FLORA

RARE FLORA SEARCH AND RESCUE

Judith Harvey

Rare Flora Search and Rescue is an exciting citizen science project, and a collaboration between the Wildflower Society of WA, WWF-Australia and the Department of Biodiversity, Conservation and Attractions (DBCA). It has engaged and is still engaging volunteers from the city and regional areas to help search for our rare and poorly known flora in the Wheatbelt.

Priority flora are considered potentially rare, but can't be afforded additional legal protection as Declared Rare Flora until survey has established that there are not plenty more just waiting to be found. This project is looking at Priority 1 and 2 species, which are those that are under threat and known from only a few records.

The project is focusing on the highly cleared areas between Geraldton and Esperance. We inform, train, support and equip volunteers to enable them to search for these rare and poorly known species independently in the future. Volunteers are registered with DBCA to provide health and safety training, insurance cover and eligibility for volunteer rewards. Participants with good botanical knowledge can obtain a Scientific or Other Prescribed Purposed (SOPP) Licence so that voucher specimens can be collected from new populations and lodged at the WA Herbarium and relevant regional herbaria. This is important evidence to verify our evergrowing knowledge of native flora. Any photographs submitted to Florabase must be associated with a voucher specimen lodged in the Herbarium, ensuring the photo is labelled accurately.

Flora Collector is an app developed specifically for this project which enables the collection and collation of information from volunteers in the field, including mapping of flora.

Fact sheets for 50 target species provide information about existing and potential locations, plant descriptions, habitat, other indicator species and key differences between similar common and priority species. Permission to search on private



Gastrolobium tenue, a low bushy shrub and Priority 1 species. *Photo: Eddy Wajon*

property is sought in areas where suitable habitat occurs.

Results

Public interest and participation in the project has been great. During the initial survey period of June – November 2017, 50 survey days were conducted by 76 individuals. Thirty six of those individuals participated in two or more surveys and 40 people came once. Well over half (64%) were from the agricultural regions, often people associated with Regional Herbaria in Newdegate, Ravensthorpe, Esperance, York, Wongan Hills, Jurien Bay and Merredin. A total of 175 volunteer days, valued at over \$36,000 (@ \$30/hr) were contributed to the project by the community.

Fifty-five people were trained in the use of the Flora Collector app — most people preferred to use it on their own Android or iOS devices, but some devices were available through the project for others. Developing the tools and the skills of participants means this new capacity to gather information about priority flora species will extend beyond the life of the project. Five DBCA flora conservation officers provided background information on the species, previous survey information and participated in the training and surveys. DBCA has committed to support coordination of these regional surveys into 2019.



Members of the Jurien Bay Regional Herbarium and others with *Calytrix ecalycata* subsp. *pubescens* east of Dandaragan. *Photo: Julia Cullity*



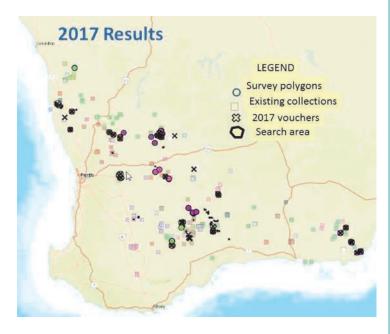
We searched for 38 species in 2017, and found 32 new populations of 11 species. Twelve new populations were found near Newdegate (four of *Drosera grievei*, three of *Banksia epimicta*, three of *Gastrolobium euryphyllum*, one of *Astroloma chloranthum* and one of *Roycea pycnophylloides*); and another six were found near Jurien (three of *Lyginia excelsa*, two of *Stylidium* sp. Banovich Rd and one of *Calytrix ecalycata* ssp. *pubescens*). Two new populations were located east of Esperance (both of *Eucalyptus luculenta*), and one each near Wongan Hills (*Guichenotia glandulosa*) and York (*Eremophila glabra* ssp. York).

The data can be viewed on NatureMap and will be incorporated into the DBCA Threatened and Priority Flora database.

All the data collected is being reviewed and recommendations made for further areas to survey or reclassification. Surveys can clarify the habitat preferences of a species, refining areas to target for further survey. When survey has established whether a Priority species is more common than was known, or is genuinely rare, recommendations will be made to reclassify the conservation status of that species.

Surveys ongoing — in your bushland?

Much of the survey in 2017 was carried out on reserves but we are also keen to survey private bushland. If you are in the Wheatbelt area, please contact Judith if you wish to know what Priority flora species may be in your area or if you would like to become involved. Judith can be reached at Judith.Harvey@dbca.wa.gov.au or 0409 290 610.



38 species surveyed, 114 populations seen, 32 new populations discovered, 161 search areas covered and 40 voucher specimens collected.

Judith Harvey is a vegetation researcher and is currently volunteer coordinator of the Rare Flora Search and Rescue Project.



Hemigenia sp. Newdegate, a spindly low shrub and Priority 1 species. It is in the Lamiaceae family, along with mint, basil, and rosemary, which share the characteristic two-lipped, open-mouthed tubular flowers. *Photo: Anne Rick*



Mapping Western Australia's biodiversity

NatureMap is a tool to view species occurrence data on an online map. It is possible to search by species (for example, where have numbats been found?) or by location (for example, what different species have been found near my property?). Threatened species will stop being displayed on the map when the zoom gets too close. Clicking on individual points gives you more information about each record, such as when it was seen and perhaps habitat notes.

Species lists can be generated for an area, giving you names to put into search engines to learn more about the native species that live in your area. You can also generate the list as a spreadsheet if you want to make notes about which species you have seen on your property.

Access it online at

naturemap.dpaw.wa.gov.au. Registration is not necessary to view information or download reports from that information; only to download spatial data.

Contact the editor if you would like tips for use.

