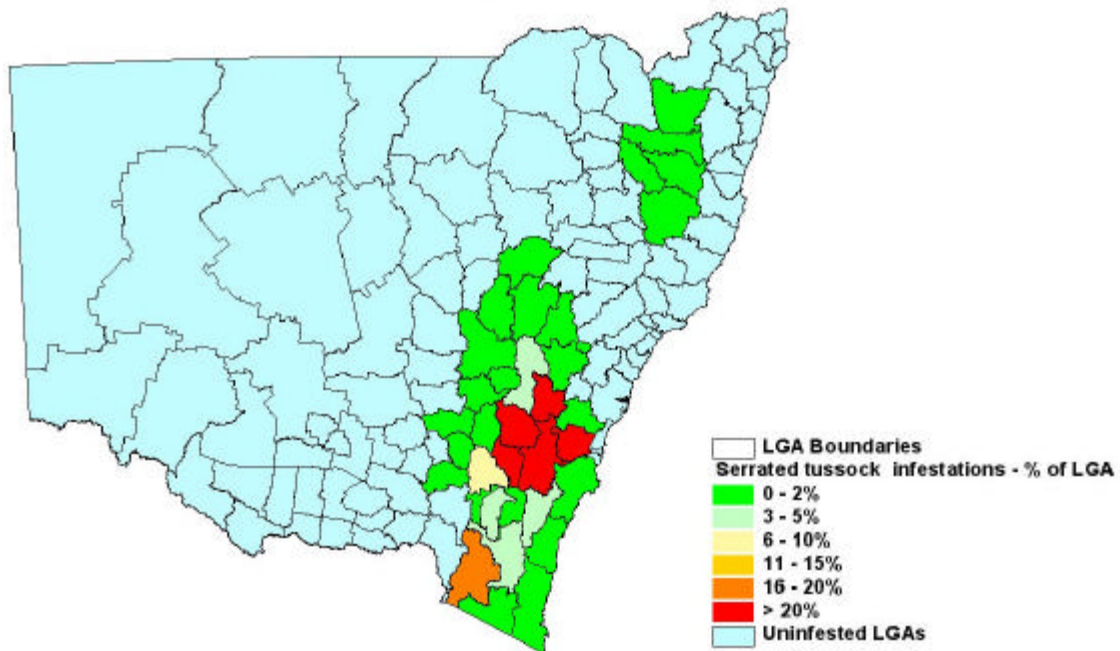


WEED RECORDING STANDARDS

Serrated tussock infestations, 1994
as a percentage of LGA



IN NEW SOUTH WALES



NSW Agriculture

The Fight Against Weeds in New South Wales

Information is one of the most valuable weapons available in the fight against weeds in New South Wales. To increase the quality of this information, local control authorities are required to report to NSW Agriculture on the current situation of noxious weeds within their area. This requirement, and the availability of new technology in weed mapping, has prompted many local weed control authorities to acquire desktop mapping software and GIS systems as a management tool for weed control.

While the benefits of these systems are undeniable, the information derived from them is only as good as the data entered. Accurate and consistent recording of field data is, therefore, the first step in any mapping program. Local authorities are urged to adopt a weed recording program before considering any mapping system.

Selection of weed recording software should take into account the needs of the local authority and the ability of the software to record, store and process data. To assist local authorities in the reporting process, NSW Agriculture has developed a minimum standard for recording noxious weeds. These standards should also be taken into account when selecting weed-recording software.

NSW Agriculture's Weed Recording Standards

The weed recording standards used by the Department and which are advised for local control authorities are summarised below.

The first five items in the recording system are regarded as essential and all fields must be completed for all weeds.

1. **Weed Name:** This should be set in four fields:
 - i. Genus
 - ii. Species
 - iii. Variety or Subspecies
 - iv. Accepted common name as per declaration.
2. **Location of Infestation:** This is the geographical location based on latitude and longitude. These are in decimal degrees only with all readings to be taken from the centre of the infestation. For local authorities which record locations in other formats such as Australian Map Grid (AMG), degrees, minutes, seconds a conversion program, GENCOORD, can be downloaded free from the Internet at <http://www.eosgis.com/enter.html>
 - i. Decimal degrees South (latitude)
 - ii. Decimal degrees East (longitude)
3. **Date discovered:** The date the infestation was discovered or the date of re-inspection (Essential)
4. **Size of infestation:** To be recorded in hectares. Note: $1\text{m}^2 = 0.0001 \text{ ha}$. (Essential)
5. **Total area infested in local control authority:** This figure should be derived from all infestation reports.
6. **Total number of properties infested in local control authority:** This figure should be derived from all property inspection reports.
7. **Degree of infestation:** Recorded as a degree of infestation in no more than five classes — class 1 being the lowest level of infestation; class 5 the highest. (Desirable)
8. **Weed status:** This should be set in two fields. (Desirable)
 - i. **Stage of development of plant:** To be recorded as either: seedling, juvenile, non-flowering, fruiting, flowering, seeded or any combination of the above.
 - ii. **History of infestation:** If infestation has been recorded previously, then the initial infestation identification is to be used in this field.
9. **Land use:** An interim standard, AS/NZS 4584-1999, currently in draft form with Standards Australia, is being developed for classification of land use within Australia and New Zealand. This standard will be released shortly.
10. **Land tenure:** Examples of tenure: Federal, State or Local Government, RLPB, Forestry, Private. (Desirable).

