

Forest Protection Survey Program

Survey Guideline - Flora (V2)



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Photo credit

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1. Survey Guideline – Flora Survey

1.1 Context

Flora surveys are being conducted to find identifiable flora species that require protection on coupes. Many flora species listed in the Code of Practice for Timber Production 2014 (the Code) are very cryptic or most unlikely to occur on coupes. Accordingly, the target list has been refined by DELWP experts to around 75 target species.

Contractors are required to be cognizant of all flora species listed in the Code that potentially occur on or adjacent to coupes.

Habitat distribution models have been generated that predict the likelihood of each prescribed species being found in a coupe. Another source of species information is NatureKit. Load a shapefile of the coupes into NatureKit, or manually draw a polygon around each area of interest, check the species records that are found within that bounded area, and determine whether any of the species are on the prescribed list. VicForests may already have identified some species in the coupe: those occurrences will be listed on their operations plan spreadsheet.

1.2 Objectives

To detect threatened flora species that are able to be positively identified within, and adjacent to, identified coupes

1.3 Survey effort

For each prescribed species likely to be found in the coupe, check their preferred habitat (i.e., rocky outcrop, wet drainage line etc.). Some information is provided in the pre-harvest species datafile. Other sources of information include Flora of Victoria, Viridans database etc.

One to one and a half days per coupe depending on number of target species and size of coupe.

1.4 Staff requirements

Demonstrate extensive field flora survey experience (assessed during procurement stages of the project).

Ability to collect flora voucher specimens to herbarium standards

Ability to identify the threatened flora species listed in the SOP schedules

1.5 Equipment for the technique

- Camera for recording species of interest
- Field data sheets or electronic recording device
- Site maps and aerial photos, and a search plan for the coupe
- Information about nearby, alternative coupes
- 10x hands lens
- Secateurs
- Plant tags
- Small paper bags/envelopes/ Voucher specimen containers
- Plants presses
- Newspaper and cardboard corrugates
- Pens, pencils, permanent thick black marker pens

1.6 Site preparation

Using topographic maps, EVC maps and aerial photos, determine what parts of the coupe are most likely to contain the habitat for any prescribed species identified. These parts of the coupe will be the priority areas to search, and may include gullies, particular aspects, sharp breaks in slope, tops of embankments etc. Areas recently burnt may also be of interest, as there may have been prolific post-fire germination, especially of obligate reseeders.

1.7 Upon arrival at site

As per SOP and create a GPS waypoint for your parked vehicle before walking into the coupe.

1.8 Conducting the survey

Ensure all surveyors are familiar with the triggers within the Forestry Code of Practice e.g. is it a population or an individual that triggers a prescription?

Using the coupe map and GPS, navigate to the first pre-determined, priority area of interest. Keep a continual eye out for any species that stand out as looking different or are less common. If you are unsure what a plant is, take a waypoint and a sample, and identify it later. The rule of thumb here is, if you don't know what it is, it is uncommon.

At the area of interest, search around to find the species likely to be there, using your pre-determined knowledge of the habitat. The plants may be on steep banks, in wet depressions, on shaded tree trunks etc. As before, always keep an eye out for less common species or ones you don't recognise, as they might be on the prescribed list.

After all pre-determined areas of interest have been searched, do a general walk-through of the coupe to see whether any prescribed (or uncommon or unknown) species are detected.

Recording species found

If a species is confirmed (or suspected) to be a prescribed species, record a waypoint at the location of the specimen.

Make a note on the size of the population, size of individuals, degree of reproductive maturity, and the habitat in which found etc.

Take and number a plant sample for confirmation of identification.

Take a photo of the plant and its habitat and record the photo number.

Keep searching for that species (and any others of concern) and if found, record waypoints at around 50 m intervals. This will enable a picture of the distribution to be built up.

To map the extent of a species population, observers are required to record a series of GPS point locations that broadly capture the perimeter of the distribution of the population within and immediately adjacent (within 20-30m) of the edge of the gross coupe boundary.

Undertake a full quadrat search to capture the typical vegetation in which the prescribed species is found (see below: Additional plant data).

Additional plant data

When prescribed species are found, a full quadrat search of its typical habitat shall be undertaken as follows:

- Note waypoint of quadrat centre
- Estimate an area 20 m x 20 m around that point
- Record all vascular plant species rooted in or overhanging the quadrat
- Estimate the percent overlapping cover of each species (1%, 2%, then to nearest 5%)

Prescribed species will not be found in all coupes or may not be identifiable in the field. In that instance observers are required to survey one full species quadrat in an area of the coupe

- Representative of the predominant vegetation community on the coupe
- to capture a suite of unusual species,
- in locations where the presence of rare/threatened (non-prescribed) species has been detected
- if the coupe is relatively homogenous, a 'typical' part of the coupe.

Waypoints shall be taken for incidental rare or threatened flora species found, to help improve their habitat distribution modelling.

1.9 Data reporting requirements

Data requirements are outlined in the FLORA data sheet. FPSP data is to be reported in accordance with the procedures outlined in the SOP.

Check identification of all plant samples, especially those that are prescribed species, and curate the field data sheets accordingly.

Confirmed prescribed species must be reported to the FPSP team ASAP (immediately).