



Too much feed: Options to manage



SFS

Southern Farming Systems

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What are our options

Increase utilisation of feed

- Increase stock numbers (purchase / agist)
- Increase condition score of existing animals
- Conserve silage or hay in spring, but these paddocks still need to be grazed or will be a mess of weeds in spring

Reduce pasture growth

- Weed control
- Resow pastures

Prioritise paddocks for grazing

- Do not lose control of all paddocks

What to consider when controlling weeds

1. What problem is the weed causing?
2. Are there desirable species to fill the gaps?
3. What is the most appropriate technique to use?
 - Herbicides: Spray-grazing, Winter-cleaning, Spray-topping, Selective herbicides
 - Non herbicide: Hay/Silage, Mulching, Grazing, Fertility
4. Direct and indirect cost of the treatment.
5. Actions to make it long lasting.

1. What problem is the weed causing?

- Poor production or feed value
- Displace or compromise growth of better species
- Shorten the growing season
- Expose soil over summer
- Cause animal health or carcass damage (seedheads)

Table 1. Feed quality of common weeds compared to perennial grass and sub-clover at the same vegetative growth stage during winter.³

Species	Digestibility (%)	Metabolisable energy (MJ ME/kg DM)	Crude protein (%)
Perennial ryegrass	80	12	23
Sub-clover	79	12	29
Capeweed	83	13	24
Dock	84	13	31
Barley grass	79	12	14
Winter grass	79	12	17
Erodium	78	12	26
Fog grass	77	12	24
Silver grass	65	10	12

Consideration:

2. Are there enough desirable species to fill the gaps?

Use PP tool to
check perennial
grass numbers

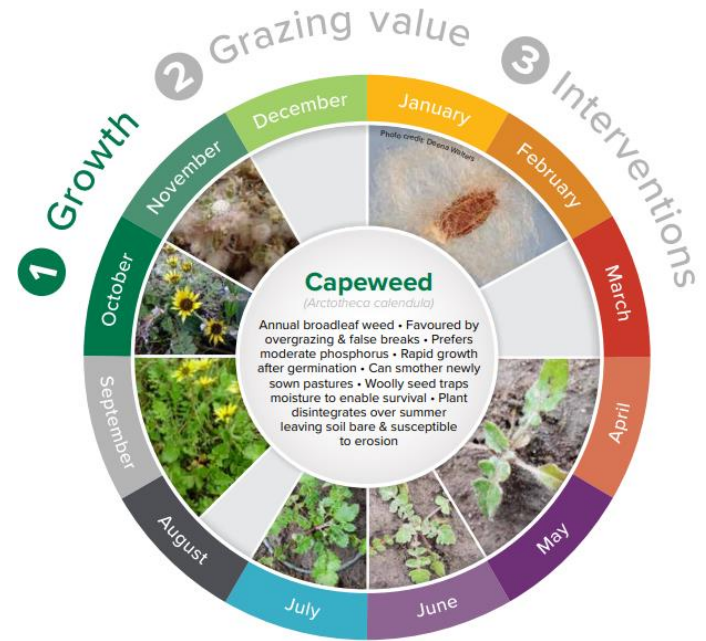
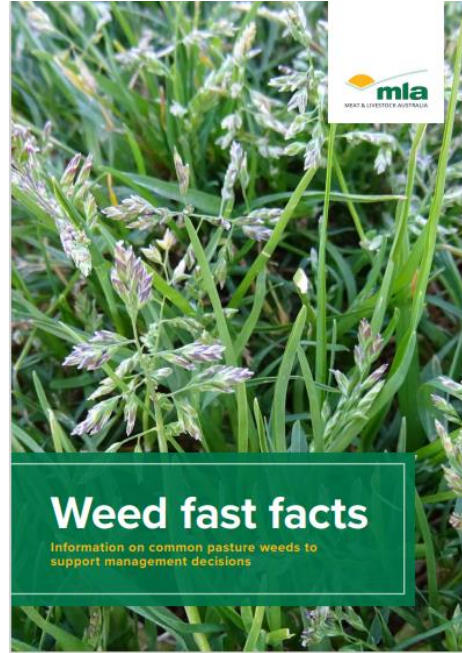


3. What is the most appropriate technique to use?

Use Weed Fast Facts to identify suitable techniques.



