

# Mapping Report for 2016 OA Annual Conference

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Chair, Mapping Committee

## **ISOM20xx Revision**

The revision of ISOM2000 is now entering its 9<sup>th</sup> year! During this time numerous comments and submissions on behalf of Orienteering Australia have been made, with the last major submission made January 2016, see <http://orienteering.asn.au/index.php/mapping-committee/> In preparing the January 2016 submission I sought opinions and indeed received advice and comments about the 'final draft' from many orienteers including Neil Barr, Noel Schoknecht, Eoin Rothery, Eric Andrews, Mark Roberts, Andrew Lumsden, Tony Simpkins, Blair Trewin, Jennet Morris, Ian Dempsey, Paul Prudoe, Michael Woodand and Paul Dowling. Our OA submission was presented on time noting that the Map Commission also received feedback from Norway, Portugal, USA, France, Finland, Slovenia, Sweden, New Zealand and Austria. At this year's Easter Mapping Meeting discussion focused on the status of the so called 'final draft' as it was actually an incomplete document and only when the draft is complete can it be judged as a whole. It was also noted that at no stage of the revision process have any offset, spot colour printed map samples been provided so as to properly assess the suitability and legibility of the new map symbols.

The Map Committee considers there are elements in the 'final draft' that are unacceptable and unless these concerns are met or substantially incorporated in any draft, then the draft should be rejected in its entirety.

## **IOF Commission Vacancies**

The IOF are currently seeking members for several of its Commissions, including the Map Commission, see <http://orienteering.org/seeking-members-for-iof-commissions/> Two Members have recently left the Map Commission.

## **Map Scale and Terrain**

There is a view that some terrains considered suitable for Middle Distance should be permitted to use 1:15000 size symbols at the map scale of 1:10000, or indeed perhaps any scale that best suits the terrain at hand ie simple spur gully country could be mapped at say 1:20000, Granite at 1:15000 and complex mining terrain mapped at say 1:10000. This is currently not permitted under ISOM2000 where a 1:10000 scale map must be a strict enlargement of the 1:15000 scale map (and which is mapped with regards to rules about simplification, generalization and legibility). Ultimately this is a topic for wider discussion and input particularly from the Athletes and Technical Commissions.

## **Training new mappers needs to be a high priority**

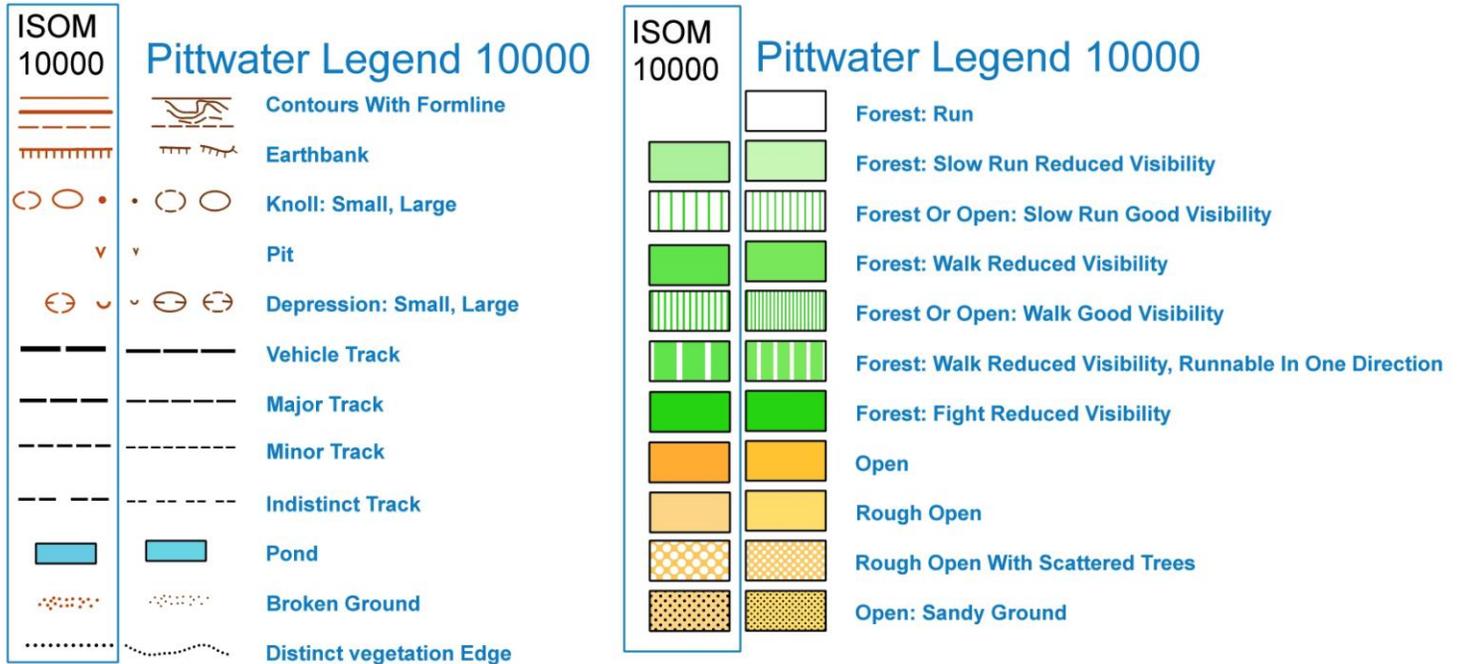
Delegates to the Easter Map Meeting reported that some training of new mappers has occurred, however much more needs to be done in this regard. I consider OA needs to continue and actively support the Associations by providing further financial incentives for the training of new mappers and that this should be considered a high priority.

