



# ROGAINING

The Cross Country Navigation Sport

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Check out our website at  
[vra.rogaine.asn.au](http://vra.rogaine.asn.au)



**Which way's North?**  
An introduction to Rogaining

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This booklet has been developed, prepared and revised by experienced rogainers over the past few years. The initial version was produced in 2002, and this version was produced in 2010 in an attempt to modernise its content. If you have any comments or suggestions that you think will help future users of this booklet please direct them to Greg Robinson or any member of the VRA committee. Contact details are available at the VRA website [vra.rogaine.asn.au](http://vra.rogaine.asn.au)

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## Introduction

### Welcome to the sport of rogaining!

The purpose of this book is to give you some idea of what to expect on your first rogaine, and also to provide some guidance in the techniques and skills required to be a happy rogainer.

Inside you will find ideas on equipment, clothing, food, route planning and navigation, plus a few handy hints to help you on your way.

There are two checklists on pages 7, 8 and 9 to assist you in your pre-event planning. Later in the book, specific aspects of the sport are fleshed out in greater detail, so that you can find out more information in particular areas of interest.

And who knows, by the time you've finished reading, you may even be able to answer that frequently asked question: – "Which way's north?!"



### This booklet is divided into the following sections

1. Rogaine preparation (check list)
2. Rogaining gear (check list)
3. Equipment
4. Preparation for the rogaine
5. Upon arrival at the event
6. On the course
7. Navigation
8. At the finish
9. Final words
10. Rules of rogaining

### Welcome to rogaining and see you on the course!

## What is Rogaining?



Many and varied definitions abound, including "competition bushwalking", "marathon orienteering", "a car rally on foot", "an Easter-egg hunt for grown-ups" and "Rugged Outdoor Group Activity Involving Navigation and Endurance". All these definitions emphasise competition, but many participants come along simply to enjoy walking in a new area and explore the bush, flowers, and views. A lot of family teams use rogaining as a way of introducing their children to the wonders of the outdoors in a controlled setting. In fact, the name rogaine was derived from the names of the three people who thought it up - ROd, GAI, and NEil Phillips – and has nothing to do with competition or endurance. So, what's it all about?

Rogaining is a sport in which teams of 2-5 participants travel across country on foot to locate checkpoints using nothing but a map and magnetic compass to guide them. There is no set course, but rather a time limit. Teams can visit as many or as few checkpoints as they wish, in any order they wish, as long as they get back to the administration tent before the time limit is reached. Events are typically between 6 and 24 hours in duration, so they reflect either a day bushwalk (6-12 hours) or a weekend hike (24 hours). Some events allow use of bikes (cyclogaines), skis (snogaines), or even canoes (paddlogaines) to travel between checkpoints. Other events are held in metropolitan areas (metrogaines).

After entering your first rogaine, details of the event location and other important information will be available to download from the VRA website one week before the event, or be mailed to you if requested. The area utilised will usually vary in terrain between native forest and farmland. Typically, the terrain has some areas that are fairly flat and other areas that are steep. The bush is usually easy to travel through with tracks criss crossing the map. Local features, such as waterfalls, ruins from the gold rush days, and history of the townships are noted.

Once at the rogaine you will be given a topographic map of the event area with numbered circles marked on it. These circles show the location of the checkpoints, and the numbers indicate how many points each checkpoint is worth. You can visit as many or as few checkpoints as you like in the allotted time. Checkpoints can be visited in any order, but your team must always travel together. Maps are available generally two hours before the start of the rogaine, which gives your team plenty of time to plan which checkpoints to visit, and in which order. The objective is to accumulate as many points as you feel capable of and return to administration before time's up. Points are deducted from your score for each minute your team is late.

## What is a Rogaine?

continued



At each checkpoint you will find an orange and white marker hanging in a tree or on a fence post. Attached to the marker is either an electronic or a manual punch, which you use to prove that your team visited the checkpoint. An electronic scoring system called 'Navlight' will be used in most events, and two team members on each team wear electronic wristbands. Other events use manual punches, which are used to punch your team's scorecard. Also on the marker is an intentions sheet, on which you must write your team number, the time, and the checkpoint you intend to visit next.

The main administration area, start, and finish point of rogaines is called the Hash House. It is at the Hash House that you plan your route, set up a tent (if you're staying overnight), and get hot food served up at just about any time during the event. The atmosphere is generally very social, and participants are encouraged to use the Hash House facilities as part of their rogaining experience.

## Twenty-four hour events

These events generally start at midday Saturday and finish midday Sunday, and are run on weekends close to a full moon. Competitors do not have to stay out on the course for the entire 24 hours, and can return to the Hash House for food and sleep at any time. A subsidised bus is provided by the VRA for transport to 24 hour events and it is strongly recommended that competitors who intend to get little sleep use this bus.

