NSW GOVERNMENT | Local Land Services

Newsletter

August 2021

FERAL PIGS ON THE RADAR

Due to the increased feral pig activity across the central west region, Local Land Services has committed $60,000 towards subsidised 1080 treatment of landholder grain.

The aim of this program is to encourage more landholders to run baiting programs and to reduce feral pig numbers across the region and in turn, their impacts on production.

Feral pigs can carry diseases such as leptospirosis and swine brucellosis which can affect livestock and humans. They damage crops reducing potential grain produced, are a major predator of lambs, have the potential to degrade soils, spread weeds and cause major losses of native wildlife and fauna.

With the threat of African swine fever entering Australia, they pose a significant biosecurity risk for this exotic disease to take hold in the feral population.

Sows have the potential to have two litters of piglets per year and can reproduce from the age of six months. This reproduction rate shows why they can grow in numbers so quickly. Based on this breeding potential, a mob of 10 pigs could grow in size to (an estimated) 480 pigs within a 12-month period.

Baiting of feral pigs is the primary control method and has the potential to eliminate the majority of the local population.

When controlling feral pigs, the aim is to take out over 70% of the pigs to have an impact on that local population. Ideally this means follow-up baiting and ongoing control activities will maintain pig numbers at a controllable level.

We encourage landholders to use integrated control methods for the best overall outcome. This includes trapping and ground shooting in order to get any of those difficult wary pigs. These methods can be less effective than baiting but contribute to the control effort in conjunction with baiting.

Recent pig survey in the central west completed by 85 landholders showed that the average pig cost landholders $65 in damages a year. So, it easy to see that targeting the pigs now will have major financial benefits on your operation in coming seasons.

Message from
Board Chair
Susan Madden

While primary producers and land managers across the Central West continue to enjoy the change in seasons, the improved seasonal conditions brings its own set of challenges, such as a growing feral pig population, increased weed infestations, the need to monitor for virulent footrot, and of course, the significant issue we have experienced with mice. These are some of the topics covered in this newsletter, with our local staff working across agriculture, natural resource management, biosecurity and emergency management available to provide on-ground advice and assistance to land managers.

The impacts of COVID-19 continues to affect the way we all operate, and I am pleased to see Central West Local Land Services using a range of different communication and service delivery approaches to mitigate these impacts. The Seeds for Success Podcast series has certainly been a highlight, providing the opportunity to hear real-life stories relating to land management and primary production across our region.

I trust you'll find value in the content provided in this newsletter and encourage you to stay in touch with us throughout these tricky times. Our Board and staff are only too happy to hear feedback and suggestions to help us continue to improve the information and services we deliver.

Controlling weeds on TSRs

By Peta Holcombe | Team Leader Travelling Stock Reserves

In the 20-21 financial year our Travelling Stock Reserve (TSR) Senior Field Officers sprayed more than 15,000ha of weeds across the region.

Weed management on TSRs is a priority for us due to the large impacts weed infestations have on biodiversity, production, cultural heritage and recreational values.

We have four TSR Rangers and eight Senior Field Officers covering the 105,000ha of TSRs in the region, both undertaking surveillance for weed infestations and the Senior Field Officers spending more than 80% of their time spraying weeds.

We ensure our staff are well equipped with ground spraying equipment and training to ensure they are effective in their job.

Weeds to be controlled are prioritised utilising the Regional Strategic Weed Management Plan, consultation with Local Control Authorities and potential impacts to the values of the TSR

We have seen an increase in weeds in response to rains after the drought

Different weeds are controlled at different times of the year depending on their growth stage and best time to get an effective kill.

Weed management is one of the highest costs for TSR management in Central West with an excess of $100,000 being spent on equipment, maintenance and chemical, this is on top of salaries.

Our staff sit on the Central West Regional Weeds Committee and Macquarie Valley Weeds Advisory Committee to ensure we are up to date with information, have input into priorities and are in touch with appropriate networks

We seek funding from the Crown Reserves Improvement Fund, DPI Weeds Action Program as well as other Government funding to increase our ability to control priority weeds on TSRs year round.

