Salvaging failed canola crops for livestock grazing

District Veterinarian Emily Stearman

Canola crops across the Riverina have endured severe frosts in August and September and prolonged water stress this year. If harvesting as normal is not an option, producers may be thinking of using what’s left of the crop for hay/silage or grazing.

Consider the following factors before baling or grazing a failed crop.

Plant factors

Nitrate levels in canola: Across the district canola-growers will be managing many different scenarios; there is inherent risk in making any assumptions about safety. Some of these canola crops will have accumulated high nitrates within the plant. If nitrogen fertilizer was applied just prior to the last rain event then plant uptake will have occurred, and these plants are a higher risk to livestock when cut or grazed for salvage.

Animal factors

Adapting ruminants to new feed: Introduce livestock gradually to a new feed. Nutrient supply to the ruminant animal requires a healthy population of bacteria in the gut; sudden changes in diet can detrimentally alter these bacteria, resulting in decreased rate of digestion or clinical disease.

Poor gut adaptation can result in a neurological condition, Polioencephalomalacia (PEM). The effect of this can also be induced or exacerbated by innately high plant sulphur. High plant sulphur can result occasionally in PEM even when appropriate grazing adaptation has occurred.

Rumen bacteria are highly effective at using plant nitrates, but in excessive amounts the bacteria are overwhelmed, resulting in accumulation and toxicity. Respiratory distress is a symptom of toxicity, and can be accompanied by neurological signs when the animal is close to death. However, a gradual increase in available nitrate levels can be well tolerated by ruminants.
**Tips for grazing**

To help prevent animal health issues, the following guidelines are recommended for grazing canola:

- Ensure that hungry animals do not graze the crop immediately. Allow all animals to have access to hay prior to introduction of the crop.
- Provide ad lib access to hay at all times while grazing the crop.
- Graze between 10am-2pm each day for seven days to ensure gradual adaption to the change in diet.
- After seven days animals can be left on the crop provided they have on-going access to hay – this will buffer the nitrate content of the plant.
- Continue to monitor stock daily; plant nitrate levels are not likely to change in the current environmental conditions, ongoing monitoring for signs of nitrate toxicity is required.

**Hay/silage**

**Nitrate in hay:** Nitrates do not break down in storage; hay and silage made from plants containing high levels of nitrate are a risk for toxicity when fed to stock. Nitrate levels can be assessed by fodder testing; this recommended if the fertilizing history indicates the plant may be high risk.

When feeding canola fodder, other sources of roughage, such as cereal hay, should be provided. Similar to grazing recommendations, a gradual increase in the amount fed will allow rumen adaptation to increased nitrates.

**Other health considerations**

**Clostridial disease:** *Brassica* species in general can be a high risk for clostridial disease. It is important to consider the vaccination status of sheep and cattle prior to grazing canola; appropriate vaccination protocols are advised in conjunction with grazing recommendations.

If any animal develops signs of illness, remove them from the paddock immediately. Provide access to hay and water and contact your local district or private veterinarian, who can also provide further information on grazing management or fodder nutrition.

**Preventing and treating flystrike**

*District Veterinarian Rahul Shankar*

Preventing flystrike is more economical than treating it. Short term management tools such as strategic chemical application, crutching and shearing, and controlling worms and dags will be beneficial in the short term, whilst producers looking for a longer term solution should investigate genetic options such as breeding for reduced dags and wrinkle.
Preventing flystrike in sheep generally involves controlling worms and dags, crutching and shearing, docking at the correct tail length and mulesing where appropriate.

Careful consider should be given to the selection of a fly treatment. The wool, meat and milk withhold as well as the method of application may determine the best product for your sheep enterprise. Some products have as high as 180 days for wool withholding and 120 days for meat export slaughter interval, this may not be desirable in fat lamb production systems.

The period of protection also varies with each product, something to consider coming into harvest where labour for repeated application may be scarce. This information is clearly displayed on the chemical label.

