

# Forest Protection Survey Program

Survey Guideline - Coupe Habitat and Sign Survey  
(V2)



## **Acknowledgements**

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## **Photo credit**

Cover photo: Jim Reside Wildlife Unlimited 2018

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# Coupe Habitat and Sign Survey (CHASS)

## Context

CHASS results may be used as one of many inputs in prioritising further surveys. A CHASS may be the only survey that some coupes receive and not every coupe in the FPSP may be subject to further targeted surveys.

The targets of the CHASS are those species which have timber harvesting prescriptions listed under the Code of Forest Practice, especially where locating these species to meet the prescription trigger would result in changes in the way the area is managed. These species are listed in the SOP. The surveyor is required to be familiar with the target species, habitat values and threatened communities prior to conducting the CHASS survey. Surveyors are not required to record observations of species that do not have timber harvesting prescriptions e.g. wombat presence as indicated by scats.

CHASS results may be used for a follow up confirmation survey or to inform further survey effort, at the direction of DELWP e.g. Anabat or harp trap survey for potential boot roosts, or for relocation of features during coupe planning by VicForests.

## Objectives

To identify habitat and signs of flora and fauna that may trigger a management action (zoning or prescription) or indicate the need for a further targeted survey.

To conduct a visual survey of habitat values and flora and fauna signs on a coupe to identify features indicative of potential presence of threatened species and communities.

## Duration

For two field staff each CHASS will take a maximum of two days per coupe to complete, depending on access and on-site conditions. Most coupes will require less than one day to conduct this survey.

## Staff requirements

A field survey team will consist of no less than two people.

The team must have the ability to recognise and record the survey targets on the CHASS Data Sheet provided, including:

- identification of carnivore and herbivore scats, bones, feathers and/or other target species signs
- identification of suitable habitat for species with prescriptions
- determining the possible or probable presence of four Threatened Vegetation Communities (section 0) and
- determining the possible or probable presence of Leadbeater's Possum Zone 1A and 1B habitat (section 0).

## Equipment list (specific to this survey technique)

- |  |  |
|--|--|
| <input type="checkbox"/> Binoculars    | <input type="checkbox"/> Waterproof field data recording sheets (CHASS Data Sheet) |
| <input type="checkbox"/> Range finder  | <input type="checkbox"/> FPSP/CHASS field/photo guide                              |
| <input type="checkbox"/> Diameter tape | <input type="checkbox"/> Sample bags (for scats, plants, etc)                      |
| <input type="checkbox"/> GPS unit      |  |

## Conducting the survey

Fill out all required metadata information in the header of the CHASS Data Sheet prior to start.

The Contractor is responsible for ensuring the coupe is adequately surveyed for the target features listed. Survey may be conducted up to 100 m outside of the survey area or coupe for the target features listed.

Take photos to provide evidence of observations, and to aid in cataloguing and later identification of survey targets unable to be identified in the field. Collect GPS waypoints to accompany any photographs or points of evidence.

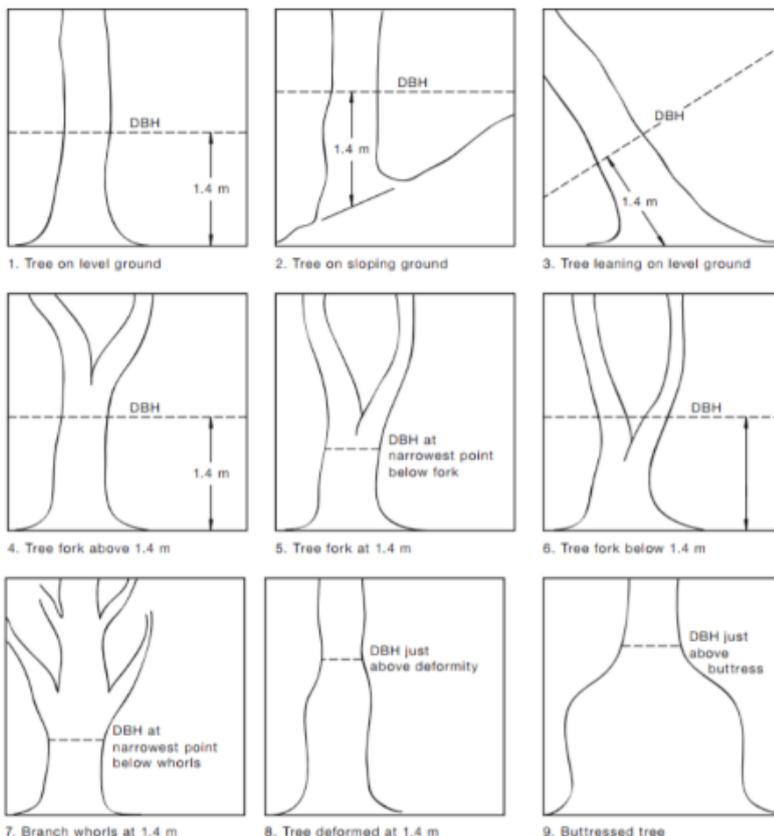
Using your knowledge of the prescription triggers for the survey targets, collect enough notes and photos to enable a determination of whether a prescription applies. For example, an active forest owl roost will require photos that are evidence of suitable habitat and repeated use or activity at the site. This may include different-aged observations of whitewash, pellets and prey items, habitat components such as roost trees and understorey, the position in the landscape etc. Enough evidence should be provided so the site can be re-visited if required.