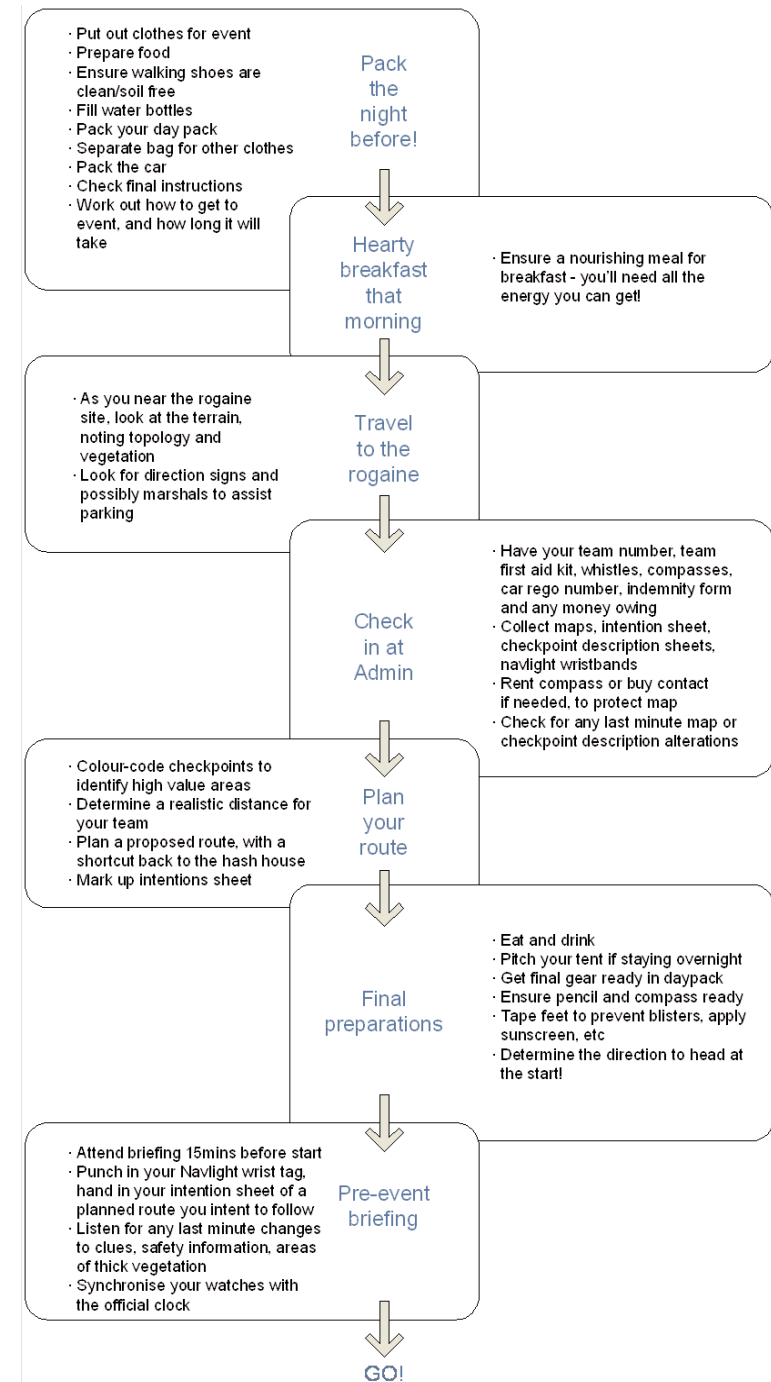
## Twelve hour events

Twelve hour events generally start at midday Saturday and finish at midnight. Breakfast is served Sunday morning and competitors are encouraged to stay overnight to reduce the risk of fatigue driving home after the event.

## Eight or Six hour events

Shorter events usually start between 10 am and midday on either Saturday or Sunday. Food is provided at the Hash House an hour or so before the end of the event. Such events tend to be closer to Melbourne to allow enough time to travel home afterwards.

## Rogaining Preparation



## Rogaining gear check list

### Pre-rogaïne preparation

- ☐ Final Instructions and signed Indemnity Form
- ☐ Coloured highlight markers
- ☐ Contact plastic and scissors (to protect your map) or a map bag
- ☐ Full water bottles (or water bladders)
- ☐ Chairs
- ☐ Table
- ☐ Tent (if staying overnight)
- ☐ Sleeping bag and sleeping mat (if staying overnight)

### What to wear

- ☐ Comfortable shirt
- ☐ Long pants (not jeans), and/or shorts/gaiters
- ☐ Sun hat
- ☐ Clean runners or light hiking boots (avoid new shoes/boots)
- ☐ Watch

### What to take on the course Compulsory items

- ☐ First aid kit (per team)
- ☐ Whistle (per person)
- ☐ Pencil (per person)
- ☐ Magnetic compass (per person)
- ☐ Other items as advised in the Final Instructions

### Other items for all events

- ☐ Mobile phone
- ☐ Water bottles/bladders (1-2 litres of water per person)
- ☐ Sunscreen
- ☐ Sunglasses
- ☐ Thermal pants
- ☐ Snacks/energy food
- ☐ Meals for on the course (if not using Hash House)
- ☐ Day pack/bum bag
- ☐ Waterproof jacket
- ☐ Toilet paper

### Additional items for cold/wet/overnight events

- ☐ Torch or headlamp
- ☐ Spare globe/batteries for torch or headlamp
- ☐ Waterproof overpants
- ☐ Spare thermal top/jumper
- ☐ Gloves

## Rogaining gear check list continued

### Items required for after the event

- ☐ Plate, cup, cutlery, tea towel (for use at Hash House)
- ☐ Dry Shoes
- ☐ Complete change of clothes
- ☐ Towel
- ☐ Food for the trip home

### First aid kit compulsory items

- ☐ Linear compression bandage
- ☐ Linear conforming bandage
- ☐ Triangular bandage
- ☐ Sticking plaster (Elastoplast or similar)
- ☐ VRA first aid sheet (available from Administration).

### Other first aid suggestions

- ☐ Pain killers
- ☐ Tweezers
- ☐ Small scissors
- ☐ Antiseptic cream
- ☐ Matches
- ☐ Tapes (such as Leukoplast)
- ☐ Electrolyte replacement powder
- ☐ Blister plasters (Moleskin, Compeed, Second Skin)
- ☐ Space blanket
- ☐ Vaseline

### Not Allowed Do not bring these items

- ☐ GPS devices
- ☐ Pedometer
- ☐ Altimeters
- ☐ Dogs

## EQUIPMENT

### Rogaining Tip

#### Each rogainer must carry

- Whistle
- Pencil
- First aid kit (one per team)
- Compass

You could be prevented from starting if you don't have these items

No specialist equipment is required for Rogaining, just the basic stuff you would carry for a day bushwalk. Everything you take on the course should fit into a day pack or bum bag. A checklist of items to bring on the rogaines is shown on page 8, but more detail is given here.

What you actually take on the day will depend on the weather, the terrain, the duration of the event, and your team's route plan. However, there are a few items that each rogainer must carry, for safety reasons. Without these items your team may be prevented from starting (see side bar).

## Clothing

Rogaines are held throughout the year and are only cancelled on days of Total Fire Ban, extreme weather forecasts or other occurrences in the area. They are not cancelled if the weather is poor - that's one of the challenges. Consequently, competitors must be prepared for a range of weather conditions, bearing in mind that warm sunny days can quickly turn into cold and wet nights. Clothing required depends on the weather, the vegetation, and the duration of the event.

A comfortable, sturdy pair of runners or walking boots with good socks is essential. You will need to wear long pants (not jeans) or shorts, a t-shirt or long-sleeved shirt, and a sun hat.

For 12 or 24 hour events you should carry clothes such as a warm woollen or fleece jumper and thermal 'long johns' for when it cools off at night, and a water and wind proof jacket. Gloves and beanie are also important in cold weather, while gaiters protect legs from scratches and socks from grass seeds. Lycra clothing is also popular with participants, as it helps prevent chafing.

For shorter events (i.e. 6 and 8 hour events) you may not need extra warm or wet weather clothing, but be mindful that the weather can change unexpectedly.

Also, take a change of clothes along for after the event - there's nothing like pulling on a fresh pair of socks!



## Food

### Rogaining Tip

#### Some suggestions for food during the event are

- Sandwiches
- Jelly beans
- Fruit (packed in something to cushion it)

- Muesli bars
  - Scroggin / Nuts
- Ideally, the food should be light weight and also travel well in a pack

Carry-on-event food should be high in carbohydrate, tasty and easy to eat (not too dry or crumbly). Food is extremely important to maintain your energy levels during an event and also helps you to absorb water to avoid dehydration. You should be aiming to eat (and drink) regularly to maintain your energy levels. A rough guide is aiming to eat something small every hour during an event. Having foods that you like is important, so that you are likely to eat more whilst exercising.

In the day or two before the event, you can prepare by making sure you eat well to build up your energy (glucogen) stores and also drink plenty of fluids. On the morning of the event, it is again important to eat well, preferably foods with a low Glycemic Index (GI). GI is a figure that denotes how fast the glucose is absorbed into the bloodstream. Pre-event you should be eating foods with a low GI, such as oats and complex carbohydrates, since this will then mean that the energy supplies from the food will be released slowly as the event proceeds.