There have been a few reports and conversations with producers about treating fly-struck sheep, and there are five basic principles that underpin treatment in fly-struck mobs:

- **Shear struck wool and a 5 cm barrier of clean wool around the strike.** Shear close to the skin to remove maggots, without removing maggots you are not effectively removing strike. Machine shearing is far more effective than hand shears.
- **Unless maggot infested wool is collected and bagged, most maggots will survive, pupate and come back as adult flies.** Collect all infested wool in a fly proof (plastic) bag and leave the bag in the sun for a couple of days to kill all maggots, breaking the life cycle.
- **Apply a registered flystrike dressing to the shorn area to prevent re-strike.** The dressing has two purposes: to kill remaining maggots and to prevent re-strike as the affected area is drying and healing. If maggots are still present in the wound a rapid kill dressing containing either Ivermectin, Spinosyn or Organosphosphates should be applied.
- **If necessary, these treated sheep may be jetted or backlined along with other susceptible sheep to provide long-term flystrike protection.** The two common flystrike preventatives are Dicyclanil (e.g. CLIK) and Cyromazine (e.g. Vetrazin). Pay close consideration to the withhold periods of products selected.
- **Remove struck sheep from the mob.** Leaving struck sheep in the mob attracts blowflies. Moving struck sheep to a ‘hospital’ paddock allows closer monitoring of recovery and reduces the risk to the rest of the mob.
- **Cull adult ewes that are repeatedly struck (crutch or body) from the breeding program in aim of improving overall flystrike resistance in a flock.**
- **Flyboss** ([http://flyboss.com.au](http://flyboss.com.au)) serves as the best reference to manage flystrike in sheep, and we encourage producers to visit this website regularly.
Are your livestock ready for this fire season?

*Regional Veterinarian Eliz Braddon*

This season is shaping up to be another high risk one for bush and grass fires in our region. The first step to preparing your property and livestock paddocks is to create effective fire breaks. Spring time mowing, grazing, brush cutting or ploughing around buildings, crops, pastures and key fence lines will greatly assist in fighting fires in summer.

Firebreaks should also, where practical, be designed to avoid trees or to provide an additional break around the trees themselves. Creating effective firebreaks assists in not only reducing the likelihood of fires entering your property but also works as a means to prevent fire escaping from your property and causing further damage to the neighborhood.

Personal safety is the first priority in all situations.

When planning, determine the most appropriate or low risk areas to move stock to give them the greatest chance of survival. Local knowledge of the terrain, the most likely direction of fire threat, accessibility, prevailing wind direction and the location in relation to timbered areas should be considered.

This could include, but would not be limited to:

- Bared out paddocks – paddocks that have been heavily grazed during spring or early summer.
- Irrigated paddocks or green summer crops – they won't burn as readily as dry feed.
- Yards – a low risk option but do consider if any nearby trees pose a threat.

Once low risk areas have been selected ensure the area remains prepared and available.

The behaviour of livestock is something that must be considered in terms of priority movement. As would be expected sheep, particularly young sheep, can be difficult to move and prefer to stay in the mob situation. If the potential for fire exists they should be moved first and early.

Working dogs should also be catered for by ensuring grass is mown adjacent to kennels.

As soon as you become aware of a fire in your area (for example Watch and act), put your bushfire plan into action. The NSW Rural Fire Service mobile app Fires Near Me NSW is a great reference to keep up to date.

Tony Armour, a sheep producer who was severely affected by the Cobbler Road bushfire at Bookham in 2013, believes livestock and infrastructure insurance is a priority.

"You only have to be burnt once in a couple of hundred years for the cost of insurance to be covered," he said.

For further information about protecting your livestock from bushfire contact your nearest Riverina Local Land Services office.
Announcements

Aglive app captures eNVDs, health declarations

A new app has been released, enabling producers to manage livestock accreditations and collecting on-farm data, enhancing both management efficiencies and food traceability.

It integrates farm accreditation and management data onto one platform, in the cloud, to provide a portable, digital resource accessible via smartphone, tablet or desktop.

The Aglive IntegriPro enables producers to complete industry and commercial certifications in one central spot, including unlimited eNVDs and National Livestock Identification System (NLIS) compliance.

Capabilities to complete MSA, EU and National Feedlot Accreditation declarations will also be added to the software soon.

Certifications are then automatically sent on to the next receiver in the food supply chain, whether that be saleyard, transporter, processor or feedlot, or they can be printed if needed.

For more information please visit: https://aglive.com/

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