

# PARASITE MANAGEMENT 2025 CALENDAR



wormwise

Funded by Beef + Lamb New Zealand





This calendar is designed to be an educational tool to provide information on:

- Parasite biology.
- The main parasite species of concern in New Zealand.
- Parasite management tools available for your farm.
- Tools for monitoring parasites.
- Risk factors for drench resistance.
- Prompts on what to consider for each month.
  - Due to the variation of farm systems and environments around New Zealand, these prompts are a guide and not hard dates on when to carry out certain tasks.

Thank you to our farmers for generously providing us with amazing images and our B+LNZ Farmer Reference Advisory Group for reviewing this calendar.



## Glossary of terms

Term	Definition
Advisor	An animal health advisor experienced in livestock parasite management.
Anthelmintic(s)	A chemical(s) capable of killing internal parasites – commonly called drench.
BCS	Body Condition Score.
Clean pasture	A paddock assumed to have very few or no worms on it (e.g. a newly sown paddock). Also known as a 'clean paddock'.
eBV	Estimated breeding value. A measure of genetic merit for a particular trait (whether directly measurable or not), estimated from performance, pedigree and/or from DNA tests.
FEC	Faecal Egg Count, also known as egg count. Measures the number of worm eggs in a faecal sample. This test does not tell you what types of worms are present.
FECRT	Faecal Egg Count Reduction Test. Used to find out which drench families are effective on your farm.
Knockout drench	Substitution of a routine drench with a highly effective product is used prior to optimal worm survival and development conditions.
Mectin/ML	One of the families of drench. The active ingredients in this family include moxidectin, ivermectin and abamectin.
Novel active	The newest families of drench, monepantel and derquantel. Products on the market containing these actives are: Startect® – A combination drench containing the novel active derquantel as well as the active abamectin, and Zolvix™ Plus – A combination drench containing the novel active monepantel as well as the active abamectin.
Parasites	Internal parasites ('worms') that live in the gut of sheep & cattle and can be a major cause of production loss in grazing systems.
Payout period	The length of time the drench or treatment works to kill worms in the animal after drenching/treating.
Quarantine protocol	A process to minimise new stock bringing resistant worms with them onto your property. This protocol includes drenching with a novel active, holding animals off pasture for at least 24 hours, then moving animals to contaminated pasture.
Refugia	Refugia is leaving some worms 'in refuge' or free from drench to maintain worm populations on your farm that are susceptible to drench.
Targeted Selective Treatment	A system that selects animals on an individual basis for drenching using certain criteria, e.g. liveweight gain.

For more information on these terms go to **B+LNZ Knowledge Hub** and search for your term.





### Postmortem of tail-end ewes

Less than 20% of tail-end ewes are light because of worms.

Get post-mortems done by your vet to understand the underlying factors on your farm.

You may be treating ewes that are sick with something else.

### Faecal egg count (FEC)

Measures the egg output of the adult female worm population in the gut of the animal sampled.

Use as a tool to identify issues early: what animals need drenching and highlight areas of the farm where animals are under greater or lesser worm challenge.

### Faecal egg count reduction test (FECRT)

Used to identify which drench families are effective. Do this as a test to establish baseline to see which drench is working, in addition to routine drench checks.

**Sheep:** test a range of drenches at once.

**Cattle:** may be easier to test 1 or 2 actives at a time.

### Drench check

Check your drench has worked by doing a FEC 10-12 days after drenching.

This should be done at least twice a year.

### Larval culture

Worm species vary in their impact on your animals.

Different drenches can be more effective for certain species of worms.

Know your worm species to help with your parasite management plan.

### Body condition scoring and liveweight gain

Weight loss and loss of condition can be a sign of worm infection.

Use these measures to gauge how your stock are performing.



Scan for more information on Wormwise worm diagnostics





# January 2025



## THINGS TO THINK ABOUT THIS MONTH



Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	31	1	2	3	4	5
	New Year's Eve	New Year's Day	Day after New Year's Day			
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
Wellington Anniversary Day						
27	28	29	30	31	1 Feb	2
Auckland and Northland Anniversary Day						
3	4	5	6	7	8	9
Nelson Anniversary Day						

### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Lambs 28 days post drench to check for re-infection. Typically, lambs on contaminated pasture are drenched every 28 days, lambs on cleaner pasture may not need to be.
- Lambs on summer crops: they should not need drenching every 28 days BUT monitor so you don't get caught out!
- Ewe hoggets that have reared a lamb.

#### Is your lamb drench working?

- Drench check on 10 individual lambs.