During the event, any carbohydrate food is okay, but probably again with a preference for low GI foods, so that there is a slow release of energy. If you are using high GI foods, such as jelly beans, bread and chocolate, then you should be eating these regularly so that you don't get highs and lows of energy occurring.

Some suggestions for food during the event are sandwiches, fruit, muesli bars, nuts, chocolate and scroggin. Ideally, the food should be light weight and also travel well in a pack.

After the event, it is important to hydrate properly as soon as possible. High protein foods are also good to aid in muscle recovery.





## Water

### Rogaining Tip

#### Water

Bring your water bottles / bladders to the event full of water  
Water points are marked on the map with a "W" (such as W10, W20 etc) and are also worth points  
Plan a route that allows you to replenish your water supplies  
Unless it is an emergency - Do not drink from streams and creeks

Water is an essential item to carry on a rogaine. Dehydration is a major contributor to fatigue and as a general guideline competitors should consume about one litre per hour during strenuous exercise. It's also a good idea to "camel up" by drinking before you start exercising.

You must never wait until you are thirsty before drinking - by then it's too late, and you will already be dehydrated. Depending on the amount of water on the course and the temperature, you may need to carry 1-2 litres per person.

The organisers will arrange for water drops on the course at which you can fill up with water. Fruit may also be provided at these points. Water in creeks on the course should not be consumed unless it is an emergency, as water running through farmland or originating in farmland is not safe to drink due to risk of bacterial contamination.

## First Aid Kit



### One first aid kit per team must be carried - this is mandatory

Minimum requirements in your team first aid kit are:

- ☐ one linear compression bandage
- ☐ one linear conforming bandage
- ☐ one triangular bandage
- ☐ sticking plaster (Elastoplast or similar)
- ☐ the VRA first aid sheet (available from Administration).

These basic kits are available for purchase at Admin before the event.

Some other suggested items include pain killers, tweezers, antiseptic cream, emergency matches, space blanket, and sun screen. Also, electrolyte replacement powder can be useful for preventing or stopping muscle cramps. Further suggestions can be found in the checklist on page 9.

## Whistle



Each competitor is required to carry a whistle. Should you get into trouble and require assistance, THREE sharp blasts at one minute intervals on the whistle is the help signal. Any teams in the area are required to assist you should they hear this signal. It is also your duty to provide assistance should you hear this emergency signal.

## Pencil

## Compass

### Rogaining Tip

#### Your compass should ideally have

A long base plate  
A revolving needle housing  
Parallel lines marked on the revolving housing  
Graduations marked in degrees (not grads or mils)  
Luminescent markings for use at night  
A large magnifying window for viewing map details

A pencil is required for marking intention sheets at checkpoints. Marking the intentions sheets is an important safety feature if you become lost, and an important backup in case of electronic scoring system failure. Please do not use pens, as this is difficult to erase after the event.

Make sure you have a good quality liquid filled compass designed for use in the Southern Hemisphere. Things to look for when purchasing a compass are shown in the side bar, but most Silva/Suunto compasses are suitable.

Compasses can be hired from Admin prior to events for a modest fee. A cash deposit will be required.



## Torch

### Rogaining Tip

A small LED headlamp may help save you on a short event if you get caught out after dark

For night events, and just for safety on shorter events, you will need to carry a torch or headlamp with spare batteries. Headlamps are very common as they allow hands-free operation while scrub bashing, eating or reading the map. Don't feel you need an expensive torch though, as long as it's reliable. A penlight torch is adequate at night to read the map. LED headlamps are very convenient to use, and generally sufficiently bright for walking through the bush and for finding checkpoints at night.



## Miscellaneous

Remember to take with you on the course some sun screen, toilet paper, a watch, and a spare pencil. A map case, or else contact plastic (available for sale from Admin) will protect your map. Other useful items include highlighter pens for marking your map, a small length of string to measure your planned route, scissors for map trimming, and a mess kit (plate, bowl, mug, knife, fork, spoon, tea-towel) to enjoy the culinary delights of the Hash House. If you intend to camp overnight at the Hash House you will need a tent and a warm sleeping bag and sleeping mat. Of course you don't have to carry these with you on the event! A table and chairs can make route planning or eating more comfortable, but are by no means essential.

## Foot Preparation

If you travel 40 km in a rogaine with an average step of 0.8 m, you will take around 50,000 steps. For the average person with a day pack on, that's a total impact of about 3,500 tonnes. It is thus important that you have a good, sturdy pair of runners or light hiking boots to wear. If you are prone to rolling your ankles, they can be strapped in the manner shown (Figure 1) to protect them from turning on uneven ground, but still allowing freedom of movement. The shoes you wear don't have to be expensive, just sturdy, comfortable and preferably with a tick cushioned sole. There is nothing worse than getting blisters because your shoes don't fit properly.

## Blisters

### Rogaining Tip

Wearing two pairs of socks, or double layer socks, helps prevent blisters

Some people also carry a second pair of socks to change into during the event

Take a specialist blister plaster such as Moleskin, Compeed or Second Skin, to fix blisters if they do form

Blisters are better prevented than treated, so if you feel a hot spot on your heel, cover it immediately with tape such as Leukosilk and then Leukoplast on top. Some people do this before the event start to prevent the hot spots.

A Vaseline coating on the feet and between the toes prior to the event start also prevents rubbing and blisters, a trick employed by marathon runners for years. Good quality socks provide extra comfort and minimise rubbing. Talcum powder is great after the event to help the feet recover.

**Figure 1.**  
Suggested  
method of taping  
feet



## PREPARATION FOR THE ROGAINE

### Entering the event

#### Rogaining Tip

#### Entering a rogaine

Event information and online entry can be found on the VRA website

You must be a member of a rogaining association to enter a VRA rogaine

You can join the VRA when you enter the rogaine. Just fill in the appropriate amount in the "membership" column

Late fees are waived for team members who are entering for the first time

Bring your final instructions to the event

If you have any team changes, please inform Admin as soon as possible

Information on upcoming events is available on the VRA website and in the newsletter.

On-line entries open 2-5 weeks before the next event on the VRA website. You can enter the event on-line by providing your details, and make any payments via Bpay. You can also join or renew your VRA membership. We offer family and individual annual memberships. Novices may purchase a 6 month introductory membership.

We do accept paper entries for events, but encourage on-line entries to minimise errors and volunteer paperwork. Note that entries must be completed by the late date (usually 11 days before the event) to avoid a late fee. This greatly assists organisers in working out food and map quantities, so please enter on time!

During the week leading up to the event, a team list (including any outstanding monies) and Final Instructions will be posted on the VRA website.

The team list will show your team number. The final instructions will provide details about how to get to the start at the Hash House (including estimated travelling times), further details about the course and anything else particular to that rogaine. You should keep these instructions as a reference, and bring them to the event. You will need to inform Admin of your team number upon arrival.