Samples of signs (e.g. scats, pellets, eucalypt fruit) can be removed from the field for later identification if identification in the field or by a photo is not possible or further analysis is required e.g. prey items within an owl pellet. However, analysis and identification of such signs is up to the contractor. Samples will not be sent to DELWP for identification.

Use the comments column to record any further information that may assist in relocating the observation in the future.

Upon completion of the survey fill in any remaining blank fields in the data sheet.

## DBH Protocol



NOTE: For example 6, the combined stem DBH may be calculated using the formula:

$$\text{Total DBH} = \sqrt{(\text{DBH}_1)^2 + (\text{DBH}_2)^2 + (\text{DBH}_3)^2}$$

If completing the survey just for that day (i.e. the survey itself is incomplete) then after filling in the remaining header fields also write "SURVEY NOT COMPLETE" as the last entry on a new line in the Comments field.

If returning to complete the CHASS on another day, then please use a new data record for each day.

Surveyors are required to record any instances of possible safety issues within the survey area to assist other surveyors who might return to the coupe.

### Observations of trees where DBHOB > 2.5 m

Measurements of tree stem diameter will be conducted as diameter at breast height over bark (DBHOB; 1.4m above ground), and according to the Australian Standards (below). Trees with a DBHOB > 2.5 m are to be recorded in the data sheet.

Contractors are required to take a photo of the tape measure on the tree trunk indicating the

measurement of the DBHOB, and to provide a GPS waypoint for the location.

### Observations of hollow bearing trees

If hollow bearing trees (HBTs) are present on >10 hectares of the coupe (equivalent to an area of 1000 m x 100 m) and hollows are assessed to be in sufficient quantity to be highly likely to support populations of HBT-dependent fauna, make a note of this on the CHASS data sheet as these locations may be candidates for spotlighting surveys. Then record the percentage visibility to the canopy, through sub-canopy and shrub layers, for the purpose of spotlighting visibility (see datasheet for definitions). This will assist with planning future spotlighting at the site, as well as transect placement. Recommended locations for future spotlighting transects may be recorded as the proposed start and/or end point grid references. Location can be recorded as the centre of the coupe if the whole coupe is covered in hollow-bearing trees.

Hollow bearing trees 0%	<10 hectares of hollow bearing trees present
Hollow bearing trees 25%	>10 hectares of hollow bearing trees present and visibility is restricted to < 25% of the canopy when looking up through the sub canopy and shrub layer
Hollow bearing trees 50%	>10 hectares of hollow bearing trees present and visibility is 26-50% of the canopy when looking up through the sub canopy and shrub layer
Hollow bearing trees 75%	>10 hectares of hollow bearing trees present and visibility is 51-75% of the canopy when looking up through the sub canopy and shrub layer
Hollow bearing trees 100%	>10 hectares of hollow bearing trees present and visibility is > 76% of the canopy when looking up through the sub canopy and shrub layer

## Threatened Vegetation Communities

### Vegetation Community Observations

Surveyors are required to record any instances within or adjacent to coupes where the presence of the following threatened vegetation communities are observed in the field. Observations are to include waypoints at 25 m intervals of the perimeter of the vegetation community where it is on-coupe or up to 25 m off-coupe, and detailed photos of key identifying features of the vegetation community.

#### Box Ironbark

Selective harvesting is excluded from Box Ironbark forest in the East Gippsland and Gippsland FMAs. These forests are characterised by a canopy of box, ironbark and gum-barked eucalypts, growing to 25 m in height, over a sparse understorey of wattles, small-leaved and prostrate shrubs, herbs and grasses (EVC 61). The main tree species are Forest Red Gum (*Eucalyptus tereticornis*), Yellow Box (*E. melliodora*), Coast Grey Box (*E. bosistoana*), Red Ironbark (*E. tricarpa*), Red Box (*E. polyanthemus*), Blue Box (*E. baueriana*) and Yellow Stringybark (*E. muelleriana*). This vegetation community occurs on gently undulating rises, low hills and peneplains on infertile, often stony soils derived from a range of geologies.

