



DR STEPH REID
BVSc BSc (Hons)
Farm Vet, Kopu

The basics

In this update

P1 The basics

P2 Stopping the Spread of Super Worms

P3 What is a Faecal Egg Count Reduction Test (FECRT)?

P4 FECRT case study

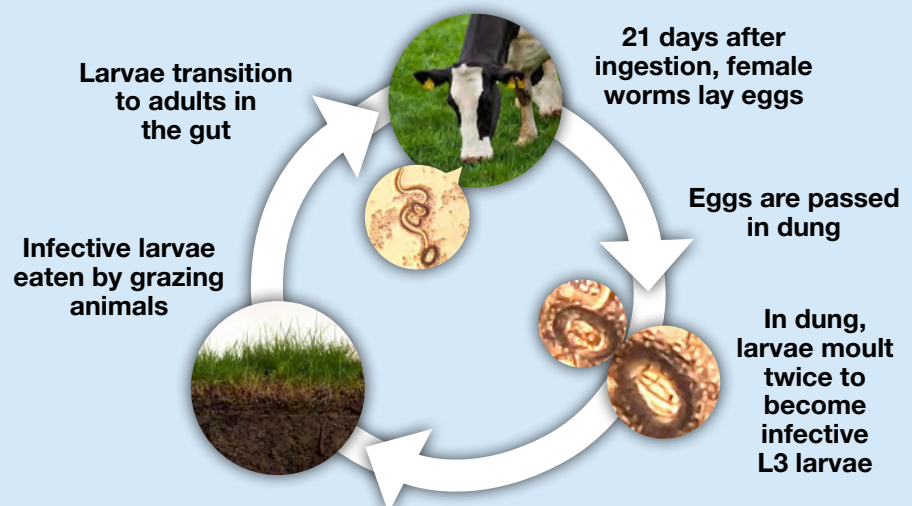
P4 Strategies for Managing Parasites on Farm

P6 Drench Smart, Not Hard

P6 AIRMED An easy-to-follow Recipe for Managing Parasites

- Animals ingest worm larvae with pasture.
- Larvae like to live close to the base of the pasture where it is moist and protected from sunlight.
- After a larva is eaten, it takes about 21 days to mature and start laying eggs in the gut (which are passed in faeces).
- Roughly 95% of worms exist on pasture (the remaining 5% are within the animal).
- Egg hatching and larval development are fastest in warm, wet conditions (if the grass is growing, then so are the worms!).
- As a broad rule, worms are species-specific (cattle worms infect cattle and sheep worms infect sheep).
- It is not a realistic goal to eradicate worms on your farm; we need to work with them.

