### Revision of ISOM, First Draft

# Maps and photographs prepared by A O Uppill, Mapping Officer, Orienteering Australia

### 24 September 2013

#### **Comments on Stony ground**

I have made further consultations with mappers and orienteers (including elite orienteers) alike and can say that nobody favours the fixed area density screens as proposed for Stony ground in the draft document. This also applies to the other proposed fixed area screens for Broken ground and Boulder field.

In support for retaining the existing way of drawing Stony ground using individual dot placement I have attached some photographs with corresponding map examples.

The Moon Rocks map is entirely open ground with the main features being rock. It was recently remapped and used for a Middle Distance event. The map and photos show general linear outcropping to complex areas of Boulders, Cliffs, Boulder Clusters, Boulder fields, Stony ground and Small knolls (being rocky in nature). As can be seen the individual Stony ground dot symbols have been used in groups of 2 (rocky ground is obvious but should not be used as a control feature), groups of 3 (significant rock outcropping and useable as a control feature) and used in combination (sometimes only one dot) with Boulder, Boulder field, Boulder cluster and cliffs. The mapper has paid particular attention not to let the Stony ground dominate the map and to ensure that other rock features are legible and readily identifiable in the field. On this map the dot size is 0.13 for printing at 1:10000, laser print. For 1:15000 a larger dot size would be needed for legibility (0.18 - 0.20). Gaps between dots is about 0.15 minimum to some widely spaced dots.

Para Wirra is typical Eucalypt woodland with Yacka understory and other bushy vegetation that impacts on runnability. This area has less rock out cropping

compared to Moon Rocks. Again individual dots have been used in combination, mostly with Boulders. Where cliffs are too small for mapping separately, a couple of dots may be used. The density and height of rocks vary significantly. Sometimes the rocks are closely situated but small, low lying. Other times they may not be large enough to map as a Boulder (less than 1m or not obvious) and be scattered, so the spacing of dots is more. The Stony ground does not present as a significant obstacle to the runner given that such areas are relatively small and or narrow. The dot size is 0.18mm and a gap minimum of about 0.18mm

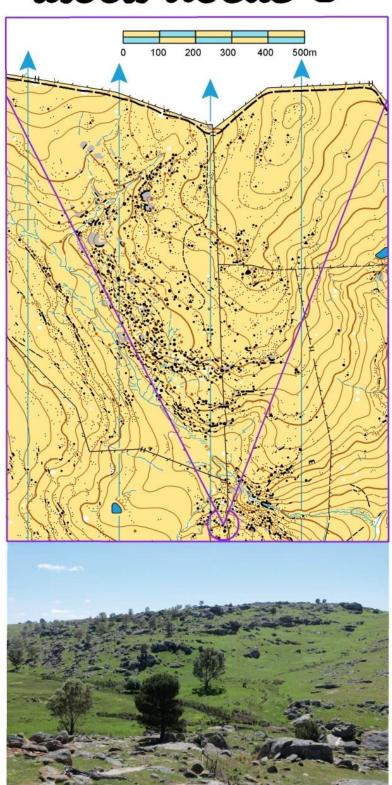
Given all the variables it seems that it is difficult if not impossible to adequately define Stony ground in terms of two or more templates similar to the runnability of Greens. It is here that the mapper must use their judgment and experience in adopting appropriate dot spacing and with due regard to cartographic legibility. For 1:15000 maps assuming off set spot colour printing: minimum dot size of 0.18mm - 0.20mm, minimum gap 0.18mm to a maximum of about 1.5mm

#### **Stony or Rocky**

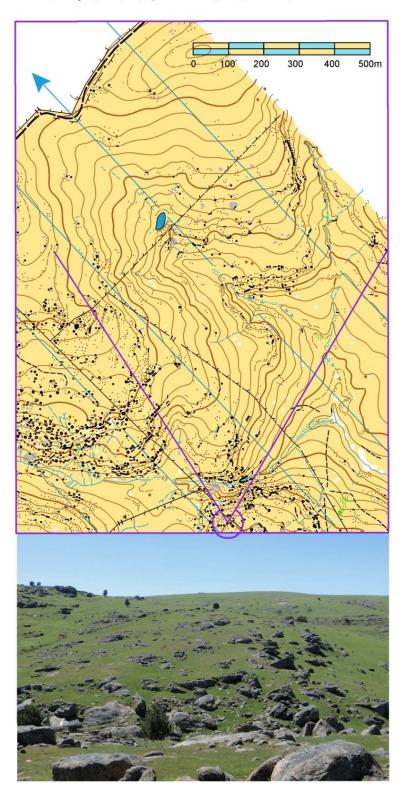
For an interesting discussion 'Rock or Stone: Is there a difference?' please refer to <a href="http://geologywriter.com/blog/stories-in-stone-blog/rock-or-stone-is-there-a-difference/">http://geologywriter.com/blog/stories-in-stone-blog/rock-or-stone-is-there-a-difference/</a>

I suggest consideration be given to using the term Rocky ground in preference to Stony ground. The term Rocky ground is mostly used in Australia and I think more accurately describes what we are mapping. The term 'rock' suggests an obstacle that the orienteer wants to know about, whereas 'stone' suggests a small, smooth object and probably something that would not be mapped.

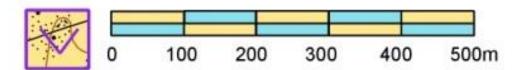
## Moon Rocks 1



## Moon Rocks 2

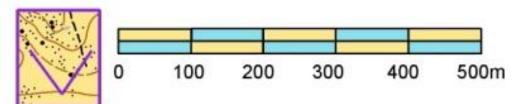


### Moon Rocks 3





## Moon Rocks 4





### **PARA WIRRA**