### The night before

#### Rogaining Tip

All this information is summarised in the checklist on page 7

The more you can do the night before, the more time you will have to plan your route at the event site. Even if you're planning for a very leisurely rogaine, it is always nice to have as much done as possible beforehand.

Have items for the Hash House, for after the event, and for on the course all in separate bags. Plan your food requirements now, not on the way to the event. Find out the weather forecast for the duration of the event and pack clothing accordingly. Make sure your walking shoes are clean and free of any soil, to prevent the spread of plant diseases.

Try to get a good night's sleep, especially if the event is a 24 hour rogaine and you're planning to be on the course for a good chunk of that 24 hours.



## The morning of the event

Make sure you have a good hearty breakfast, as it always pays to have a well-fuelled engine before starting. Also, make sure you're hydrated, especially if the forecast is for hot weather. You may also want to have some electrolyte replacement drink (Staminade/Powerade/Gatorade etc) to help prevent cramps.

Fill water bottles or water bladders from home, as many Hash House sites do not have a source of running water and so all water has to be brought to the event by the organisers.

## Travelling to the event

If you are travelling by car, allow yourself plenty of time to arrive at the event site, check in at Administration, plan your route, and pitch your tent (if necessary). Plan to arrive at the event site at least 2 hours before the start time. If going by bus, ensure you're at the specified pick-up point with plenty of time to spare.

As you approach the event site, note the terrain and vegetation to give yourself a feel for what you may be walking through. Look for significant landmarks such as summits, larger rivers, and main roads. These observations will help you to become oriented when you see the map.



## UPON ARRIVAL AT THE EVENT

### Registration

**Things to bring to Admin**

Your team's final instructions (with your team number on it)

Any money owing

The registration number of the car you arrived in. (NB: "The grey Subaru wagon" will not suffice!)

You will need to show your team's first aid kit, whistles and compasses, so be prepared

### Route Planning

**Identify high point scoring areas by colour coding your checkpoints on the map.** A suggestion is to use 3 different colour highlighters for high, medium and low value checkpoints

**Highlight the checkpoint number, not the circle, because highlighting the circle may make it harder to see the important detail**

On arriving at the event site, head straight for the Event Administration tent (Admin) to register your team. Admin opens about 2 hours prior to the start of the event and members will need to show their whistles, compasses and team first aid kit at Admin. An indemnity form will need to be completed and signed, and any money owing will need to be paid in cash. Maps, checkpoint description sheets, intention sheets and additional information (such as the time of the briefing, or course changes) are made available at this time. If Navlight electronic scoring is used at the event, electronic wristbands are fitted to team members to wear on their wrists during the event.

The VRA shop rents compasses and sells items such as first aid kits, whistles and contact paper for map covering.

Once you have your map it is time to plan where you're going to go. This can be made easier by colour coding checkpoints with highlighter pens, using different colours for the different point values (see side bar). By colour coding checkpoints it's easier to see where the high scoring checkpoints are.

Often high scoring checkpoints are located around the edges of the map and in hard to reach places, such as at the top of steep hills or in deep gullies with little road access.

Look for obvious routes or loops that join several checkpoints together. Use linear features such as roads, ridgelines and watercourses that take you past several checkpoints. Avoid too much up and down climbing. It may be quicker to take a slightly longer, flatter route between checkpoints than a short, steep route.

Estimate how far you can travel in the time available, and plan accordingly. Also identify some 'escape routes' that can get you back to the Hash House quickly at the end of the event if you miscalculate your speed and distance.



#### Rogaining Tip

Try and identify "escape routes" back to the Hash House, to use if you're running out of time  
If you are more than 3 hours into a 6 hour event, you should be heading back to the Hash House

#### Rogaining Tip

After the first hour of the event, check how far you have gone and see if your proposed route is reasonable  
Be prepared to change your planned route at any time  
Only stay on the course for as long as you find it enjoyable

Most people can walk comfortably at 3-5 km/hr on tracks. It's slower in the bush. Time how long it takes you to walk a kilometre on tracks and in bush of varying thickness.

On 12 and 24 hour rogaines you need to decide if you are going to return to the Hash House at any time during the event. Most teams plan to return to the Hash House overnight on 24 hour events, for both food and sleep. They may then head out on the course again the next morning. You only need to stay on the course for as long as you find enjoyable.

The top competitors have many theories about if and when to return to the Hash House. On 12 hour events most competitive teams will stay out for the entire 12 hours. Those teams that finish their planned routes early may have a short rest and then collect some checkpoints close to the Hash House if they have time.

On 24 hour events, the competitive teams may stay out for the duration of the event. This maximises the opportunity to collect high value checkpoints around the edge of the map. Other competitive teams plan a short, fast route for the afternoon that brings them back to the Hash House on dusk where they can have a rest and some food before picking up warm clothing and extra food, and then continuing on all night and into the next day. Conversely, some teams prefer to return to the Hash House in the early hours of the morning, when morale is lowest and travelling time the slowest. It's amazing what a good rest and some food can do for the soul.

## Route Planning

continued

#### Rogaining Tip

##### For 24 hour Events

Hash Houses usually start serving food from about 17:00 hours until the end of the event

Make sure you note the times for which the Hash House is 'open for business' - there's nothing worse than turning up expecting a meal, only to find the food is not on yet.

Mark your planned route on your map in coloured highlighter pens. Also mark up your Intention Sheet with your planned route (including your direction of travel), Team Number, car registration numberplate and mobile phone number. Your intentions sheet is handed in at the briefing and used in case you are overdue.

## At The Start

Prior to the start of each event, there is usually a ten minute briefing given by the event organisers. If used, Navlight wristbands are also checked to confirm that you are at the start. Hand in your Intentions Sheet. It is important to listen to this briefing as last minute information may be provided, such as safety information and roads that will be patrolled if you get into trouble during the event. When the word is given, you can go. For events with manual scoring, you can then collect your score card from the "clothes-line" and off you go.



#### Rogaining Tip

Events last for exactly the time limit, no matter what time they start. (i.e. 6 hour events finish exactly 6 hours after they start)

Your team will lose 10 points for each minute (or part thereof) that it is late

If your team is more than 30 minutes late, you will be listed as DNF (Did Not Finish)

**WHENEVER YOU RETURN TO THE HASH HOUSE YOU MUST REPORT TO ADMINISTRATION, EVEN IF YOU INTEND TO RETURN TO THE COURSE LATER. THIS IS FOR SAFETY REASONS.**

## ON THE COURSE

### Scoring

#### Rogaining Tip

Some events use both a Navlight electronic score system and also a manual score card system. Please punch both your score card and wristband tag at each checkpoint in these events

Before heading out on the course, there are a few things you need to know about what you're looking for and what to do when you find it – i.e. you need to know about scoring and Checkpoints.

Each Checkpoint that your team visits earns you points towards your total score. To keep track of your total score, either an electronic scoring system called Navlight and/or a manual scoring system using a score card is used.

