

# SEEDS OF FRUSTRATION

## ANNUAL GRASS WEEDS

Seed heads blowing in the breeze in a grazed pasture can tell us a great deal. Not only about how much feed is left ungrazed at the end of a good season, but also about the weeds in the paddock that will likely command our attention.

Stock are not particularly interested in the seed heads of many irritating annual grasses. Their presence is a standing reminder of rejected feed, soon to be trampled trash under the feet of selective grazers seeking tastier morsels. This unused growth takes water and nutrients away from more desirable species. It's a double whammy.

For some weed species, even when they are growing, feed quality is limited by too little leaf and too much fibrous stem. Sometimes even that low proportion of leaf will be less palatable, reducing feed intake. They also often come with spiky seeds that cause problems for livestock and livestock products.

It's an unfortunate fact that by the time you can see annual grass seed heads it's often too late to do much about them. But the seed heads do make it easier to identify the species to which they belong, where they are and what proportion of the paddock they occupy. We can then devise a plan for reducing their impact and encouraging more desirable species, and stop them in their tracks in the future. Alternatively, we may choose to simply live with the problems, but plan to make the best of the existing pasture's strengths.

### Weeds to watch out for

Barley grass, vulpia, great brome (introduced spear grass) and soft brome are the most prolific and likely seed head owners.

### Management options

- Use grazing and fertiliser management strategies to give desirable plants an advantage
- Limit opportunities for weed germination on bare ground
- Put pressure on establishing weed seedlings with grazing or chemical tools
- Use grazing to suppress or synchronise the development of seed heads
- Chemically sterilise seeds as they develop
- Cut and remove seed heads before seed sheds
- Embark on a resowing program

But always start by assessing the problem, and prioritise. Overleaf is a timeline showing some management options throughout the year.

# PASTURE TIMELINE

## TACTICS FOR MANAGING ANNUAL GRASS IN AN EXISTING PASTURE

Autumn 	Winter 	Spring 	Summer 
<b>Germination &amp; seedling establishment</b>	<b>Growth &amp; tillering</b>	<b>Growth, booting, seed head emergence &amp; flowering</b>	<b>Flowering, seed set &amp; seed shed, plant senescence &amp; death</b>
<b>Plan</b>	<b>Graze</b>	<b>Fertilise</b>	<b>Plan</b>
<p>Identify and observe annual grass seedlings establishment.</p> <p>Review control impacts to date, plan for control in the next season.</p> <p>Contain the spread with good on-farm hygiene.</p>	<p>Defer or rotationally graze to increase biomass and competition to reduce annual grass tillering.</p>	<p>Apply nitrogen fertiliser where conditions suit, to benefit vegetative perennial grasses as annuals die.</p>	<p>Identify where annual grasses are a problem and what species are present.</p> <p>Plan control strategies paddock-to-paddock and species-to-species.</p> <p>Identify pasture condition limits.</p>
<b>Fertilise</b>	<b>Spray</b>	<b>Graze</b>	<b>Fertilise</b>
<p>Apply fertiliser to supply limiting nutrient requirements (aside from nitrogen) ahead of the break.</p>	<p>End of winter/start of spring, clean with herbicide to kill establishing seedlings and suppress germination.</p>	<p>Graze intensively to synchronise seed head development in preparation for strayingtopping.</p> <p>Graze intensively to remove tillers with developing seed heads at stem elongation, before seed head emergence.</p> <p>Rotationally graze/rest to encourage competition from growth and tillering in perennial grasses.</p>	<p>Apply nitrogen fertiliser where conditions suit to benefit vegetative perennial grasses as annuals die.</p>
<b>Graze</b>		<b>Cut</b>	<b>Graze</b>
<p>Defer grazing to encourage desirable species and increase ground cover as rapidly as possible.</p>		<p>Cut silage to remove developing seed heads.</p> <p>Cut early to remove seed heads before maturation or shed.</p>	<p>Rotationally graze and/or rest to grow and benefit perennial grasses (when growing conditions allow).</p> <p>Maintain ground cover to reduce germination sites for annuals.</p> <p>Progressively remove dead biomass to encourage growth of desirable species at break.</p>
		<b>Spray</b>	<b>Spray</b>
		<p>Spraytop to suppress annual grass growth.</p> <p>Spraytop to reduce seed or sterilise seed that is set.</p>	<p>Spraytop to reduce seed set or sterilise seed that is forming.</p> <p>It is essential to apply herbicide before seeds harden and seed heads hay off. Applications prior to the milky dough stage are required.</p>