

## Suggested methods for assessing groundcover

### What is groundcover?

The *Native Vegetation Act 2003* (NV Act) defines groundcover as “any type of herbaceous vegetation”. Herbaceous plants are those that are fleshy, including grasses, forbs, herbs and similar low-growing, non-woody plants.

### Why is groundcover important?

All native groundcover has biodiversity and environmental value and all groundcover, whether native or not, plays a major role in limiting soil erosion, improving water penetration into soils and adding organic matter that improves moisture holding capacity and plant growth.

High quality areas of native groundcover such as undisturbed native grasslands are becoming very rare and have significant biodiversity value.

For these reasons approval is generally required under the NV Act to clear groundcover that comprises greater than 50% of native species (plants that existed in NSW before European settlement).

### Do I need approval to clear native groundcover?

NV Act approval will be required unless the proposed clearing is permitted or excluded under the NV Act.

One type of permitted clearing is the ability to clear native vegetation comprising only groundcover in certain circumstances. This Info Sheet outlines

the conditions required for this type of clearing and suggests some methodologies for doing the necessary calculations.

For details of other relevant permitted and excluded clearing, see Info Sheet 6: What clearing does not require approval?

### Do I need separate threatened species approval to clear native vegetation consisting only of groundcover?

Approval under the *Threatened Species Conservation Act 1995* may be required to clear native vegetation consisting only of groundcover.

### Clearing of native vegetation consisting only of groundcover

Native groundcover can be cleared without approval in the following circumstances:

1. Live native vegetation cover must comprise less than 50% of total live cover, and
2. 10% or more of the area must be covered with either native or exotic vegetation, whether dead or alive (this is to account for situations like drought), and
3. These percentages must be calculated in a scientific and objective manner that is appropriate to the land and species of vegetation present (see possible sampling methods on next page), and
4. Calculations must be made in a season when the proportion of native vegetation compared to

non-native vegetation in the area is likely to be at its maximum (your local CMA can provide advice on this), and

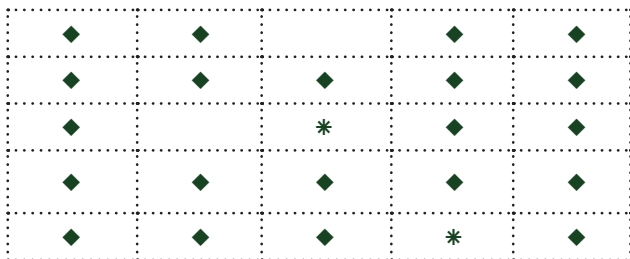
5. The following records must be kept for at least 5 years from the date of clearing:
  - > a map of the area assessed including locational information and the transect(s) used, and
  - > a record of the season in which the assessment was made including both the time of year and the type of season (wet, drought etc), and
  - > a statement of how the assessment was undertaken (four suggested methods are explained below), and
  - > photographs taken at the time of assessment which clearly show typical groundcover in the mapped area.

### Examples of groundcover percentage calculations

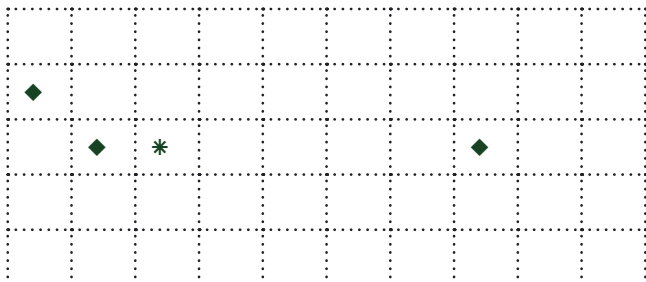
Key:

- \* native groundcover
- ◆ non-native groundcover

**Example 1:** Clearing does not need approval as less than 50% of the groundcover is native vegetation and more than 10% of the total area is covered with vegetation whether dead or alive.