#### Are eggs present and if so, what type of worms are they?

- Request larval cultures.

#### Are your ewes at BCS 3 or better?

- Plan to get your weaned ewes and ewe hoggets that have reared a lamb to > BCS 3.

#### Protect your susceptible worms by using refugia

- Minimise drenching of adult sheep.
- Share lamb grazing areas with undrenched ewes.
- Consider leaving some lambs untreated after seeking advice.

#### Consider your grazing management

- Lambs grow faster on low worm contamination feed.
  - Regular drenching will not reduce the effects of a daily worm challenge.

### Cattle

#### Do you need to drench and when?

Do a FEC test on:

- Calves 28 days post drench to check for re-infection.

#### Is your calf drench working?

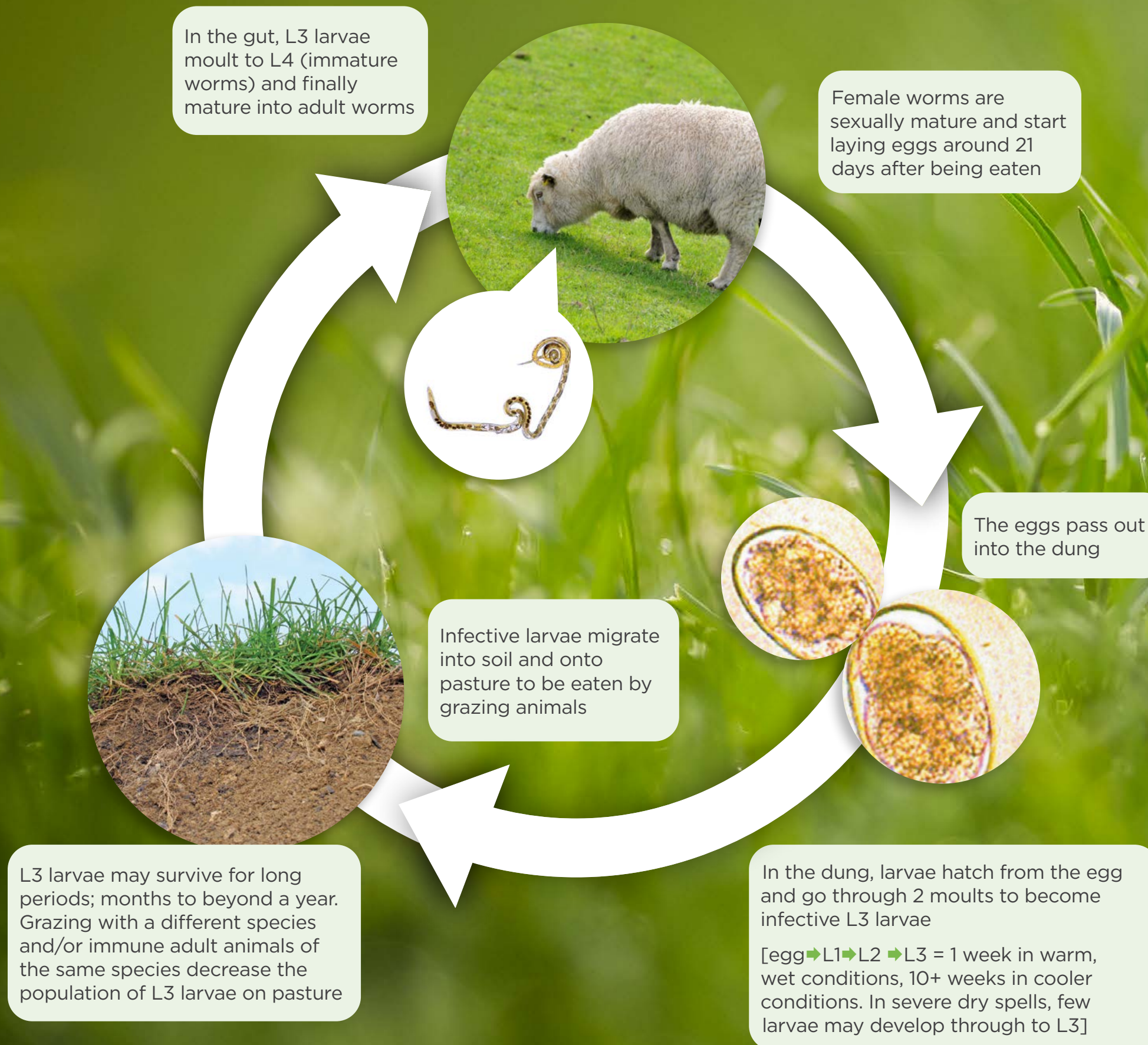
- Drench check on at least 10 individual calves.

