

MOUNTAIN BIKE ORIENTEERING RULES

This third version of MTBO Rules for New Zealand has been developed by the Orienteering NZ MTBO Committee and revised after the Otago and Woodhill2Whaka Carnivals.

These Rules for the conduct of Mountain Bike Orienteering (MTBO) events in New Zealand have two sections:

- Rules which apply to participants in all events
- Competition Structure which governs the conduct of championships

Other rules may come into play for international events, but the intention of this document is to make the “rules of the game” easily accessible.

1 Preamble

1.1 Mountain Bike Orienteering (MTBO) is a sport in which competitors using bicycles visit a number of control points marked on the ground, with the aid of a map and compass.

Competition is most commonly for individuals to visit all the controls on their course, in a specified order, in the fastest time. There will normally be several courses of differing lengths, and in a championship you may have to do a specified course for your age and sex.

Alternatively you can be required to visit as many controls as possible within a fixed time, to maximise the score from controls with differing values, or many other variations. There are competitions for teams riding together, and for teams riding sequentially. If it is one of these, the organiser will spell out the object of the contest.

1.2 The over-riding principles are

- competition must be fair
- organisers and participants must respect the environment
- risks should be identified and minimised
- both recreational and competitive riders should be catered for

2 Rules of the Game

2.1 There will be a start, a finish, and a timing system. These depend on whether everyone starts together, or starts at intervals. Systems are continually evolving, you have to do what is required to register, record your start time, and record your finish time.

2.2 Control points are marked on the map with a purple circle and identifying number. In complicated areas there may be a purple dot in the middle of the circle. The start is marked with a purple triangle. The finish is marked with a double circle.

2.3 Control points are marked on the ground with an orange and white flag, and an identifying number matching the map. They will also have a device for recording your visit. This may be a clipper (you carry a clipcard), or it may be electronic (you carry an e-card). To prove you visited a control you clip your card or put your e-card in the slot. In case of failure of an electronic system to record, use the backup clipper on your map.

2.4 Deleted. (This rule related to attaching your clipcard or e-card to your bike).



- 2.5 You must travel with your bike to each point. The map gives you information about the likely riding conditions by various routes and it is up to you to choose the best one for your capabilities, and to follow it. In individual competition you are expected to navigate independently.
- 2.6 Unless otherwise specified you may only use roads and tracks marked on the map. Off-track travel may be permitted using a special symbol for “allowable routes” or on certain colours on the map, see “Competition Structure” for definitions. This may vary from event to event, so check the event information and the map legend. (It also varies throughout the world!)
- 2.7 If you inadvertently take a route which is not allowed (perhaps it looked a bit like a track but was not) you must retrace your route to the previously allowed point, and not continue on across disallowed terrain.
- 2.8 For safety or course-planning reasons, there may be:
- One-way tracks
 - Forbidden points or routes
 - Forbidden areas
 - Compulsory routes.
- The symbols for these will be in the map legend.
- 2.9 You can use a magnetic compass and cycle computer to help your navigation. You can not use a satellite-based navigation device to help you navigate, or any map other than the one supplied by the organisers. You are welcome to use an electronic device to track your course for later analysis, but any navigation features must be disabled to the satisfaction of the organisers.
- 2.10 You are responsible for using a well-maintained bicycle. You must wear a helmet approved for use on NZ roads. If you have bike problems you are allowed to seek help from other riders, but it is up to them whether they give it. In a championship you are not allowed to obtain help from anyone who is not a participant.
- 2.11 If you come upon an injury incident, abandon your course and do whatever is required to help. Riders are recommended to carry a mobile phone to speed the response to an injury incident; but it must not be used to gain navigational help. The organiser’s number will be printed on the map.
- 2.12 MTBO does not normally have sole use of the tracks, you must ride at all times in a considerate and controlled manner.
- Slow down when passing members of the public.
 - When passing opposing traffic keep left.
 - On singletrack, the downhill rider gives way to uphill.
 - When a faster rider wishes to overtake you, give way at the first opportunity. The faster rider should call to indicate their intention to pass and on which side.
 - Avoid damaging tracks through aggressive riding such as skidding.
 - On public roads obey all traffic rules.
- 2.13 The organisers may publish a “course closing time”. Cut short your ride if necessary to hand in your card or download your e-card at the finish by this time. Do not go home without reporting in, the organisers will mount a search for anyone missing.
- 2.14 The person in charge of the event is known as The Controller. The Controller may check the proposed course, equipment and clothing of any participant in relation to the terrain and weather, and veto the proposed ride.



- 2.15 Any incidents affecting safety or fairness should be reported to the controller. In a championship there is a standard complaint/protest procedure: see the Orienteering NZ Competition Rules for Foot Orienteering.
- 2.16 Dogs and other animals are not permitted anywhere onsite unless specifically allowed. Events often use farmland and they are not welcome. To ensure the landowner is delighted to host further events, ensure the event site is left tidy.
- 2.17 Gates must be left as found, both on access roads and on the course. The most likely cause of problems is when the opener expects the person behind to close, and there is a person behind that, and a person behind that, and... Because of this: "YOU OPEN, YOU CLOSE. NO EXCEPTIONS."