**Example 2:** Although less than 50% of the groundcover is native, clearing requires approval as less than 10% of the total area is covered with vegetation whether dead or alive.



### Suggested assessment methods for clearing groundcover alone

Landholders proposing to clear groundcover alone may use any method of assessment, so long as it is scientific and objective and the conditions prescribed are met. The four methods detailed below are examples only.

For any method used it is necessary to divide the area to be cleared into areas of similar groundcover appearance based on land use history, soils and vegetation type. In many cases this will simply mean that each paddock is assessed separately.

#### Assessment Method 1: Quadrat Method

This method uses a wooden or metal square (quadrat) of at least 0.5 square metre area (approx 71cm x 71cm) internal dimensions. The method is as follows:

- a) walk at random within each area to be assessed and throw the quadrat a short distance
- b) for each throw look only at the area within the quadrat and assess and record the following:
  - A = the percentage of total vegetation cover (living or dead) and
  - B = the percentage cover of live native plants
  - C = the percentage cover of live non-native plants
- c) take at least 10 random samples per hectare up to a maximum of 200 samples for each assessment area
- d) calculate the percentage of the assessment area covered by vegetation (living or dead)

$$\frac{\text{Sum of A} \times 100}{\text{Number of samples}}$$

- e) calculate the percentage of the living vegetation that is live native groundcover by:

$$\frac{\text{Sum of B} \times 100}{\text{Sum of B} + \text{Sum of C}}$$

## Assessment Method 2: Pointed Stick Method

This method is adapted from that used in the Prograze© program for assessing the botanical composition of pastures. The method is as follows:

- a) walk at random within each assessment area and throw a 30 cm long stick with one pointed end a short distance
- b) for the ground at the pointed end of the stick record:  
D = presence of any vegetation (living or dead)  
E = presence of living native groundcover vegetation  
F = presence of living non-native groundcover vegetation
- c) take 50 samples per hectare up to a maximum of 500 samples for each assessment area
- d) calculate the percentage of the assessment area covered by vegetation (living or dead) by:

$$\frac{\text{Sum of D} \times 100}{\text{Number of samples}}$$

- e) calculate the percentage of the live vegetation that is living native groundcover by:

$$\frac{\text{Sum of E} \times 100}{\text{Sum of E} + \text{Sum of F}}$$

## Assessment Method 3: Step Point Method

- a) before arriving at the site mark on a map a random straight-line transect for each assessment area. (This is to avoid subconsciously choosing a better or poorer part of the paddock)
- b) make a 1mm wide mark on the toe of each boot
- c) walk across the paddock following the transect and at each step record:  
D = presence of any vegetation (living or dead)  
E = presence of living native groundcover vegetation  
F = presence of living non-native groundcover vegetation
- d) take 50 samples (steps) per hectare up to a maximum of 500 samples per assessment area
- e) for each assessment area, the relevant figures are calculated as per the Pointed Stick Method above

## Assessment Method 4: Wire Point Method

- a) as for the Step Point Method, map a random straight-line transect for each assessment area
- b) walk across the paddock following the transect and at each step hold a straight 1 metre length of fencing wire vertically to the ground from the outstretched hand and, without looking, drop it to the ground
- c) at that point record:  
D = presence of any vegetation (living or dead)  
E = presence of living native groundcover vegetation  
F = presence of living non-native groundcover vegetation
- d) take 50 samples per hectare up to a maximum of 500 samples per assessment area
- e) for each assessment area, the relevant figures are calculated as per the Pointed Stick Method above



New South Wales  
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# Native vegetation management in NSW

Native Vegetation Act 2003

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## For more information:

Contact your local CMA, or you may also:

**Visit:** [www.nativevegetation.nsw.gov.au](http://www.nativevegetation.nsw.gov.au) **Email:** [info@nativevegetation.nsw.gov.au](mailto:info@nativevegetation.nsw.gov.au) **Frecall:** 1800 237 012

*Note: This information does not constitute legal advice. Please seek specific advice from your local CMA before undertaking any clearing.*