## Surveying the surveyors' marks

Alex Petrow

As part of the Show Us Your Limits 'Walk and Talk(s)', Pastor John Evans of the Canberra Bushwalking Club (CBC) led a 40-strong group of walkers through the Goorooyaroo Nature Reserve last Saturday afternoon.

Because part of the walk passed along the ACT-NSW border, Pastor John cajoled me into accompanying the tour, so as to dazzle(!) the assembled with my surveying knowledge.

The not-too-strenuous six kilometre trek was organised by the Centenary of Canberra unit in CMD, which is organising events with heritage themes in the run-up to Canberra's centenary in 2013.

Starting from Horse Park Drive, we heard a brief history on how the shape of the ACT came about, the requirement to mark its bounds on

the ground and the technology used to do that. Surprisingly, the methods and equipment used by Sheaffe, Mouat and Johnston from 1910 till 1915 did not really begin to change much until about the late-1970s.

In my opinion the first major change to speed up work was the programmable calculator. Why? Because with logarithms, it took 30 minutes or more to solve a triangle, compared to less than five using a calculator.

We followed John easterly along the steadily rising track, using the pauses while slower walkers caught up to describe the scenery and take in the ooh-aah views that unfolded the higher we climbed.

After rising about 120 metres, we came to corner X4 on the border. Surveyor Sheaffe took almost two years to get here, having started from Mt Coree in June 1910.



## Surveying the surveyors' marks continued..

At 98 years old, X4 is the best border marker I've seen. Why X4? With some 2445 corners along the border, there had to be a naming convention. At the time, it was envisaged that Sheaffe would do the whole job, but when Mouat began southwards from Mt Coree, the system went out of kilter. Despite this, each corner still has a unique identifier.

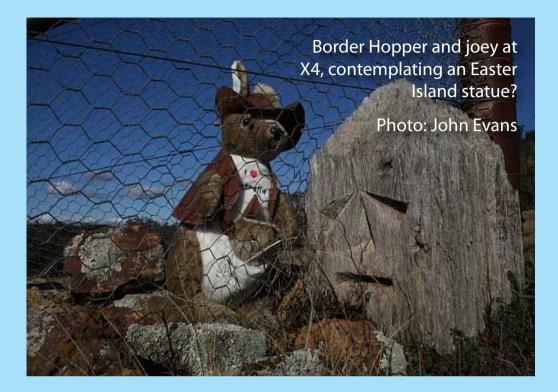
From X4 we could see other trig stations on Old Joe, One Tree, Oak, Majura, Ainslie and Spring (NSW) hills. We also looked down on to Wattle Valley homestead, on the dark side of the border.

As well as the corner border markers, the surveyors also carved shields in suitable trees and placed other marks near most corners so the border corners could be re-established should the original markers be destroyed. Alas, as we walked northerly up the ridge to Old Joe, this was indeed the case, with a fence built along the border.

As we followed the fence up, we came across a very young bat that seemed to have impaled itself on a barb on the top wire of the fence. Fortunately, the little fellow was just resting there, hanging upside sleeping until woken by all the flashing cameras taking pictures of him.

Ninety metres higher, we reached the top of Old Joe Hill. Over the fence was the sighting beacon on the trig mark. Although these quadriped structures may not have the historic charm of a mossy dry-stone cairn, they allowed the surveyor to make readings from the mark immediately. (Dismantling a 2-metre high stone cairn prior to observations and re-assembly afterwards was not a prospect looked forward to by a field party!)

Some trigs were named for the hill they stood upon, after landholders or even a surveyor's assistant!



After afternoon tea, we began descending the steep western spur of Old Joe. Back once again in the reserve, we noticed a group of dressed tree trunks that carried aluminium tags indicating that they were wildlife habitats and were not to be disturbed.

Before we all went our separate ways, Pastor John thanked everyone and said the walk would almost certainly be repeated later in the year. Keep an eye out for it!