The lifecycle of internal parasites



Stopping the Spread of Super Worms



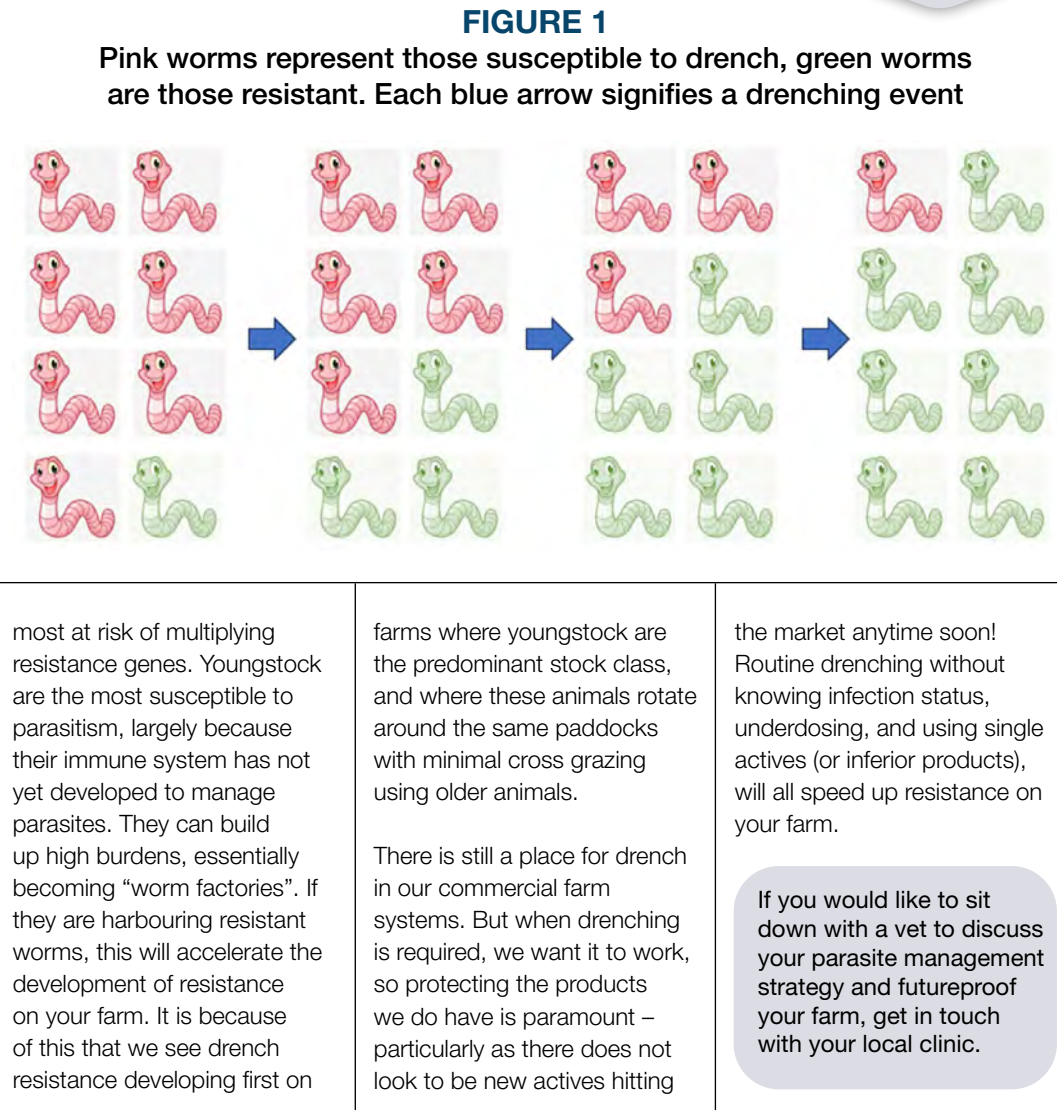
DR STEPH REID
BVSc BSc (Hons)
Farm Vet, Kopu

Drench resistance is increasingly an issue in both sheep and cattle systems. Identifying and understanding high-risk practices is the first step in slowing the development of resistance on your farm.

Before we had commercial drenches, almost all worms had genes that made them susceptible to drench. But, with naturally occurring genetic variation, some have genes that make them resistant to certain actives. Each time we drench, we are selecting for these resistance genes (or conversely, think of it as culling out the susceptible worms). With repeated drench use, the proportion of resistant worms on farm increases.

We cannot get rid of parasites on farm, so we need to make sure they are susceptible to the drenches we are using. This is called refugia and is an important component to controlling resistance.

We also need to be aware of the stock classes that are



**NEED HELP?
NEED TO TALK?**

RuralSupport

Call for free, confidential
advice & support

0800 787 254

www.rural-support.org.nz

HELP & SUPPORT

**We're here to
strengthen connection
in New Zealand's rural
communities.**

What is a Faecal Egg Count Reduction Test (FECRT)?



AMANDA CARR
Vet Technician,
Te Kauwhata

A faecal egg count reduction test (FECRT), otherwise known as a “Drench check”, is a vital tool in identifying issues with drench resistance in cattle or sheep. It tests the effectiveness of different application types and chemical combinations of drenches. It is often used to test animals which have shown an unsatisfactory response to previous drenching or are coming onto the farm from an area which may have resistance issues.