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MINERAL SUPPLEMENTATION ON CEREAL CROPS ESSENTIAL THIS WINTER

By Jillian Kelly | District Veterinarian

Grazing winter cereal crop is popular as it meets a feed gap in our region and offers a large amount of dry matter that is very good quality. Wheat crops across the region could be expected to have >13.5MJ ME/kgDM and >30% crude protein.

It is well acknowledged that cereal crops are low, or marginal, in minerals such as calcium and magnesium, which can cause deaths in livestock. In addition to the frank deficiencies in Ca and Mg, the extremely high K level and very low Na content result in a very high ruminal K:Na ratio, which is known to greatly impede macromineral absorption.

The solution is always to provide mineral supplementation when grazing cereal crops. A dry lick that contains a source of calcium, magnesium and sodium is a good idea, your local District Vet can recommend the correct supplement for your local area and grazing situation.

In addition to helping the stock stay alive, grazing trials have proven massive improvements in weight gains when livestock are supplemented. In the 2006 Grain & Graze project, a combined Mg/Ca/Na supplement led to a 54% increase in lamb liveweight gain, compared with unsupplemented lambs grazing a dual-purpose wheat crop.

Further experiments were then conducted to separate the responses to Mg or Na, which resulted in an increased liveweight gain of 24 and 37% respectively. Increases in liveweight gains were also measured when animals were supplemented with straw only while grazing the cereal crop. Other studies have shown that in both sheep and cattle, mineral supplementation has resulted in increases in liveweight gain of 15-60%.

It is hard to know if these impressive results are entirely due to the correction of dietary deficiencies. It is likely that the benefits could be due to the rumen buffering ability of these supplements. We know that a crop that is lush, green and rapidly growing will be readily fermentable, high in water soluble carbohydrates and low in effective fibre. Ingestion of a large volume of this diet will cause high levels of volatile fatty acid (VFA) concentrations in the rumen, which as their name suggests are acids, causing a slight drop in rumen pH.

It is well acknowledged that cereal crops are low, or marginal, in minerals such as calcium and magnesium, which can cause deaths in livestock.

Most of the mineral supplements discussed are either basic in their very nature, or are salt based which makes the animals salivate, causing the recycling of sodium bicarbonate into the rumen, creating a more neutral pH which is the optimum environment for rumen microbes to do their best fermentation. A similar effect can be achieved with straw, except that this fills up valuable rumen space with feed that is poorly nutritious, hence the better results achieved with licks.

Reducing invasive native species on our TSRs

By Peta Holcombe | Team Leader Travelling Stock Reserves

Our TSR team has been busy reducing invasive native species including Pine, Wilga and Buddah on TSRs between Albert and Condobolin as well as between Grenfell and Bimbi.

Clearing invasive native species promotes the regeneration and regrowth of native, less invasive vegetation.

The projects are a part of a long-term plan to open up more routes making them suitable for walking and grazing stock.

The project aims to improve diversity of native ground cover and will involve monitoring as well as continuing to manage weeds and regrowth.

To date there has been a great response from the project to help things along we have spread native grass and forb seed.

In the last financial year staff controlled 335ha of invasive native with funding from the Crown Reserves Improvement Fund as well as internal funds.

The project was carried out in line with the Land Management Code under the Local Land Services Act 2013.

Seeds for Success PODCAST

Have you tuned into Seeds for Success yet? Hear stories from locals just like you on production, pest management, genetics, getting through the tough times and what they're doing on their place.

With 24 episodes under our belt, we are proud that Seeds For Success has had over 10,000 downloads since we launched in September of 2020, with each episode averaging 480 listens.

Listen in as David and Suellen Taylor explain how native grasses work on their property in the Central West plains (episode 22), or hear how Tim Bowman from Tooraweenah approaches the selection of bulls, and how he's incorporating artifical insemination into his breeding program (episode 18).

One of our most popular episodes was with Bomber Moxham, who shared stories from his 89 years on "Mullengudgery".

GRAZING MANAGEMENT IN RIPARIAN AREAS

By Bree Agar | Team Leader Land Services

Grazing can have a role in repairing a riparian area, but this must be strategic with the aim of long recovery periods leaving sufficient ground cover, especially during the summer storm period.