The points that you earn for visiting a checkpoint are equal to the 'tens' value of the checkpoint number – for example, checkpoint 63 is worth 60 points, checkpoint 23 is worth 20 points. You also get points for visiting a Waterpoint as a checkpoint will be located there as well. Waterpoints are positioned in easy to find locations and contain self serve water containers and a box of fruit.

### Navlight Wristband tag

Your team will be given two electronic Navlight wrist tags which are fitted to two team members' wrists at Registration. The wristbands are made from a rugged vinyl material and cannot be removed from your wrist without breaking them. Wear them quite loosely; you should be able to fit two fingers between the band and your wrist, but make sure that they cannot fall off during the event.

### Navlight punch



### Punching your tag



An electronic punch hangs from a cord at each checkpoint. There is also a punch at the Start of the event to test your wristband tag, and a punch at Administration to register your arrival and departure at the Hash House.

When you visit a checkpoint, you record your visit by inserting the punch into your wristband tags of your two team members. You must hold the punch in the tag until the red light flashes a few times on the punch to indicate that your visit was recorded. The red light flashes on the punch within half a second of inserting into your tag. There will be punches at the Start of the event to practice.

You also need to use the Navlight punch any time you return to the Hash House during or at the end of an event.

## The score card

#### Rogaining Tip

Remember - you will have either a Navlight wristband tag, or a scorecard

The score card is a sheet of plasticised paper with a grid of numbered squares on it (see below). It is used to prove you have visited a checkpoint. If, for example, you visit checkpoint 45, you use the punch to clip your score card in the square numbered 45. There is only one score card per team, so don't lose it! You collect your team's score card at the Start from the Clothes Line.

20	21	22	23	24	25	26	27	28	29	Your totals	Admin only	TEAM NUMBER
30	31	32	33	34	35	36	37	38	39			TEAM NAMES
40	41	42	43	44	45	46	47	48	49			1 .....
50	51	52	53	54	55	56	57	58	59			2 .....
60	61	62	63	64	65	66	67	68	69			3 .....
70	71	72	73	74	75	76	77	78	79			4 .....
80	81	82	83	84	90	91	92	93	94			5 .....
100	101	102	103	104	A	B	C	D	E			TIMES OUT
												TIMES IN
												SCORE

YOU MUST RETURN THIS CARD TO ADMIN - OTHERWISE ORGANISERS MAY BE REQUIRED TO INITIATE A SEARCH.

Calculate your own score here:

TOTAL: (Admin only)

## The checkpoint

#### Rogaining Tip

Don't forget to fill in the intention sheet

If you visit a checkpoint but do not punch your Navlight tag or score card, you will not receive any points for your visit. All team members must simultaneously get to within 5m of the checkpoint

You should not rest within 100m of a checkpoint unless it is at a water drop. This can 'give away' the checkpoint location to other teams and detract from their enjoyment of the event

The checkpoint is generally a white and orange corflute marker hanging in a tree or on a fence post (see picture). It is not meant to be difficult to find, just as long as you've navigated to the correct location. The checkpoint has two things attached to it – a punch and an intentions sheet to show where you plan to go next. The punch can be an electronic Navlight punch, or a manual punch, or sometimes both.

Some checkpoints – known as metal checkpoints - are simply white and orange metal plates chained to a feature, with a punch bolted to them. These checkpoints are used in areas very accessible to the public, and cannot be tampered with, stolen, or destroyed as easily as the corflute checkpoints. They usually do not have intentions sheets attached to them.





## At the checkpoint

## If you are lost

### Rogaining Tip

#### If lost

Do not split up  
Locate roads nearby  
and head for these  
Stick to tracks  
Use your whistle to  
attract attention

When your team reaches a checkpoint you must punch your wristband tag or the scorecard box in the place that corresponds to that checkpoint number. You also need to fill in the intention sheet hanging from the checkpoint with your team number, time and proposed next checkpoint. This helps the organisers if you become lost and are late returning.

If you think you are lost, DON'T PANIC. Try to determine where you were last sure about your position and back track to that point. If you can't back track to a known position, stop and have a rest and a bite to eat. Think about where you are. Are there any major roads or other recognisable features near your general area that you could reach without too much trouble and use to guide you back to the Hash House?

If you are really lost:

1. Stay together, stay warm and reassure each other.
2. Continue to give 3 consecutive blasts on your whistle.
3. Continue as a team to work out how to get to the Safety Road, the Hash House or a major road.

If you are really lost with no idea how to reach a major road/highway, railway line or similar linear feature, stay put and consider when a search will be mounted. DO NOT SPLIT UP. If you are not back at the Hash House within 1 hour of the finish, a vehicle search by road will begin. If you are on a road, do not leave the road in the hope of reaching the Hash House cross-country. You will be more easily found if you stick to tracks and roads.

If a vehicle search along major roads fails to locate you a more intensive foot search will be initiated. During a foot search, your intention sheet submitted at the start will be used to determine your movements throughout the event and isolate a search area. At the same time, a check of car registrations and tents will be made to check if you have returned to the Hash House and mistakenly not returned your score card to Admin. Phone calls to your mobile will be made to check that you haven't mistakenly gone home, or to attempt to locate you on the course.

Use your whistle to attract attention – THREE blasts at one minute intervals is the recognised distress signal. If you are still missing after the foot search the Police will be called in to conduct a more thorough search. (Note that, at the time of writing, the VRA has never had to do this.)



## If someone is injured

### Rogaining Tip

#### If injured

THREE blasts on a whistle repeated at one minute intervals is the recognised distress signal. Use it when injured or lost  
If you hear someone else's whistle blasts  
YOU MUST STOP  
ROGAINING and go straight to the team in distress

## Event Cancellation and Recall during an event

### Rogaining Tip

#### If there is a recall

Four successive horn blasts, repeated at regular intervals signals a recall  
YOU MUST STOP  
ROGAINING and go straight to the Hash House

If a member of your team is injured and requires assistance someone can be sent to the Hash House for help. However, if there are only two people in your team, the injured person should not be left alone. Use your whistle to attract attention and seek help from passing teams. Anyone who hears the distress signal is obliged to provide any assistance required. You should be familiar with the first aid techniques described on the VRA first aid sheet.

The VRA will cancel a rogaine before the event day if the fire risk is unacceptable for the day of the event in the event area. This will be published on the VRA web site.

It is still possible that an event such as bush fire, adverse weather conditions or flood may be encountered during a rogaine, and necessitate a recall of competitors during the event.

The standard recall during an event is four short successive car horn blasts, repeated at regular intervals. Vehicles will travel the identified safety route (marked on the event map) and other roads, providing conditions are safe to do so, sounding the recall.

Competitors must make their way to the nearest track and then towards the Hash House via the track/road network so cars can find you. Competitors should be able to guess the likely nature of the hazard considering the prevailing weather conditions.

If the fire is between you and the Hash House then seek alternative shelter, such as farmhouses or towns, areas which have sparse tree canopy, areas which have already been burnt, rivers, dams, caves, mines, dugouts, a rut, hollow, or rocky area. Avoid areas with thick undergrowth or high grass.