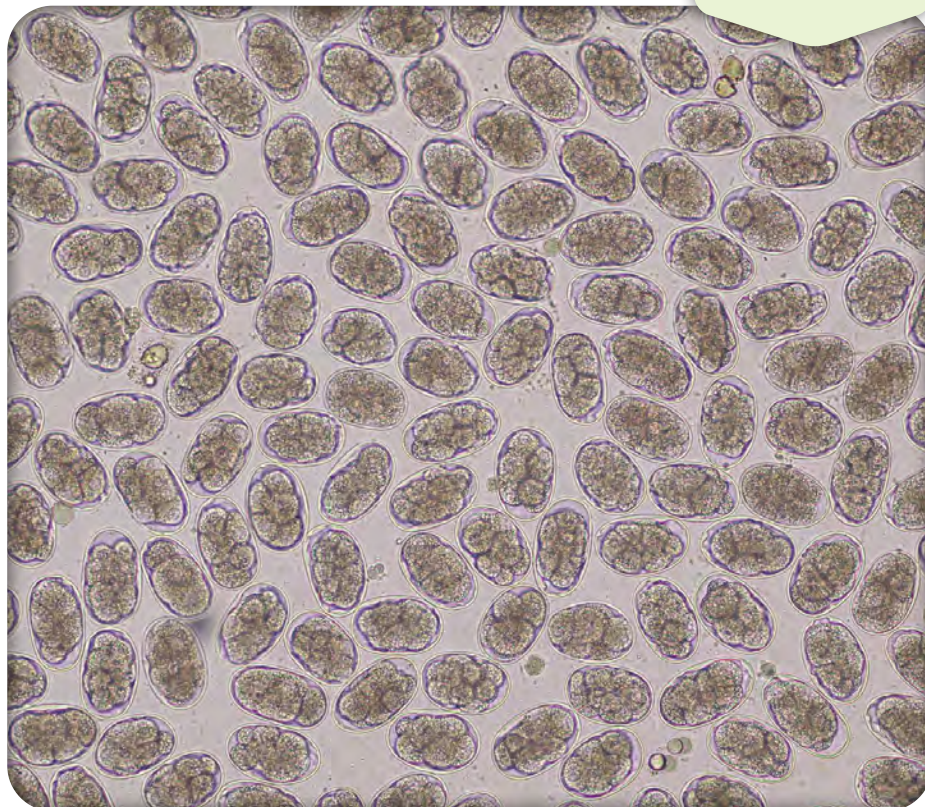
After a problem has been identified or is suspected you can either request a FECRT, or your vet will recommend one after consulting with you. The drenches chosen to be included in the test are based on the stock class, previous FECRT results and other farm factors. Usually, 3 or 4 drenches are tested.

Pre-reduction test faecal samples need to be taken & tested (owners can collect these samples themselves). Once it's confirmed there have been enough worm eggs found the FECRT can be booked. It is very important that the animals to be included in the test are not drenched with anything prior to, or between our visits.

At the first visit a random selection of animals is assigned to each drench (usually 10-15 per drench being tested). They are weighed, their tag numbers recorded, a faecal sample taken, they're painted with a colour which will visually identify which drench they received, then are drenched to their weight with their assigned drench.

10 days after drenching, we return to collect another faecal sample from each animal in the drench test groups. Depending on the drenches being tested, a 3rd visit to collect faecal samples 20 days post drenching may also be needed.

Finally, you will be sent a report with the results which compares the data from each visit, how well each drench performed and any vet recommendations.

A photograph of a brown cow with a blue tag on its ear, looking directly at the camera. The background is a blurred green field.

**PERFORMANCE READY
ON EVERY FIELD
THIS SEASON**

**ASK YOUR VET FOR
MULTIMIN®**

Registered pursuant to the ACVM Act 1997, Nos. A011875 & A009374.



