

Controlling worms in livestock- Dealing with rain after drought

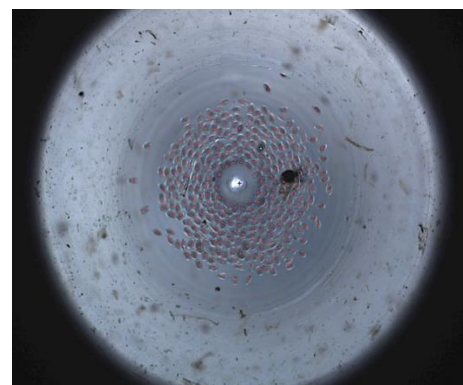
Drought is bad for worms. Rain is good for worms, especially when it is warm. Therefore, current conditions favour rapid development of high worm burdens in sheep and cattle. We must be mindful also that selection for drench resistance is much higher after dry conditions. Below we examine some simple management practices, to ensure that worms don't affect livestock health and productivity.

1. Sheep and cattle worms after drought, fire and rain

- ❖ Parasites such as barbers pole worm (*Haemonchus*) can live up to 12 months in the abomasum (fourth stomach) of sheep and cattle.
- ❖ Stock that were treated with a drench will continue to host resistant worms in their gastrointestinal tract. Even using a new class of drench may leave one resistant worm.
- ❖ In dry times, the worm eggs that drop out in the dung will mostly be killed in the dusty paddocks but as soon as there is moisture, the larval worms hatch out of the eggs and contaminate new grass. Populations increase exponentially with each generation that passes through the stock.
- ❖ Dung pats also provide a good reservoir for eggs and larvae that develop after wet weather.
- ❖ *Nematodirus* eggs are tough and survive drought. When it rains, they are usually the first worm type to infect sheep and cattle. The Dawbuts laboratory has seen high counts of *Nematodirus* over the past few weeks.
- ❖ Stock will be re-infected with more resistant worms when they start to graze because the worms that survived the dry conditions are mainly the resistant ones (in the stock).
- ❖ Larval survival in wet paddocks in late summer and into autumn will be high, so action is needed now to avoid the establishment of large populations of resistant worms on farms.

2. Monitoring for emergence of worms

- ❖ Conduct worm egg counts in each mob 4 to 6 weeks after the first rain event. This is especially important if there has been follow-up rain, which aids survival of larvae on pasture.
- ❖ Worm egg counts can be sent to Dawbuts for processing by an approved reference laboratory.
- ❖ For on-farm testing, the FECPAKG2 machine is a rapid and convenient way to conduct worm egg counts. Results are sent by email within hours of conducting the test.
- ❖ Parasitology laboratory and technical support for FECPAKG2 is provided by Dawbuts.
- ❖ For bulk or individual counts, take samples from at least 15 animals. Sample a range of stock classes (young, older, males, females) to see if there is a difference between groups.



3. Treatment of stock for worms

- ❖ For advice on the correct choice of drench, consult your vet or animal health advisor or look up Wormboss.com

- ❖ Once worm egg counts rise above an average 150epg (sheep) or 75epg (cattle), consideration must be given to treatment, both for the health of the animals themselves and to prevent pasture contamination.
- ❖ Use an effective drench i.e. one that has greater than 95% efficacy. Using a drench with low efficacy will result in more resistant worms contaminating pastures. Combination drenches are preferred to single active drenches.
- ❖ If bringing in stock from another place, use a quarantine drench. In sheep, this means two different drenches with a total of 4 active ingredients, one of which must be from one of the new classes (Zolvix or Startect) of drench. For cattle, this may involve using both an injectable and an oral drench to kill all potential worm species present.
- ❖ Check that the drench has worked by taking samples for worm egg counts at the time of drenching and again 14 days after. This 'DrenchCheck' gives an accurate estimate of the efficacy of each drench used.
- ❖ Make sure you request larval identification, so you know which type of worm is surviving the drench.

4. Summary

- ❖ Worm populations in livestock re-establish very rapidly following rain.
- ❖ There is a higher chance of resistant worms after rain following drought conditions.
- ❖ Monitor for worm eggs using Dawbutts laboratory services or FECPAKG2.
- ❖ Treat with an effective drench to stop worms from affecting stock and causing larval contamination of pastures that could last through autumn and into winter.
- ❖ Check that drenches are effective using 'Day 14' worm egg counts.



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