- 11. Source of infestation: Example of sources:** Header, Grain, Stock, Unknown, Other (please list).
- 12. Number of plants in infestation:** If weed is declared W1, then all plants should be counted where possible. (Desirable)

Local Authorities Weed Recording Standards

A more detailed set of weed recording standards was developed by participants at a workshop held in April 1998. The workshop included staff from NSW Agriculture, the National Parks and Wildlife Service and noxious weeds inspectors and general managers from various local authorities throughout New South Wales. While recognising that the needs of local authorities may differ greatly, the following weed-recording standards were considered to be the most suitable for the majority of local authorities.

The workshop resolved that any weed recording software selected by local authorities should be flexible enough to record, store and process all, or as much as possible, of the following.

Property Records

- i. Name of occupier
- ii. Name and address of owner
- iii. Property details — name, assessment number, lot DP, road, area (size), parish etc.

Weed Records

- i. Weed names — common and botanical
- ii. Size of infestation — hectares for common weeds; number of plants for W1 weeds
- iii. Degree of infestation — a scale ranging from 1 (not present) to 5 (heavy infestation)
- iv. Location
- v. Land use
- vi. Weed growth stage and history of infestations on the site (for W1 weeds)
- vii. Source of infestation (for W1 weeds)

Inspection Details

- i. Inspection date and time
- ii. Inspection number
- iii. Name of inspector
- iv. Inspection with or without occupier
- v. Full or part inspection
- vi. Initial or re-inspection
- vii. Telephone calls
- viii. Re-inspection date
- ix. Inspectors comments

Property Weed Control Records

- i. Weeds controlled
- ii. Method — herbicide, mechanical, cultural or biological
- iii. Herbicide used, rate, adjuvant, application method and water source
- iv. Success or effectiveness

Regulatory History

- i. Previous inspections — to be linked through inspection numbers
- ii. Weed control notices served
- iii. Penalty notices issued
- iv. Prosecutions and results

Local Control Authority Land Weed Control Records

- i. Weeds controlled
- ii. Date
- iii. Location
- iv. Type of herbicide used
- v. Volume of herbicide used

Reporting (for each weed)

- i. Total area infested within local control authority
- ii. Percentage of properties with a given weed in local control authority
- iii. Number of properties per size of infestation. For instance; number of properties with < 1Ha, 1Ha, 5Ha, 10Ha... of a given weed
- iv. Number and percentage of properties inspected
- v. Re-inspection schedules

The following is a list of forms, reports and system requirements which the workshop participants regarded as desirable for weed recording software to be capable of generating.

Standard Recording Forms

- Letter of notification of entry for inspections.
- Property inspection report – must comply with NSW Agriculture requirements.
- Nil infestation letter.
- Section 18 notice and accompanying letter with re-inspection and expiry date.
- Property re-inspection report.
- Section 20 notice and accompanying letter.
- Letters for (S.E.I.N.S) and/or prosecution.
- Notice/work record spraying form.
- Section 43 record of entry (for section 20).
- Account for section 20 work – to be tailored for individual councils.
- Private works form – to be tailored for individual councils.
- W1 weed form – must comply with NSW Agriculture requirements (see appendix 1).

Reports

- Property report
- Inspectors periodic reports – from / to date format
- Weed infestation – from / to date format, must comply with NSW Agriculture requirements
- Re-inspection program (scheduler / diary)

System requirements

- Ability to link to a GIS system
- Ability to link to a variety of external programs and networks
- Ability to store GPS data in decimal degrees
- Re-inspection scheduling

Contacts for systems already in use

Weedmap/MapInfo	Holbrook Shire
CivicView	Kempsey Shire
Weedmap	Upper Macquarie CC

A sample database — which may be used to meet NSW Agriculture's minimum standards — is described below:

Infestation ID (up to 50 characters in length)

Description: Essential: A unique identifier to be used. No duplicates allowed.

Required: Yes — a record is required

Infestation History (five characters)

Description: Essential if infestation has been recorded previously. Use the initial infestation ID in this field.

Required: Yes

Genus (50 characters)

Description: Essential: Plant genus. (For instance, *Chrysanthemoides*)

Required: Yes

Species (50 characters)

Description: Essential: Plant species. (For instance, *monilifera*)

Required: Yes

Spp or Var (50 characters)

Description: Essential: Plant sub species or variety. (For instance, ssp. *Rotundata*)

Required: No — a record is not required

Local Common Name (50 characters)

Description: Desirable: Accepted common name for the area. (For instance, Bitou bush)

Required: Yes

Date Discovered (eight characters)

Date format: DD/MM/YYYY

Description: Essential: Date infestation discovered

Required: Yes

Size of Infestation

Decimal Places:

Number (Long)

4

Default Value:

0.0001

Description:

Essential: Area to be recorded in hectares. 0.0001ha = 1sq metre

Required:

Yes

Number of plants

Description:

Number (Integer)

Essential: W1 weeds. Desirable: for all other weeds

Required:

No

Degree of Infestation (50 characters)

Description: Desirable: Degree of infestation from sparse to complete cover. No more than five classes to be used.

Required: Yes

Development stage of Plant (50 characters)

Description: Essential: W1 weeds. Desirable: for all other weeds

Required: Yes

Source of Infestation (50 characters)

Description: Desirable: Mainly for new infestations. (For instance, header, seed or feed.)

Required: Yes

Identification/Verification (50 characters)

Description: Essential: All new weed outbreaks. Desirable: For other weeds. (For instance, National Herbarium of NSW)

Required: No

Identification/ Verification ID (20 characters)

Description: Essential: All new weed outbreaks. Desirable: for all other weeds. (For instance, Herbarium voucher number)

Required: No

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