Grazing also has a role in reducing excessive dry matter build up to reduce fire intensity.

Some of the main principles that define strategic grazing are:

1. Grazing periods are determined by specific goals. For example, in riparian areas, the aim is to graze annual weed species during a growth period (autumn–spring) to assist in the regeneration of native species.

2. When it comes to grazing intensity, use high density grazing - short term grazing (one to seven days) with high stock numbers (+100DSE/ha) to quickly utilise or trample dry matter.

3. Aim to maintain 100% ground cover at all times and promote a higher density of ground cover prior to summer to intercept high intensity summer and autumn rains.

It is extremely important that over the summer-autumn (storm period) 100% ground cover is left at least 20m either side of water courses to filter storm runoff and prevent animal faeces, eroded soil and organic residues from entering the stream.

The following are ways that you can reduce the impact that your grazing activities have on riparian vegetation:

- Control stock access to riparian zones by fencing off the area. This should be at least 25m from the top of the bank
- Provide alternate sources of water (if required) so that stock do not need to access waterways
- Strategically graze the riparian area to reduce annual weed burdens, improve ground cover and encourage regeneration of native vegetation
- Maintain 100% ground cover on riparian areas as buffer strips and high levels of ground cover across the remainder of the property

For more tips on managing riparian areas, please contact Senior Land Services Officer NRM Dominic Nowlan on 0409 915 695 or email dominic.nowlan@lls.nsw.gov.au and ask for a copy of the *Stock and Waterways* guide.

ENDANGERED PEA POPULATION BEING PROPAGATED

A collection of endangered plant seeds from the region is currently being propagated in Canberra ready to be returned for planting as part of Central West Local Land Services Progressing the Small Purple-pea project.

Natural Resource Management Officers from Central West LLS travelled to Canberra recently to visit the Australian National Botanic Gardens and National Seed Bank where the Small Purple-pea (*Swainsona recta*) is being propagated and grown for translocation purposes.

Watch out for Virulent footrot

Virulent footrot is a notifiable disease under the NSW biosecurity ACT 2015. Anyone who suspects virulent footrot has the requirement to notify an authorised officer (LLS Vets and Biosecurity staff) within one working day of suspicion of virulent footrot in sheep or goats.

Footrot is caused by a bacteria, Dichlobacter nodosus. Under the right conditions the bacteria proliferates in the interdigital space and produces enzymes which breakdown the soft part of the hoof causing under-running.

Any lame sheep should be caught, and feet inspected. Checking especially for moisture, hair loss, and maceration between the toes and under-running of the soft sole beginning from the inner edge of the hoof.

The diagnosis of virulent footrot is made by assessing the level of advanced under-running in the feet of 100 sheep in relation to current environmental conditions. In the late 1980's the NSW sheep industry endorsed the NSW Footrot Strategic Plan which was developed to keep the percentage of infected farms in NSW under 1%. Under this program an eradication program must be undertaken when virulent footrot is diagnosed.

Best practice at lamb marking

By Nik Cronin | District Vet

Marking and mulesing are important husbandry practices still largely considered essential to protect the lifetime welfare of Australian sheep. They are also painful surgical procedures. While industry works to develop new and practical alternatives, sheep producers have a responsibility to both their animals and industry to do their best with technologies currently available to minimise the negative welfare impacts associated with undertaking these procedures. At current stock prices this seems like a more than reasonable investment.

With three new additional pain relief products available for use, now is an excellent time for producers to consider implementing an improved pain relief strategy at marking and mulesing.

Numnuts is a specialised dispenser tool that gives a dose of short acting local anaesthetic at the same time that a ring is applied when tail docking or castrating sheep using rings. It will provide immediate pain relief for a short period after administration. The dispenser itself can be purchased online or from certain regional stockists, but the injectable local anaesthetic product, Numocaine, is a scheduled S4 drug and is purchased from a vet clinic.

Two other new products are systemic anti-inflammatories; they work to reduce overall pain and inflammation around the body. They take a bit longer to work after administration, approximately 10-15 minutes, but will provide pain relief for a much longer period, up to 24 hours or more. Metacam 20 is an injectable product, and Ilium Buccalgesic OTM is a gel which is applied into the mouth in the cheek pouch area. As they are in the same 'group', they cannot be used together, and are also scheduled S4 drugs so are purchased from a vet clinic.

