

Volunteer surveys for Lake Muir blood spider orchid - *Caladenia erythrochila*

By Phillip and Pamela Hill

Lake Muir blood spider orchid is a rare species with up to two small, blood-red flowers 50 to 60 mm across. Flowers are distinguished by their long, wispy petals and sepals and small, blood-red, often white marked lip. The orchid was first recognized as new by the late Harry Winfield and formally named in 2001 from specimens collected north of Lake Muir by Bill Jackson in October 1995. To date, the species has been found in only a few locations and, due to its rarity, is listed as Priority flora in Western Australia.

As indicated by its' common name this species has been previously found near Lake Muir between Manjimup and Mt Barker.

In 2012 five sites (A, B, C, D and E) were visited. Of these, A, B & C were of previously known locations. Site D was visited as a potential sighting was made there in 1998. Finally Site E was included in our program late in the 2012 season after a confirmed sighting by another WANOSCG member. We now have coordinates for that location for future follow up.

Our findings for the period were as follows: Site A – 99 plants found, comprising 67 in flower, 30 with leaves only and one in bud. Site B – eight plants found, comprising seven in flower and one a leaf only. Site C (the original known site of *Caladenia erythrochila*) revealed no plants at all on our 2012 visit. Site D is 53 kilometres away (as the crow flies) from site A. The location was reported in 1998 but because of the very different habitat to that of the originally known population it was thought to have possibly been an incorrect identification. Our initial visit to this site did nothing to dispel that assumption. This assumption has however been revised following a plant being found at Site E. in habitat not that dissimilar to that at Site D. This site is located approximately 20 km (as the crow flies) from Site D or 70km from sites A, B & C. The timing of our visit precluded us from seeing the target orchid ourselves on this occasion but did allow us to compare that habitat in relation to what is considered as “Normal” for the orchid.

During our sightings we only found nine plants in seed, this equating to 8.41% of 107 all plants found or 12.15% of 74 flowering plants found. All nine plants in seed were found at Site A.

Threats to Lake Muir blood spider orchid at Site A include grazing from native animals and trampling of habitat by people searching for the orchid at this well-known site.

One of the problems in finding this orchid is the small window of opportunity to see it in full flower which may be due to the very poor rainfall experienced in the region in the previous couple of years. It has been noted by ourselves and the local DPaW officer that the flowers are only present in a healthy state for a few days before rapidly deteriorating. The period 26 September to 1 October 2012 was an example of this with the orchid in good flower on the 26th September, about 70% in fair flower on the 29th September but most flowers severely wilted by the 1st October.

The time spent by ourselves for travelling and studying Lake Muir blood spider orchid in the field for 2012 was approximately eight full days. However, the follow-up work at home in identifying orchids sighted from photographs and the data gathered onsite, compiling this data and checking it online with mapping software and sourcing suitable maps for the area to be studied, accounted for approximately another 5-7 days work spread over the season. Overall, approximately 15 days were spent on the project.

Having now undertaken our initial study of Lake Muir blood spider orchid we feel more confident of potentially finding more plants in 2013 given sufficient rainfall.

