forest difficult running (20-60%) Very low visibility (Can combine with 407, 409)
	409	Undergrowth difficult running (20-60%) Good visibility
	410	Vegetation very difficult to pass (0-20%) Often impassable (Can be trees or undergrowth)
	411	Forest runnable in one direction (Use shades of green for runnability)
	412	Orchard (Orientate to direction of planting)
	413	Vineyard (Orientate to direction of planting)
	414	Distinct cultivation boundary (When not shown by a fence, wall, etc.)
	415	Cultivated land (Seasonally out of bounds)
	416	Distinct vegetation boundary (Distinct forest edge or change in a forest)
	418	Special vegetation feature (Distinct tree stump or log)
	419	Special vegetation feature (Distinct tree)
	420	Special vegetation feature

Symbols drawn to IOF 1:10,000 map
standard symbol set for OCAD 9

Does not list all symbols

IOFSymbolsSheet.ocd