BOTRYCHIUM AUSTRALE ON THE PLAINS

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About ten years ago I spotted one small plant of an unfamiliar fern in a wilderness dominated by weeds. This land adjacent to our property is legally river protection reserve owned by Canterbury Regional Council. It was dominated by an unholy mix of blackberry, cotoneaster, gorse, broom (*Cytisus scoparius*), and *Muehlenbeckia australis*. My son Matiu identified the fern as *Botrychium*. I kept an eye on it over the years. Meanwhile a self-sown *Pseudopanax crassifolius*, which must have originated from the north side of the Ashley River, grew rapidly right next to the fern.

In October 2009, with ECAN's permission, I commenced converting the reserve to shrubland and woodland with species that might have been in the place before human interference. In early 2015 the first reproductive *Botrychium* spike appeared. I sent a poor photo to Miles Giller and Alice Shanks, who both identified it as *Botrychium australe*, previously unknown from this district. This appears to be near its southern limit. By

March clouds of spores were being released from the 214 mm high spike.

Contrary to a published drawing and photograph, which have the reproductive spike branching from the basal stem well above the vegetative fronds, this specimen (Fig. 1) has the fertile spike and vegetative fronds separate to at least 1 cm below ground.

Acknowledgement

The author would like to acknowledge the work of Lynn Barr who kindly travelled to take quality photographs of the *Botrychium australe*.



Figure 1 *Botrychium australe* fertile spike and vegetative fronds. (Photo Lynn Barr)