ENVIRONMENTAL IMPACT OF ORIENTEERING

An ACT Case Study:  
2007 Oceania Championships

Introduction

This report documents the impact on the local environment of a major Australian orienteering competition (around 500 competitors) held in Namadgi National Park, ACT in October 2007. It focuses on the impact on the environment immediately adjacent to five control marker sites visited by significant numbers of competitors. These sites were chosen as they were some of the most frequently visited control sites during the competition. Portable water containers placed temporarily at the sites provided competitors with the opportunity to stop and get a drink of water. The information in the report is intended to assist land owners and managers to understand the likely impact on the terrain of an orienteering competition.

The Sport of Orienteering

The sport of orienteering is a competition in which the participants are provided with a specially prepared map on which a number of control sites are identified, which they have to visit in a prescribed order. Competitors start at separate time intervals and are able to take whichever route they judge to be the fastest. Essentially it involves navigating whilst running through the terrain, with the winner being the person who has the fastest time for their course. The control sites are marked in the field with special white and orange cloth markers. In major competitions these are hung from a lightweight metal stand. On top of the stand is an electronic unit which records the time at which the competitor visited the control.

Types of Impact from Orienteering

The environmental impact from orienteering occurs in different ways. These are summarised in the following list, in decreasing order of impact.

- Least impact is made by competitors running through the terrain. Competitors travel alone and are able to take different routes between controls.
- Slightly more impact on the terrain occurs near control marker sites, as these are visited by numbers of competitors, the course design dictating the number in each case.
- Water control sites are visited by the greatest numbers of competitors, as courses are designed to make economical use of them.
- The most significant impact is around the finish and assembly area. All competitors must travel down the finish chute. This is the area where cars are parked, registration tents are placed, toilets located, etc.
Orienteering event planners are always concerned to minimise the impact of their activities on the environment. They are readily able to succeed in this in relation to the finish/assembly area as the key factor they consider when choosing an assembly area is to make sure it is not in an environmentally sensitive area, and can handle the likely impact. They have less control over where control sites are placed in the terrain as these are chosen to provide the greatest navigational challenge.

Impact Assessment

The environmental impact after an event in the finish/assembly area is easy to assess as it is clearly visible and concentrated in a relatively small area. It is not so easy to assess the impact of competitors in the terrain, as this will occur throughout an area of many square kilometres, often in areas that are not easy to access. This report provides documentation which will assist land owners and managers to understand the likely impact orienteering competitors will have on the terrain away from the assembly area.

Methodology

This study investigated the environmental impact in relation to five control sites used during the 2007 Oceania Orienteering Championships. This competition was held in October 2007 in the southern part of Namadgi National Park on a specially prepared orienteering map (Boboyan Divide).

Five control sites were chosen, these being water control sites, where the largest number of competitors would be visiting. The sites were photographed the day before the competition. They were photographed again, from the same position, on the day of the competition, immediately after the competitors had visited them. A brief report is provided in relation to each site. This provides before and after photographs, and lists the total number of competitors who visited each site. Finally, the area was revisited 6 and a half weeks after the competition and photographs were again taken.

Report on Control Sites

Attachment A shows before and after photographs in relation to each of the control sites listed below. Attachment B includes photographs of the same areas taken 6 and a half weeks after the competition. The photographs in the attachments have been reduced in size for publication purposes. The author can provide higher resolution copies if required.

The following reports describe the impact observed on the day of the competition.
Site 102
Visited by 131 competitors. Grassy site between boulders. Some slight compaction of grass and vegetation evident close to the control. See photographs in Attachment A.

Site 105
Visited by 143 competitors. Flat spur in an area burned during recent control burning activity, with an amount of fire debris still lying around. Little impact, other than breaking some already dead debris. See photographs.

Site 131
Visited by 132 competitors. On a hill side in a burned area, but with some grass clumps regenerating. Evidence of footprints on the bare earth visible around the area where the water containers were located. See photographs.

Site 135
Visited by 275 competitors. At the base of a large boulder, with grass regenerated after partial burning. Very little visible impact, other than one broken tree seedling. Some minor tracking visible to and from the control site (not shown in the photograph) where competitors appear to have used existing animal tracks. See photographs.

Site 146
Visited by 45 competitors. Grassy valley floor adjacent to rocks. Some slight compaction of grass in the direction followed by most competitors on visiting the control, which was already a lightly marked animal path. See photographs.

Finish Chute
Attachment A also includes some photographs of the finish and assembly areas, where the finish chute was located.

Six and a Half Weeks After the Competition
All the control sites were visited again 6 and a half weeks after the competition. The photographs in Attachment B show the control sites and the finish, start and assembly areas. By this time there is no longer any visible sign of impact by orienteers, either in the bush, or at the finish, start or assembly areas. Without prior knowledge it would not be possible to know the area had hosted a major orienteering competition.

Conclusion
The photographs in this report provide a firm demonstration that there is likely to be little impact from orienteering competitors on the terrain in which an orienteering event is held. Even in areas where most activity is concentrated, such as control sites, the initial impact is slight and full recovery can be expected within a short time frame. The impact of local animals, such as
wombats and kangaroos is likely to be more significant. In order of magnitude the activities of orienteers and the local fauna are at the very bottom of the scale in comparison with more significant environmental impact events, such as bushfires and the damage caused by feral animals, particularly pigs.

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23 November 2007
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ATTACHMENT A
Environmental Impact of Orienteering – Sites Before and After Competitors

102 Before

102 After
Finish/Assembly During Competition
Environmental Impact of Orienteering
Six and a Half Weeks after Competition

The following pictures document the impact on the area used for the 2007 Oceania Orienteering Competition 6 and a half weeks after the event. The event was held in early October. The umbrella in the photographs shows where the orienteering control was placed during the event.

By now it is not possible to tell there had been an orienteering event in the area.

Site 102
Finish/Assembly Area

Finish Chute – Where All Competitors Finished
Start - Where All Competitors All Started From