3 Competition Structure

A championship must follow those parts of the Orienteering NZ (Foot-O) Competition Rules which are generic. Most of these are requirements on the organisers, but there are some which affect competitors. There are eligibility provision for national titles for example, and a complaint/protest procedure.

The following sections specific to MTBO take precedence over the Foot-O provisions:

3.1 Mapping Specifications

There is an IOF specification for MTB-orienteering which takes the place of the specification for Foot-O. Find it on the IOF website <http://orienteering.org/resources/mapping/>. There are some New Zealand interpretations and variations of this specification.

3.1.1 Track network (standard IOF)

MTB-orienteering takes place mostly on the road and track network, and the ridability needs to be shown. Speeds are assessed as if the track is flat. Thick and thin lines depict width.

- Sealed roads and paved areas. Brown with a thin black border
- Fast riding. Black solid line, Speed 75-100% of that possible on a smooth gravel road.
- Medium riding: Black line with long dashes. Roughness and small obstacles reduce speed to 50-75% of a gravel road.
- Slow riding. Black line with short dashes. Larger obstacles require the rider to pick their way, and reduce speed to 25-50% of a gravel road.
- Impossible to ride. Black line of dots. Speed 0-25% of a gravel road
- A purple obstacle symbol is used where conditions force the rider to dismount for a very short distance, eg gate or fallen tree.

3.1.2 Off Track Travel (NZ version)

- Riders may travel on open land shown as full yellow and on forested land shown as white. These imply a ridability of 25-50%.
- Riders may travel on open land with scattered trees shown as white with full yellow dots. This symbol is made up of two allowable colours as above and also implies a ridability of 25-50%.
- Riders may NOT travel on other types of yellow open land or green forest, and these are used for terrain that is not suitable or simply not mapped.
- On allowable areas, crossable fences (and if applicable stone walls and pipelines) are shown. These features, and any watercourses and streams, large erosion gullies and earth banks, may be assumed to require a dismount. On the other hand a distinctive ditch that is easily ridable is shown as a small erosion gully (row of brown dots).



- On allowable areas, high fences (and if applicable high stone walls and pipelines) are generally forbidden to cross. Any crossing points in these (eg gates) are marked with a crossing point symbol (if no dismount is required) or the obstacle symbol (if a dismount is required).
- Riders may travel on green equivalents of the track symbols. The dash length of a green line will indicate ridability just as for tracks. Green lines may pass through otherwise non-allowed terrain. Or green lines may show a recommended or faster route through allowed land. They will follow clear terrain features such as forest edges, ridges, gullies.

3.2 Control Descriptions

These are not used in MTB-orienteeing; controls are always on tracks. If there are several tracks close together a purple dot in the middle of the circle can be used to clarify which track.

3.3 Competition Formats

These differ in length, but ideally they each call on a different mix of skills as well. The IOF Rules contain an Appendix which lists the ideal profile, terrain, navigation and other aspects for each format. Find it on the IOF website <http://orienteering.org/mtb-orienteering/rules/>.

3.3.1 Classes and Courses

MTBO in NZ is smaller than foot orienteeing and a reduced set of courses and classes is appropriate for championships. The following should be regarded as a guide for winning times and not all classes need to be offered. Relays theoretically would be similar per leg to the middle distance but age group relays are not going to be viable in the foreseeable future. Organisers should experiment with mixed-length formats to arrive at something suitable.

MTBO Championship Winning Times (minutes)

	Long	Middle	Sprint
M/W-14	40	30	22
M/W-16	60	40	22
M/W-20	90	50	22
M Open	110	55	22
W Open	110	55	22
M/W40-	95	50	22
M/W50-	90	50	22
M/W60-	85	45	22
M/W70-	80	45	22

3.3.2 Guidance for Course Structure

Notes:

- Not all classes need to be offered. This particularly applies to juniors where numbers may be low.
- There should always be a physically easy course, and anyone should be able to ride a short course unofficially.
- Distance percentages can be misused as they take no account of climb or riding technicality. Where the riding is easy (eg forest roads) the percentages need to be higher, relative to Course 1. Where the riding is difficult (eg demanding single-track) the percentages need to be lower.
- Course 6 is an option to consider for the long distance, in steep/rugged terrain, and where high numbers are expected. Otherwise combine it with Course 5. For events under about 100, combine courses 2 and 3.
- Figures have been reviewed after W2W and the changes in the target times.



Course	Mens Classes	Womens classes	Groups and Rec	Long (% of C1)	Middle (% of C1)	Sprint (% of C1)
1	M Open, M-20 sprint only			100	100	100
2	M-20 (not sprint) M40-	W Open	C2Rec	80	85	85
3	M50-	W-20, W40-	C3Rec	65	70	75
4	M-16, M60-	W50-	C4Rec	56	61	70
5 (Physically easy)	M-14, M70-	W-16, W60-	C5Rec	46	51	60
6 (Physically easy)		W-14, W70-	C6Rec	36	41	50