Once sheltered, cover your body with a non-synthetic material if available. Stay out of line-of-sight of the fire. Bury yourself if necessary. This is to protect you from radiant heat.

Cover your face with a damp cloth and breathe through this. Hydrate as much as possible.

## Reading Maps



The topographical maps used for rogaines are simply a graphical representation of the shape and form of the land over that area. One of the most obvious features of a topographical map are the continuous lines, called contour lines. Contour lines are not present in reality but on a map they are used to mark a line of equal height. The shape of the contour lines allows you to visualise from the map a picture of what the landscape looks like in reality. For instance, the closer the contour lines, the steeper the slope. With practice this becomes an easy task and a skilled map-reader can recognise the exact shape of the land at a glance. Examples of the more common contour patterns are shown in Figure 2.

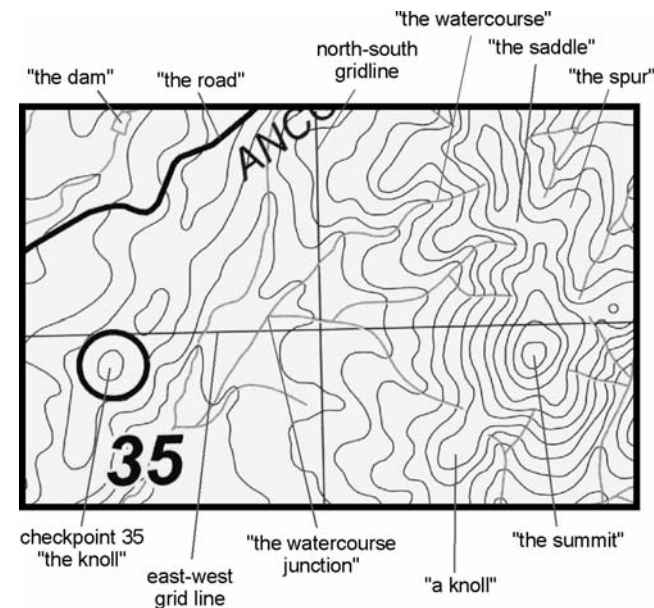
Linear and other additional features (buildings, dams, etc.) are sometimes marked on topographical maps using easily recognisable symbols. For instance, roads and vehicular tracks are often marked as red lines of varying thickness depending on the type of road. Walking tracks are often marked as thin dotted black lines. Be aware that not all tracks are marked and some that are marked may have become overgrown and difficult to distinguish. Others may be inaccurately marked.



Watercourses (creeks) are marked as blue lines, although a blue line doesn't always mean water, or even a defined channel, will be present. It just gives an indication of where water would flow. Buildings and other structures are marked as black squares and symbols, and dams and waterholes as blue dots or circles.

Some maps may indicate the location of vegetation boundaries, such as where a pine forest finishes and open grazing land begins. These boundaries are at best only a guide. Rogaining maps will also indicate areas that are out of bounds (usually in pink). These areas should not be entered at any time.

A well-made topographical map will have a legend in the margin that shows in detail what each symbol, line and area used on a map represents. They also have additional information such as the contour interval (vertical distance between contour lines), the magnetic declination, and the date the map was produced.



**Figure 2.** Common contour patterns and features found on rogaing maps. This is a close-up of an actual rogaing map. The terminology used to identify features is explained on page 28 (Checkpoint Description Sheet Terminology).

### Rogaining Tip

If you are confused about distinguishing gullies from spurs have a look at where the creeks run, these are the gullies and valleys; the curves in between are the convex sides of hills called 'spurs'. Also, look for the summits (closed contour circles), these make it easy to identify the descending spurs

The scale of the map is a very important factor in reading the map correctly. A scale of 1:25000 (quite common on rogaing maps) means that 1 unit of distance on the map represents 25,000 of the same units on the ground. For instance on a 1:25000 map, 4 cm is equivalent to 1 km on the ground (i.e.  $4 \text{ cm} \times 25,000 = 100,000 \text{ cm} = 1000 \text{ m} = 1 \text{ km}$ ). On a 1:50000 scale map, 2 cm on the map represents 1 km on the ground.

Most rogaing maps have a series of grid lines running top-bottom and left-right. The distance between these lines is generally 1 km, which helps in estimating distances on the map. These grid lines also provide a reference for taking compass bearings.

A piece of string, a ruler (edge of compass), or the edge of a piece of paper can be used to measure the distance between two features on a map and help calculate the actual distance on the ground.

## Features of a compass

A compass will help to orient the map so the landscape features on the map are aligned in the direction of the real features. The compass is also used to help you travel along a line, or bearing, between two points.

Figure 3 shows a diagram of a basic magnetic compass. It has a rectangular base plate of clear Perspex marked with the direction of travel arrow. Mounted at one end is the circular compass housing in which is the compass needle. The housing is oil filled to dampen the movement of the needle. It is transparent, has an orienting arrow inscribed into it under the needle and can be rotated within the base plate. North, South, East and West are marked around its perimeter along with 360° graduations.

### Rogaining Tip

Some maps have "magnetic north" lines marked on them, either instead of, or as well as, grid lines. These lines are used when taking compass bearings, and eliminate the need to account for magnetic declination.

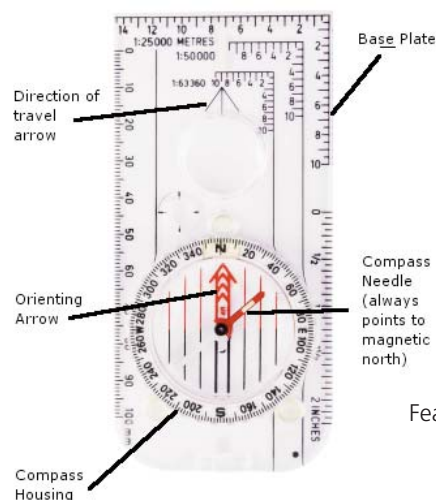


Figure 3.  
Features of a magnetic compass.

## Grid north and magnetic north

Before using the compass it is important to understand the difference between Grid North and Magnetic North. Grid North is simply the direction of the north-south grid lines, where north is up the map. These grid lines are shown in Figures 2 and 4. Magnetic North is the direction the red end of a magnetic compass needle points. The grid lines on the map, however, are generally not aligned with Magnetic North.

The angular difference between Grid North and Magnetic North on maps is called the grid magnetic angle. Often it will also be referred to as the magnetic declination. This angle should be marked on all maps, and is typically about 11 degrees to the East of Grid North in Victoria.

## Using the compass

### Take a Compass Bearing

To travel from one location to another on the map, carry out the following steps:

Place the compass on the map, aligning the long edge of the base plate with your route. In Figure 4 we are intending to travel from the dam to checkpoint 55.

Rotate the compass housing within the base plate to align its orienting arrow with the north-south gridlines, and making sure the orienting arrow points north and not south. In this case the process gives a compass bearing of 285°. However, this angle is in fact the angle between grid north and the direction of travel, so it is necessary to compensate for the difference between Grid North and Magnetic North.

