

## Weeds – a threat to drought recovery

### Weeds Unit

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#### Introduction

Drought provides the ideal opportunity for weeds to demonstrate their competitive ability. It is important to maintain vigilance so that weeds do not become a serious threat to the drought recovery on your farm.

Weeds are a major form of land degradation, and pose a high cost to the community in both environmental damage and lost production in the farming and grazing industries.

#### Likelihood of weeds

The situation in cropping areas and pastoral areas will vary. In **cropping areas** the immediate problem is fallow weeds, which quickly rob the soil of both valuable nutrients and moisture. Fallow weeds can be controlled by a combination of cultivation and herbicide spraying (see Primefact 367 *Soil management following drought*). The weed species likely to cause most concern are:

- common heliotrope (*Heliotropium europaeum*)
- summer burrs – bathurst and noogoora burrs (*Xanthium* spp.)
- caltrops (*Tribulus terrestris*)
- *Amaranthus* spp.
- thistles
- panic grasses (*Panicum* spp.)
- mintweed (*Salvia reflexa*)
- Johnson grass (*Sorghum halepense*)
- wireweed (*Polygonum aviculare*).

In **pastoral and tableland areas**, noxious weeds that make remarkable recovery and spread include:

- serrated tussock
- blackberry
- blue heliotrope (*Heliotropium amplexicaule*)
- nodding thistle (*Carduus nutans*)
- Scotch thistle (*Onopordum* spp.)

- St John's wort (*Hypericum perforatum*).

They provide an additional financial burden in both lost production and cost of control after a long period of low farm productivity.

#### General problems

Summer burrs (both bathurst and noogoora burrs) pose immense problems, as does the potential spread of the perennial weed silverleaf nightshade (*Solanum elaeagnifolium*), which is a serious long-term threat to farming and pastoral areas.

#### Weeds from introduced fodder and grain

Weeds currently present in the State as well as new introductions are highly likely to appear as a consequence of feeding drought fodder and grain.

Major weeds of concern in NSW that originate in other States are parthenium weed from Queensland, and bifora (*Bifora testiculata*) and bedstraw/cleavers (*Galium tricornutum*) from South Australia – these latter two weeds are widespread in the South Australian wheat belt. If purchased grain has originated from these areas, it is important to check for any occurrences of the weed, especially in areas where stock have been fed.

Other highly likely weed contaminants of both grain and fodder are silverleaf nightshade, wild radish (*Raphanus raphanistrum*) and spiny emex (*Emex australis*). These species are currently major weeds in the State, but will be further spread as a consequence of drought feeding.

Imported grain from overseas sources provides a huge potential for introducing new/exotic weeds, such as kochia (*Kochia scoparia*) from the United States.

The procedures for feeding introduced fodder and grain are well publicised (see Primefact 372 *Weed strategies following drought, fire and flood*), and producers are encouraged to adopt a rational program that will minimise the possible spread of weeds from contaminated fodder and grain.



## Poisonous plants

Following summer rains there can be an increase in livestock weed poisoning. Stock losses are attributed to both direct plant poisoning and photosensitisation:

- *Panic* spp. cause photosensitisation, mainly in sheep;
- *Amaranthus* spp. cause kidney failure in sheep and cattle;
- thistles cause nitrate poisoning in sheep and cattle.

With an increase in the presence of useful grazing species, the poisoning situation will hopefully only be short-lived.

See also Primefact 362 *Animal health following drought* and Primefact 364 *Grazing management following drought*.

## Plant identification

Early identification and control are the first and most important steps in weed control and eradication. District extension officers can provide identification and technical information on new weed species, such as bifora and bedstraw/cleavers.

## Herbicide resistance

Fodder and grain contamination with herbicide-resistant weed seeds, mainly annual ryegrass, is the quickest means of introducing herbicide-resistant weeds onto farms where perhaps herbicides have never been used. Good farm hygiene and the rational feeding of introduced fodder and grains are the best avoidance procedures.

Herbicide resistance is widespread in the grain belts of South Australia and Western Australia – large quantities of grain are often obtained from these areas when there are drought conditions in NSW. The manner of drought feeding, particularly of grain, will determine the spread of herbicide-resistant weeds on individual farms.

## Control strategies

Control strategies in both cropping and pastoral situations are generally adequate. Pesticide orders are in place to control such weeds as blue heliotrope. The most important aspect of control of newly introduced weeds is early identification, detection, and immediate control.

Drought conditions will often result in a serious setback for a producer's long-term strategy and program for controlling pastoral and cropping weeds. An accurate assessment of the situation and a well-planned long-term strategy form the basis of an effective weed control program.

## Further information

- Further information is available on weeds management at [www.dpi.nsw.gov.au/reader/weeds](http://www.dpi.nsw.gov.au/reader/weeds)
- See other Primefacts on Drought recovery at [www.dpi.nsw.gov.au/reader/drought](http://www.dpi.nsw.gov.au/reader/drought)

## Further assistance

Further assistance is available from NSW Department of Primary Industries Agronomists and the National Parks & Wildlife Service.

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