DR BELINDA BORMAN
BVSc
Farm Vet, Taupiri

FECRT case study

Carrying out FECRT

(Fecal egg count reduction tests)

Recently, a concerned farmer came to us because he was unsatisfied with how his drench was working. To start the investigation, we conducted a FEC on a post-drench sample he had brought in. It showed his double active drench working at 43% and his triple at 53%. As drenches need to be working at above 95% to be effective, these results raised a few concerns.

Results like these will quickly build up to result in complete drench breakdown and deaths, so we went on farm and tested a triple (Boss) and a novel (Zolvix). Thankfully, we were able to show that these drenches were both 100% effective.

What could have happened here:

- Different drenches have different carriers and properties. This means that even if they have the same active ingredients, they may not be equally effective.
- Things like how you store a drench, the expiration date and how well the bottle is shaken can all affect drench efficacy.
- Adequate dosing – when we do a FECRT, we weigh animals to ensure the correct dose rate, and we use a syringe or a specially calibrated gun.

Positives:

- This farm still has effective drench options that we have proven work.
- Finding an issue early means that we can set a farm up for success in the future.

Negatives:

- Each time that worms are exposed to drench and not killed, they could pass on resistant genes – this leads to drench failure.
- Continuing to use drenches you know are ineffective is not a viable choice.

Carrying out a FECRT should be kept simple. We don't have to test every drench on the market to be able to give recommendations. Post-drench checks 10 days after drenching are an excellent starting point to verify that your drenches are working and set your farm up for long-term success.

Strategies for Managing Parasites on Farm

Parasites are a major challenge to livestock health and productivity across New Zealand farms. With warmer, wetter conditions in many regions extending the parasite season, and rising concerns around drench resistance, effective parasite management strategies are more important than ever to maintain animal health.

To achieve this, an integrated management approach is key – this involves combining monitoring, smart treatment choices, and pasture management strategies to control worm burdens while preserving drench efficacy.

Monitor and Test:

Regular faecal egg counts help to identify when treatment is truly needed, reducing unnecessary drenching. Drench Checks and Faecal Egg Count Reduction Tests

assess the efficacy of our drenches and help make informed decisions around our drenching protocols.

Strategic Use of Drenches:

Utilise combination drenches, particularly for youngstock, to increase the spectrum of activity and reduce the development of resistance. When bringing new animals to the property, use a quarantine drench to reduce the risk of introducing resistant parasite populations. Reduce the use of long-acting treatments as these favour the development of resistance. Ensure animals are dosed to their appropriate weights and drench guns are calibrated regularly.

Grazing Management:

Cross-grazing with adult stock or different species (i.e., running adult cattle or sheep after youngstock) will clean up pastures, assisting in reducing larval burdens and

generating refugia. Maintaining higher pasture residuals will prevent animals from grazing to the base of the sward where the larvae are concentrated, therefore reducing intake. Consider alternative forages that are less favourable for parasite survival.

Animal Nutrition:

Well-fed animals have stronger immunity and tolerance against parasite burdens. Ensure youngstock have consistent access to quality feed, clean water, and essential minerals.

By adopting an integrated, farm-specific approach to parasite management, we can protect our livestock, improve productivity, and safeguard the effectiveness of treatments for the future.



DR ANNALISE RILEY
BVSc (Dist.)
Farm Vet, Waihi

*We've
got
Christmas
covered this
season...*

**Barkers Gift
pack available
with TURBO® or
BOSS® Pour-on
2.5L**



**Ham available with
TURBO® or BOSS®
Pour-On 5L, TURBO®
Triple + Tape 20L,
DILIGENT® Extra
Spray-on 20L or
with every 2 x 20L
of BOSS® Triple
Mineralised Drench
for Sheep**

**Achieve unparalleled
protection this season
with Alleva Animal
Health's superior parasite
control combinations
- and receive a quality
Ham or Barkers Gift Pack
with qualifying purchases.**



AAH-ALLP-2025-038



TURBO®, BOSS® and DILIGENT® are registered trademarks of Alleva Animal Health Ltd. TURBO Pour-on (A011722), BOSS Pour-on (A010817), TURBO Triple + Tape Mineralised Oral Drench for Sheep (A011932), BOSS Triple Combination Mineralised Drench for Sheep (A011614) and DILIGENT Extra Spray-on (A012034) are registered pursuant to the ACVM Act 1997. See www.foodsafety.govt.nz for registration conditions. Ham or Barkers gift box received may differ from advertised image and available while stocks last.