### Follow a Compass Bearing

Remove the compass from the map and compensate for the Grid Magnetic angle by rotating the housing the required number of degrees in the direction indicated on the map. For example, if the angle is 11° East of North (as it is in most of Victoria), then rotate the housing 11° clockwise. This will change the compass bearing to 274°.

Now hold the compass level in front of you with the direction of travel arrow on the base plate pointing away from you. Turn yourself until the red end of the compass needle is aligned with the orienting arrow in the housing and the North mark on the rim of the housing. Walk in the direction indicated by the direction of travel arrow.

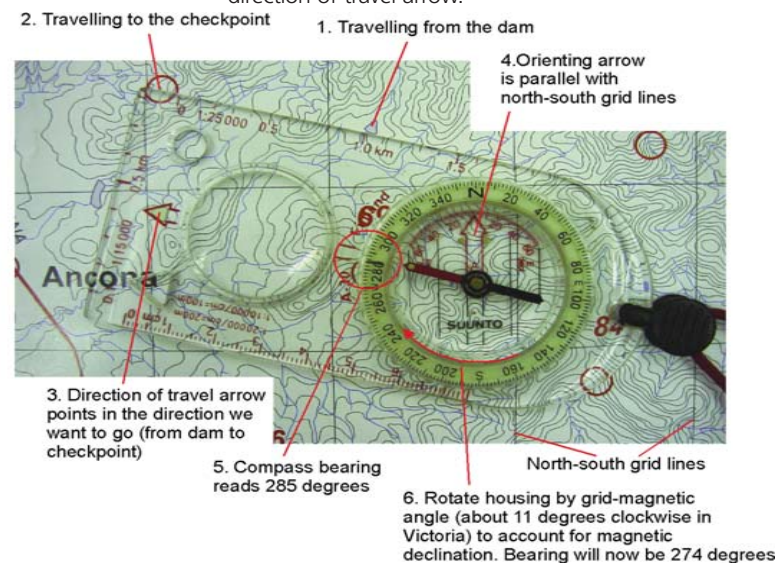


Figure 4. Place compass edge along line you want to go. Rotate housing so orienting arrow is parallel with the north-south grid lines and points North. Subtract the grid-magnetic angle (about 11° in Victoria) by rotating the housing, to give the final bearing of 274°.



## Following a bearing

The easiest way to follow a bearing is to pick an easily identifiable object, such as a tree or rock, in the distance, along the line indicated by the direction of travel arrow. You can then walk to this object without looking at the compass. Then repeat the process identifying a new object along the bearing. This technique allows you to move off the bearing to negotiate obstacles but still return to the bearing at the object you had previously identified as being on the bearing line.

## Navigation hints

- Trust your compass, especially at night.
- Rogaining at night is slower. Take special care at dusk as many get lost at this time, as you adjust to the change in pace and visual references.
- There are often unmarked tracks along spurs and gullies. Be wary of relying too heavily on tracks for navigation, as they are often marked incorrectly. Use minor tracks as a guide only.
- Determine the number of steps it takes you to walk 100 metres along tracks, open bush and thick bush. Use this to pace count and help measure distances between features and along roads and compass bearings.
- Use obvious features as 'attack' points for checkpoints i.e. Instead of trying to navigate directly to a checkpoint along a bearing over a long distance, navigate to a nearby feature, such as a knoll, and then navigate to the checkpoint. This reduces the chances for error when following bearings for long distances.
- Always be aware of your position and match the terrain to the map. This will ensure that you pick up any deviations from your course early.
- The bush along spurs and ridgelines is generally more open and faster. Bush in gullies is often thick and slower.



## Checkpoint description sheet terminology

Along with the map, you also get a checkpoint description sheet that describes the location of all the checkpoints. Checkpoint descriptions begin with 'THE' or 'A'. Checkpoint descriptions beginning with 'THE', e.g. 'The Spur', indicate that the spur is a feature that is recognisable on the map. Checkpoint descriptions beginning with 'A', e.g. 'A Knoll', is one that is not marked on the map but is actually there. Often 'A' features are implied by the contour lines. Correct checkpoint description terminology is shown in Figure 2.

## Checkpoint description sheet terminology

continued

Checkpoints in public places, such as road junctions, may also have a checkpoint description that states a bearing and distance from the centre of a feature. This is to place the checkpoint out of view of the public. For example: 'The road junction, 120° 20 m'. This means you must travel to the centre of the road junction, then set your compass on 120° and travel in that direction for 20 m to find the checkpoint. Note that these bearings are magnetic ones, so there is no need to allow for magnetic declination. You just set the compass to the stated bearing and go in that direction.



## Night navigation

Once you understand the major concepts relevant to daytime navigation, you can try to put them to use at night. The main difference at night is that you can only see what is immediately around you, and possibly the outline of surrounding ridges. Events are staged as close as possible to full moons to provide the maximum amount of light at night.

At night, you have to pay as much attention as possible to your compass, as well as the slope of the ground under your feet and always keep reference to where you are on the map. If you lose your position at any stage it is much harder to relocate at night. Learn to recognise features in the dark, and try to use your torch as little as possible. This helps protect your night vision.

## AT THE FINISH

Always return to Admin when you return to the Hash House, even if it is just for a rest. If you do not return your Navlight wristband (or score card) to Admin at the end of the event, you will be presumed missing and a search will be initiated.

Hash House food and results should be available within an hour of the finish. Results will be listed on the VRA web site and also in the next newsletter.

## FINAL WORDS ...

This document is by no means comprehensive. It is simply designed to give you some idea of the methods, equipment and navigational techniques used by many of today's experienced rogainers. What you do with it now is up to you. As you progress in the sport, you will discover your own methods and tricks, and become a more skillful navigator. If you want more information on navigating there is an excellent reference book available.

"Rogaining – Cross Country Navigation"

by Neil Phillips and Rod Phillips.

Third edition published 2000 by Outdoor Recreation in Melbourne, Australia.

Copies may be bought through the Victorian Rogaining Association at very reasonable prices and are generally available for sale at events. Also, make sure that you get a copy of the current event rules (included in this booklet) and a VRA first aid sheet.

If you have any queries or questions about rogaining or navigation in general, feel free to contact a committee member (their contact details are in your newsletter or on the VRA website), or speak to them at an event. They are always happy to help out anyone new to the sport.

If you want to practice your skills any time, the VRA has a permanent course set up in the Mt Disappointment State Forest north of Melbourne. Checkpoint description sheets and map information is available from the permanent course manager who is listed in the VRA newsletter. Why not spend a weekend with your friends at the permanent course, practising your skills? The VRA also runs training days, coaching events and map skills workshops, so keep your eye on the newsletter for information on these. If you are unable to find a partner for an event you can contact the Partner Finding Service listed on page 2 of the VRA newsletter.

We hope you enjoy your rogaining experience. However, please remember that the VRA is totally run by volunteers, so consider volunteering your services to help in some way at an event. There are plenty of rewarding tasks that need doing, and there is something for people of all ages and abilities – from organising an event, to chopping vegetables, to collecting checkpoints after the event is over. Helping is great fun and you meet lots of new people and potential partners.