#### Heathland

Selective harvesting is excluded from Heathlands in East Gippsland and Gippsland FMAs and road construction is to be avoided. Heathlands are characterised by a dense layer of small-leaved shrubs, usually 1-2 m tall, over a ground layer of sedges, coarse lilies, rope-rushes, prostrate shrubs and herbs. In most places there are occasional small, short-trunked, spreading trees, to 15 m tall, which may form a sparse canopy on deeper soils. Three Ecological Vegetation Classes (EVC) are listed in the Management

Standards and Procedures: Wet Heathland (EVC 8), Clay Heathland (EVC 7) and Riparian Scrub Mosaic (EVC 191).

### **Montane Riparian Thicket**

Montane Riparian Thicket is protected in all FMAs. These stands contain at least 40 % canopy cover of Mountain Tea-tree (*Leptospermum grandifolium*). Key understorey species include Mountain Pepper (*Tasmannia lanceolata*) and a range of sedges, rushes and ferns. It typically occurs in montane and subalpine areas, often within Montane Damp Forest along drainage lines, streams with gentle gradients and in-soaks at the heads of gullies on south-facing aspects (EVC 41). While most areas of Montane Riparian Thicket will already be protected within SPZs or Code exclusions, mapping of the extent of any patches of this vegetation type that are contained within the gross area of coupes will be required to check this assumption and identify any additional areas requiring protection.

### **Rainforest Canopy Species**

Warm Temperate Rainforest (EVC 32) and Cool Temperate Rainforest (EVC 31) are protected from timber harvesting in eastern Victoria. There are extensive, existing processes for identifying and delineating rainforest patches, and these will continue to be used, rather than forming part of the forest protection survey program. Rainforest will also be addressed under a separate DELWP project focused on RFA reform.

### **Leadbeater's Possum Habitat**

If conducting CHASS in the Central Highlands FMA, surveyors are required to record any instances within or adjacent to coupes where the presence of potential Leadbeater's Possum habitat is observed in the field. Observations are to include waypoints of the perimeter of the identified habitat where it is on-coupe or up to 25 m off-coupe, and some photos of key identifying features of the habitat. Observers are not required to map the habitat as mapping extent will be conducted by remote sensing analysis and further targeted field surveys.

#### **Zone 1A Habitat**

Where there are more than 10 live mature or senescent hollow-bearing trees per 3 ha in patches greater than 3 ha, and each tree is within 100 m of one of the other trees.

In Zone 1A habitat hollow-bearing trees are defined as live mature or senescent trees of Mountain Ash (*E. regnans*), Alpine Ash (*E. delegatensis*) or Shining Gum (*E. nitens*) containing hollows. During salvage harvesting after fire Zone 1A habitat is assessed as if all the trees were live.

#### **Zone 1B Habitat**

Where there are more than 12 hollow-bearing trees per 3 ha in patches greater than 10 ha and wattle density exceeds 5 m<sup>2</sup>/ ha.

In Zone 1B habitat hollow-bearing trees are dead, mature or senescent living trees of Mountain Ash, Alpine Ash or Shining Gum containing hollows. This prescription applies until either of the Zone 1B attributes (the presence of dead, mature or senescent living trees containing hollows, or wattle understorey) no longer exist.

For more detailed instructions on identifying Leadbeater's Possum habitat in field surveys see pages 15 and 16 and Appendices 5 to 8 in: DELWP (2015) Threatened Species Survey Standard: Leadbeater's Possum. April 2015. Victorian Government. The document is available at:

[https://www.forestsandreserves.vic.gov.au/\\_data/assets/pdf\\_file/0026/29276/Survey-standard-for-Leadbeaters-possum-revised-April-2015.pdf](https://www.forestsandreserves.vic.gov.au/_data/assets/pdf_file/0026/29276/Survey-standard-for-Leadbeaters-possum-revised-April-2015.pdf)

### **Glossy Black Cockatoo Habitat**

If conducting CHASS in the East Gippsland FMA, surveyors are required to record any instances within or adjacent to coupes where the presence of potential Glossy Black Cockatoo habitat is observed in the field. Observations are to include waypoints at 25 m intervals of the perimeter of the identified habitat where it is on-coupe or up to 25 m off-coupe, and some photos of key identifying features of the habitat.

Cones of the Black She-oak (*Allocasuarina littoralis*) are the main food source of the Glossy Black Cockatoo in Victoria. Forest stands containing Black She-oak are therefore potential foraging habitat for this species,

with the cockatoos preferring mature, sparsely distributed trees 2–10 m tall. Remnants of chewed cones and debris on the forest floor beneath these trees are an indication that cockatoos have been present. Glossy Black Cockatoos are generally considered to breed between March and August. They nest in large, old hollow-bearing trees and are known to use vertical or near-vertical spouts in senescent or dead trees. Nest sites are commonly clustered or grouped in the landscape.

### **Data reporting**

Data requirements are outlined in the CHASS data sheet. Complete all required fields on the data sheet for each target observation.

Further data that may be recorded if encountered includes:

- Examples of historic or cultural heritage
- Evidence of illegal activity