## **Mapping Standards for competition maps**

In last year's report I advised about printing and legibility issues relating to competition maps. In particular when maps are mapped and drawn to specification there should be no need to print Long Distance or Middle Distance competition maps at 1:7500. I also said that organisers and particularly controllers must ensure maps meet mapping specifications which are designed to produce legible maps at the scale of 1:15000 (assuming spot colour, offset printing). For the first round of the 2017 NOL competition TAS has chosen its Pittwater Dunes map which is non-compliant with ISOM2000. The map is at a scale of 1:7500 and uses undersize symbols (leading to insufficient

generalization and simplification (ie over saturation of detail) and further it is proposed to print the map at 1:10000 for the Elites. Accordingly when printed at 1:10000 it will be extremely if not impossible to read map detail on the run and indeed will require the elite orienteer to have perfect vision. At 1:7500 non elites will also struggle to read some the undersize symbols and map detail. The map however is to be used for the NOL event, both Middle Distance and Long Distance!

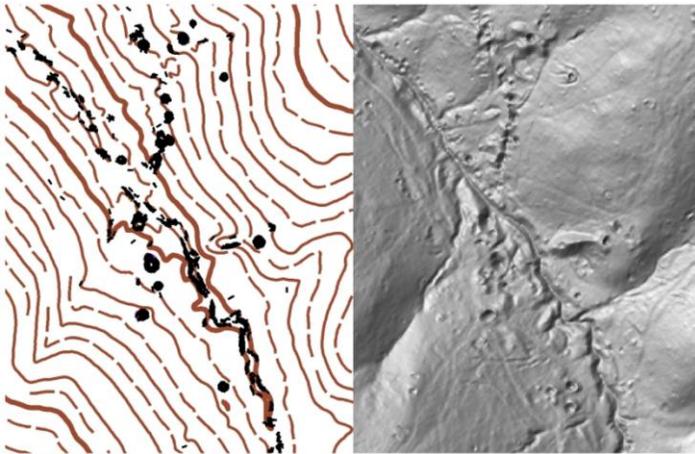
The graphic below compares the 1:10000 symbol sizes of Pittwater Dunes to ISOM2000 requirements.



### LIDAR Investigations

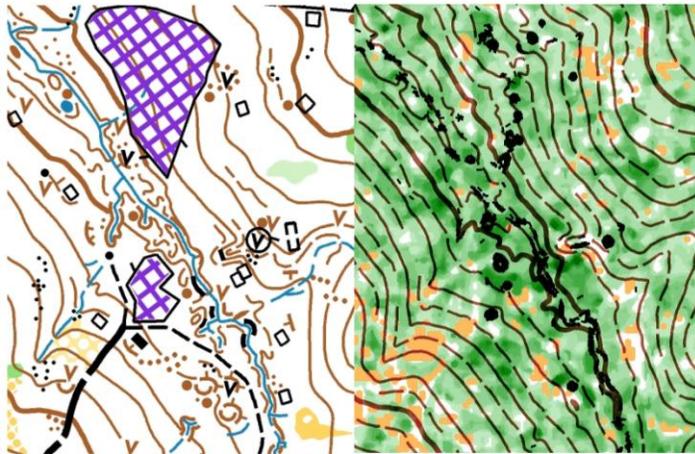
LIDAR data is rapidly becoming the new benchmark source material for orienteering base maps. LIDAR data can produce highly accurate detailed base maps such as contours, hill shading, vegetation density and height and rock detail. There are already computer programs that can automatically generate from LIDAR useable base maps and also training o-maps. While some mappers in Australia have used LIDAR to a limited extent, there is ongoing research to further develop its application for map making in an Australian context. In this regard a grant of \$20,000 by Alex Tarr made available through the Australian Sports Foundation is being managed by Noel Schoknecht to investigate and research the possibilities of producing a single base map image derived from LIDAR data. Several workshop sessions are currently being planned with Airborne Research Australia (<http://www.airborneresearch.com.au/>) at Parafield, SA, to amongst other things define the data parameters needed to produce orienteering base maps. Also a NSW orienteer has made a donation to the Australian Sports Foundation of \$202 for mapping development with this being used to assist investigations into the application of LIDAR for map making.

An example of hill shading, rock extrapolation, vegetation and contours covering a section of Para Wirra orienteering map in SA is shown below.



Contours & Rocks

Hill shade



O Map

Vegetation & Contours / Rocks

**Eric Andrews 1943 -2016**

Sadly this year was the passing of Eric Andrews. Not only will he be remembered as one of Australia's finest mappers but also for his contribution to mapping in both his home state of Queensland and at the National level. Eric had an 'eye for detail' as evident by his artistic skills in some 200 plus orienteering maps. At a personal level I am indebted to his council on many a mapping issue particularly related to my current position as OA Mapping Chair. In 2004 Eric gave me a specially hand drawn course in Purple of *The Cascades* competition map, being an example of one of those many extra things Eric would do, in this case to help a colour blind orienteer. And a lasting memory will be his statement 'Which knoll?' on the Prelinna / Mannawarra map being a 'BATMAPS' map, and used this year for the NOL Ultra Long-O event in SA.



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