**Finally, make sure you have fun out there,  
because that's what it's all about!**



## RULES OF ROGAINING

### Definition

Rogaining is the sport of long distance cross-country navigation for teams travelling on foot. The object is to score points by finding checkpoints located on the course within a specified time. Checkpoints may be visited in any order.

"The course" means anywhere a team travels during the time of the rogaine but specifically excludes the access road and areas in the proximity of an administration area designated for non-competition use by the organisers, for example for parking or camping. "Event site" includes the course and any administration, access and non-competition areas.

### Entries

- R1 A team shall consist of two, three, four or five members.
- R2 A team that has a member under fourteen years of age shall also have a member eighteen years of age or over.
- R3 Competition placings are awarded in several sections based on the age and gender composition of teams. Each team shall be deemed to be entered for all sections of the competition for which it is eligible.
- R4 No member of a team shall have been involved with the organisation of the rogaine so as to have a prior familiarity with the rogaine course or the fieldwork of the rogaine map.

### Respect for land and property

- R5 Competitors shall respect public and private property.
  - (a) Competitors shall not cross newly sown ground or growing crops, except if specifically permitted by the organisers, or any area deemed out-of-bounds by the organisers and shall keep a reasonable distance from dwellings and stock with young.
  - (b) Competitors shall take due care when crossing fences, crossing at corner posts, solid posts or between wires wherever possible. Each team shall leave gates in the same state as they were found.
  - (c) Competitors shall not discard litter or light fires at the event site nor smoke on the course.
  - (d) Competitors shall not unduly damage or disturb native flora or fauna.
  - (e) Dogs and weapons of any kind, including firearms, are prohibited at the event site.

## Conduct of competitors

- R6 Competitors shall not enter the course until the official start is signalled.
- R7 The only navigational aids that may be carried on the course are magnetic compasses, watches and copies of the competition map. The possession of other navigational aids, including pedometers, altimeters and GPS receivers on the course is prohibited. The possession, at the event site, of maps that provide additional information not shown on the competition map is prohibited.
- R8 The use of computers for course planning is prohibited.
- R9 Competitors shall travel only on foot.
- R10 Members of a team shall remain within unaided verbal contact of one another at all times whilst on the course. A team shall demonstrate compliance with this requirement to any event official or other team on request.
- R11 Organisers shall issue checkpoint recording devices, which shall be a scorecard &/or an electronic recorder to one or more members of each team. Electronic recording devices shall be attached to the competitors by a tamper-proof device, such as a wrist band, before the commencement of the event. Tamper-proof devices shall only be cut or removed by event officials.
- R12 A team shall surrender its recording device(s) to any event official, and shall advise their team number to any event official or other team, on request.
- R13 A team shall not accept assistance from, nor collaborate with, other people, nor deliberately follow another team.
- R14 No food nor equipment shall be left on the course before the event for a team's use, and no food or equipment shall be discarded on the course unless retrieved by the team during the event and brought by the team with them to the finish.
- R15 Competitors shall carry a whistle at all times whilst on the course. In an emergency a competitor shall give a series of short blasts on their whistle.

## Checkpoints

- R16 All team members shall simultaneously approach to within 5 metres of each checkpoint for which points are claimed.
- R17 In order to gain points for a checkpoint teams must record their visit to that checkpoint using the recording device provided by the organisers in the correct square, where a scorecard is used. If a team punches an incorrect square, they must notify the organisers of the details of this immediately upon returning to the administration to be eligible to be credited with that checkpoint.

## Checkpoints continued

- R18 Where more than one electronic recording device is provided to a team, all devices must record a visit to a checkpoint to gain points for that checkpoint.
- R19 Teams shall fill in any intention sheet at the checkpoint with the time of arrival, the team number and the number of the checkpoint that they intend to next visit.
- R20 If a recording device is lost, a team may present in its place a record of punch marks or a record of the electronic "punch" human readable backup codes on any single sheet. The organisers will accept this single sheet from the team provided that the punch/record marks are discernible, and the team can identify to the organisers the checkpoint number for each of the marks.
- R21 Competitors shall not deliberately rest within one hundred metres of a checkpoint unless the checkpoint is also a water drop.
- R22 Competitors shall not adversely interfere with a checkpoint, water drop, any other facility placed upon the course by the organisers, or the equipment of any other team.





## Administration Areas

- R23 Whenever a team visits an administration area, all team members are required to report together to the organisers and surrender their team's scorecard and/or "check-in" their electronic recording device(s). The team shall only collect its scorecard and/or "check-out" their electronic recording device(s) immediately prior to leaving that administration area.
- R24 A team shall finish by all of the members reporting together to the designated finish administration area and surrendering their recording device.
- R25 If a competitor wishes to withdraw from a team for any reason the entire team shall return to an administration area and notify the organisers. The original team shall be deemed to have finished the event. If a new team is formed it may be admitted to the competition at the discretion of the organisers but no points shall be credited for checkpoints already visited.

## Penalties and Protests

- R26 The penalty for breaching these rules is disqualification except for rules R16, R17, R18 and R19 for which the penalty is the loss of points for the checkpoint under consideration. Any team disqualified under this rule shall be recorded as DSQ.
- R27. A team may voluntarily withdraw, by advising the organisers immediately upon their finish, if they have breached any rule for any reason and shall be recorded as W/D.
- R28. Within forty-five minutes of the nominated finish time, a team may report in writing to the organisers about any team thought to have breached these rules, or may protest in writing to the organisers about any actions of the organisers that they consider made the competition unfair.

## Scoring

- R29. The event shall end at precisely the set number of hours after the actual starting time, both times as defined by the organisers' clock. Where multiple timing devices are in use, the organisers shall ensure all clocks used to record finishing times are synchronized. Teams finishing late will be penalised at the rate per minute or part thereof specified in advance by the organisers. Teams finishing more than thirty minutes late shall be deemed ineligible for a placing and their result shall be recorded as LATE.
- R30. A team's score shall be the value of the checkpoints visited and correctly verified in accordance with these rules, less any penalties. The team with the greatest score, or in the event of a tie the team that finished earlier, shall be awarded the higher placing.

## Scoring continued...

- R31. In the event of a checkpoint being damaged or deemed misplaced or missing by the organisers, teams shall be awarded the checkpoint score:
- a) If the punch is missing or damaged but the team has a correct record on the intention sheet.
  - b) If the punch is missing and there is no intention sheet, but the team can satisfy the organisers that they visited the correct site.
  - c) If a checkpoint is missing or misplaced but the team can satisfy the organisers that they visited the correct site.
  - d) For a correctly recorded visit to a misplaced checkpoint.
  - e) If an electronic "punch" fails but the team has either (where applicable) a punch on a backup control card or record of the human readable backup code for that checkpoint.
- R32. Any team hearing a distress signal must abandon their course and help in any way needed. No team shall be penalised for any rule breached in the course of giving such help.

## General