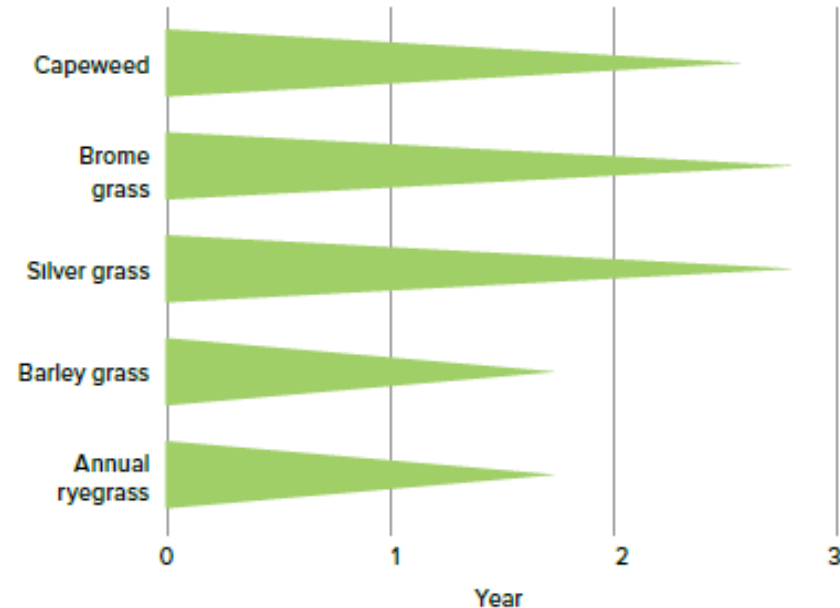
Weed Fast Facts



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Opportunity to remove annual plants with short seed dormancy

Figure 1. Longevity of seeds of annual grasses affected by spray-topping. Longer cones indicate greater seed dormancy before germination.



4. Cost of treatment?



Before & 10 days after winter cleaning to remove silver grass

How do I know if herbicide application will improve my pasture?

The issue: Weeds can reduce pasture productivity, but controlling weeds with herbicide does not always provide all the answers and requires careful management to realise the benefits.

The impact: Improvement in desirable grasses and clovers enables a pasture to reach its productive potential and extend its persistence.

The opportunity: Weed control can be a low-cost, high-return tactic to improve the productivity and life of a pasture, but only under the right conditions.

Taking control

Herbicides can be a useful tool to alter the composition of a pasture, either through direct action or when combined with grazing management. Selectively removing or suppressing unwanted plants results in less competition for desirable species, providing an opportunity for those species to increase in size and occupy vacant spaces. Good weed management can deliver significant gains in the quantity and quality of pastures.

However, the effect can be short-lived if the underlying reasons for the presence of the weed are not understood and addressed, or if there are insufficient desirable species to take advantage of the reduced competition (see increasing competition the key on the next page).



Indirect - Loss of production

Table 5. Indicative loss of pasture production through common herbicide techniques.

Treatment	Production loss
Spray-grazing	10–40% for eight weeks
Winter cleaning	Up to 50% for eight weeks
Spray-topping	20% for four weeks

5. Actions to make it long lasting

- Focusing on addressing the cause of the weed and strengthening the sown pasture species.
 - addressing fertility,
 - improving pH
- Apply at least two years of actions for control of plants with short seed life, rather than one off treatments.
 - E.g. spraytopping in first year, silage in second year

Spray-Grazing

Aim is to remove the target weed in two weeks

“Can this be achieved?”

- 5-7 times the stocking rate in big paddocks
- In small paddocks, easier to graze out.
- Not late pregnant or animals in light condition
- Can you box mobs or herds together?

Easier to achieve if starting with less feed on offer, smaller weeds



Grazed down to:

Cattle – 4 cm height, sheep 2 cm

How do I ...
use selective herbicides to safely remove
common weeds from sown mixed pastures?



The issue: Weeds can invade sown clover/grass pastures, competing for moisture and nutrients over time. Selective herbicides provide additional weed control options to the most common control techniques of spray grazing, winter cleaning and spray-topping. However, with many herbicides on the market, knowing which herbicides are safe on weeds but safe on desirable species can be confusing.

The impact: Weeds reduce the productivity of the desirable species and while some selective herbicides can kill them, others may cause unacceptable damage, reduce available feed and open the pasture up to further weed invasion.

The opportunity: Selective herbicides offer more management options to extend the productive life of a sown clover/grass, provided label directions are followed and the pasture is managed to minimise pasture damage.

There are three common and safe herbicide application techniques to control weeds in pastures.

These are:

- spray-grazing
- spray-topping
- winter cleaning (with simazine and paraquat).

More information on these techniques is available from the MLA website (see links on the top page of this fact sheet).

Selective herbicides offer a fourth option for controlling common weeds, especially in newly sown pastures or to provide diversity in the chemical groups used.