Trisolfen is still available and is not replaced by these new products.

WhatToDoWithMiceDamagedHay

By Tim Bartimote | Senior Land Services Officer - Cropping

Mice continue to be a significant issue throughout much of the Central West region. Impacting crops, running amuck in sheds and machinery as well as damaging hay stores.

As we head into another good season for haymaking it is important to assess the condition of current on-farm hay storages to decide on whether infested hay should be kept or disposed of. If the decision is to dispose of hay, how then do we go about doing this in an effective but safe manner?

Monitoring is key when identifying the impact of mice on hay bales. Bear in mind that PPE is essential when getting close to potentially contaminated bales. Implement good hygiene as well as the use of masks and gloves to reduce the risk of contracting an illness. Compromised bales also pose a hazard because they can collapse on machinery or personnel.

Mice contaminated hay can be managed through burning, burying or spreading.

Burning contaminated hay bales, in an isolated and open area, can be a cost-effective means of disposal. This practice requires minimal inputs but can be quite time consuming if dealing with large quantities of hay and conditions are not conducive. If employing this practice, be sure to comply with all NSW RFS requirements and ensure all mice carcasses are dealt with by making certain the entire pile of hay is consumed. As with any type of burning, implement appropriate strategies to mitigate the spread of the fire; the spread of ash will also need to be considered.

Burying contaminated hay in carefully considered sites will quickly and effectively deal with the issue. However, the expense of this practice should be examined and the availability of excavating equipment. Pit locations should avoid sites prone to accumulate water or near water ways. Pits need to be deep enough to apply a minimum of a foot of soil between the additive height of the bales and the original soil surface. Excess soil must then be placed on top to compensate for future sinking of the pit. Due to the soil settling and the breakdown of the contaminated hay. Unlike other pits, these will not require lining but will still require the access to be restricted to the site by livestock.

Spreading hay back onto paddocks with rakes can put nutrients, bound in the organic matter, back into the soil through decomposition. This will take significant time to occur but may provide some benefit out of hay, which is otherwise unfit for consumption by livestock.

Mice contaminated hay can be managed through burning, burying or spreading. Each of these methods have their benefits and drawbacks.

Access by livestock will need to be restricted, as potential for illness is still possible if the hay is consumed. Depending on bale size, smaller sections may need to be distributed across the paddock first before attempting to use a rake behind a tractor. This practice would likely only be possible on country that is being fallowed. A potential consequence of this practice is the impact of an uneven spread of hay, leading to poor germination of plants in locations where hay has accumulated.

IMAGE: NSW DPI

Mouse Management – Th importance of monitorin

While mice are generally less active over winter, now is a good time to start thinking ahead and planning how you can protect your crops before harvest.

With mouse numbers likely to increase as we move into spring, the first step in any effective control program is to detect early when populations are increasing in your paddocks.

You can start this monitoring process now, and the easiest ways to do so is by carrying out active burrow counts and using mouse chew cards.

To find out more about these techniques, visit https://www.lls.nsw.gov.au/mice/mice-monitoring

Zinc phosphide rebates for mouse control now available with applications now open for the NSW Government's Zinc Phosphide (ZnP) Rebate program.

Eligible primary producers can apply for a rebate of 50% for the purchase of the critical mouse control chemical zinc phosphide, up to $10,000, to provide financial and cash flow relief.

Approved applicants can claim for zinc phosphide bought between 1 January 2021 and 17 December 2021 to eradicate mice during the 2021 mouse plague.

Applications can be made online via the NSW Rural Assistance Authority (RAA) and are open until 17 December 2021. All invoices must be submitted to the RAA by 28 January 2022.

If you're not sure whether you qualify under the financial hardship criteria, please apply online to the RAA so they can assess you and provide advice.

For more information about the rebate guidelines, eligibility criteria and details on how to apply, visit www.raa.nsw.gov.au/.

NLP2 Outcome 6
Adapt Project
12 MONTH STATS

9 workshops

10 field days

5 webinars

3 podcasts

8 resource videos

4 trials at 12 different sites