Drench Smart, Not Hard



DR NEKA KATER
BVSc
Farm Vet, Paeroa

Anthelmintics (drenches) are essential for controlling worms in livestock. However, over time, worms can become resistant — meaning drenches stop working as well. While resistance can't be avoided entirely, smart management can slow it down. One key principle is **refugia**.

Calves are most at risk of picking up worm larvae after weaning, once they start grazing more pasture. The average worm life cycle is about 21 days. It usually takes at least three weeks of grazing for calves to become wormy.

Calves on larger paddocks, at lower stocking rates, or with higher residuals have less exposure and a lower infection risk. Signs of heavy worm burdens include scours, dirty tails, poor growth, and rough coats. Before reaching for the drench gun, it's best to collect a poo sample — a faecal egg count (FEC) can confirm whether drenching is actually needed.

A bit of worm exposure is good — it helps calves build immunity. If all animals are drenched regularly, especially when only young stock are on farm, resistant worms quickly

dominate. Over-drenching also slows immunity development, so adult animals can still get sick later, wasting energy that should go into growth, milk, or reproduction.

That's where **refugia** comes in. Refugia means keeping a small number of worms unexposed to drenches, so they stay "susceptible." These worms then breed with any resistant ones, helping dilute resistance genes and keeping drenches effective for longer.

Practical refugia strategies:

- Leave a few well-grown calves undrenched.

- Graze undrenched adult cows before or after calves — they add susceptible larvae.
- Avoid "dose and move" (drenching then shifting to clean paddocks).

Talk to your Franklin Vets team about setting up a **refugia plan** to help prevent the development of drench resistance on farm.

AIRMED

An easy-to-follow Recipe for Managing Parasites



DR STEPH REID
BVSc BSc (Hons)
Farm Vet, Kopu

1. Avoid the Worms

Parasitism exists on a spectrum. On one hand, we have the extreme scouring, skinny, and dehydrated calf or lamb. But this is only the tip of the iceberg; larval intake reduces appetite and means animals must redirect energy and protein into mounting an immune response rather than growth.

Parasite intake can be reduced through a variety of methods: grazing new pasture, cropping, leaving high residuals, and cross-grazing with adults/other species.

2. Integrate with Other Stock Classes

Other stock classes can be used to interrupt the worm cycle. With the exception of one worm species, they are species-specific (i.e., infect either sheep or cattle, not both). Therefore, adult cattle or sheep can be used to clean

up pasture (ingesting infective larvae) before a paddock is grazed by calves, for example.

3. Refugia

To slow the development of resistance, we need to keep a proportion of worms on farm unexposed to drench, this is referred to as refugia. Every time we drench, there is the potential for worms to survive (resistant worms). As the proportion of these worms builds up on pasture, the likelihood of their breeding increases, leading to greater resistance. By leaving a proportion of worms unexposed to drench (and hence not allowing them to develop resistance), you can dilute any resistant worms present on your farm.

4. Monitoring

This refers to monitoring a range of parameters on your farm related to drench resistance and parasitism levels.

We can monitor the level of parasitism in your animals using: faecal egg counts (FECs), body condition score, growth rates, grazing residuals and overall health.

We can monitor resistance levels on your farm using faecal egg count reduction tests (FECRT) or drench checks, and by performing larval cultures to diagnose resistance at the species level.

5. Effective Drench

While we are trying to move away from routine drenching to ensure our drenches continue to work in the future, in a commercial system, drenching will be required at certain time points. Therefore, we need to know when we are using drench that it is effective. FECRTs and drench checks can inform these decisions.