The success of selective herbicides depends on their ability to kill the target weeds such as barley grass, silver grass, tall fescue grass, cocksfoot, triticale and erodium, while minimising damage to desirable species, such as pastures, perennial ryegrass, cocksfoot, tall fescue and sub-clover.



Removal of sown sward using broadleaf selective herbicides. Image credit: Roger Christie, ANAD.

Weed kill
Very good to complete control
Suppression
Not on label, poor control
Grey area – don't know, not on label or no published data available



Table 3. Example of a simplified table to demonstrate use, with silver grass as the target weed for removal in perennial ryegrass.

	Propaquizafop	Haloxypop ²	Imazamox	Ethofumesate	Simazine ²	Propyzamide	Sethoxydim	Butroxydim
Weeds	Weed efficacy							
Wimmera ryegrass	Green	Green	Yellow	Red	Red	Green	Green	Green
Silver grass	Red	Red	Green	Red	Green (Refer to winter cleaning technique)	Green	Red	Red
Winter grass	Red	Grey	Yellow	Green	Red	Green	Red	Red
	Safety on mature desirable species							
Perennial ryegrass	Green	Green	Red (cv: ³ Ansa)	Green (Safe on seedling ryegrass and annual ryegrass)	Green (Refer to winter cleaning technique)	Red	Red	Red
					Green (OK)			
Example herbicide trade names	Shogun ¹ , Correct 100 EC	Verdict 520, Inquest, Firepower 900	Raptor ² , Claw 350SL ³	Tramat 500 SC, Matrix 500 ⁴	Flowable simazine, Simagranz (discontinued)	Burst 500 SC, Rustler 900 WG, Kerb 500 SC	Sertin 186 EC	Factor WG
Group	1	1	2	15	5	3	1	1
WHP from grazing	3 days (but leave longer for uptake)	7 days	7 days	7 days	14 days	25 days	14 days	14 days
Additional critical comments	Do not use on desirable seedling grasses	.	.	Can reduce clover stands by 40–50%	Do not apply to sands, use lower rates on light-textured soils	.	.	.

Resowing considerations

‘Fail to prepare, prepare to fail’.

Pasture resowing is very expensive if we fail.

To eliminate the risk of failure, do pre-sowing checks & preparation.

- Get the soil conditions right
- Reduce competition from weeds
- Minimise pests

Don't rush in.

Prepare a sowing plan – eg Oversowing sub-clover plan for Rokewood demonstration.

Checks	Consideration	Assessments	Actions
Pre-sowing	Paddock infrastructure - ability to graze as required	Paddock small with one distinct land class (flats)	No subdivisional fencing needed separate landclasses. Water trough adequate.
	Soil condition	Phosphorous limiting. pH ok. Flat surface.	Application of capital P prior to sowing.
	Weed and pest control	Red-legged earth mite present. Old established phalaris and silver grass main weed. Limited sheep to clear trash causing potential slug and sowing issue.	Timerite spray for earth mites spring before sowing. Use Paraquat to suppress phalaris at sowing and look to kill germinating silver grass. Use slug bait at sowing. Reapply if bait disappears.
	Cultivar selection and rate	Heavy clay with potential waterlogging. Select mid maturing white seeded sub clover types.	Source inoculated seed early to be ready to sow. Need 5 kg/ha each of Rouse and Yanco.
	Sowing	Timing and method of sowing	No suitable pasture drill. Assess soil dryness Sowing depth is shallow (less than 30mm).
Post Sowing	Post sowing observations	Clover establishment	Check establishment, weeds and pests 10, 15 and 20 days after sowing.
	Post sowing management	Leaf appearance.	Check leaf appearance at 3 and 6 weeks following germination. Start to graze when sub-clover has 3 true leaves, then keep pastures grazed short over winter
		Flower appearance.	Check for flowers in late September. Need to lighten grazing when flowers start to appear to maximise seed set.
	Summer trash	Assess pasture litter levels in summer, aiming to leave a 1000 kg DM/ha by the autumn break to encourage germination. Slash paddock if stocking pressure isn't enough to remove old litter.	

Prioritise paddocks

Priority paddocks for grazing are:

- High growth pasture paddocks.
- Paddocks targeted for lambing, calving or high animal production.
- Paddocks with good clover composition or conversely paddocks where trying to improve clover content.
- Small paddocks, where it is easier to control grazing.
- Paddocks that have reasonable water supply or quality.

Lower priority paddocks are:

- Hill country, as groundcover targets were probably low.
- Native country.

Conclusion

Lots of opportunities when you have too much FOO.

Need strategies to stop pastures from becoming a mess.

What's in your treatment plan?

Write down a few things that you might try.