#### Consider your grazing management

- To reduce worm challenge, try to graze young calves on low worm contamination feed and/or share grazing area with adult cattle or sheep.



# The lifecycle of internal parasites



Scan for more information on Wormwise worm life cycle





# February 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
27 Auckland and Northland Anniversary Day	28	29	30	31	1	2
3 Nelson Anniversary Day	4	5 Waitangi Day	6	7	8	9
10	11	12	13 Valentine's Day	14 National Lamb Day	15	16
17	18	19	20	21	22	23
24	25	26	27	28	1 Mar	2
3	4	5	6	7	8	9

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Lambs 28 days post drench to check for re-infection. Lambs on contaminated pasture typically need drenching every 28 days, lambs on cleaner pasture may not.
- Lambs on summer crops should not need drenching every 28 days BUT monitor so you don't get caught out!
- Mixed aged ewes (light and main mobs) and 2-tooth ewes pre-tup.

#### Are eggs present and if so, what type of worms are they?

- Ask for larval cultures to check for worm species including Barbers Pole.

#### Use refugia to protect your susceptible worms

- Share lamb grazing areas with undrenched ewes.
- Consider leaving some lambs untreated after seeking advice.

#### Consider your grazing management

- Grow lambs faster by providing feed with low worm contamination.
  - Regular drenching will not reduce the effects of a daily worm challenge.
- Make a feeding and management plan for ewes to have them at BCS 3 or better at lambing, and enough grass to set stock multiples onto pasture covers of 1,400 kgDM/ha.

### Cattle

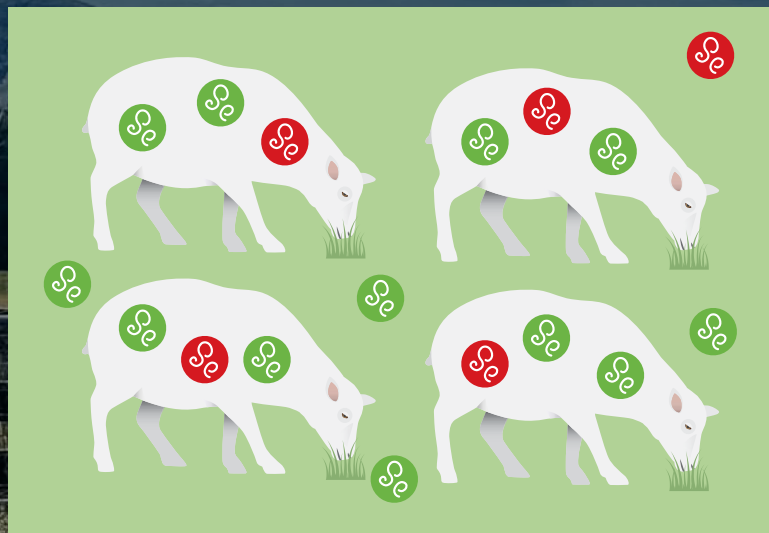
#### Use refugia to protect your susceptible worms

- Share dairy-beef calf grazing areas with older undrenched cattle.



# Refugia

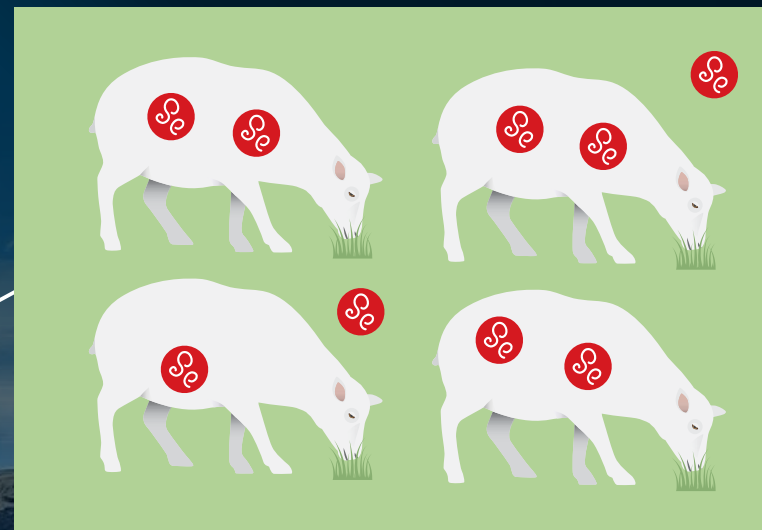
Maintaining worm populations on your farm that are susceptible to drench.



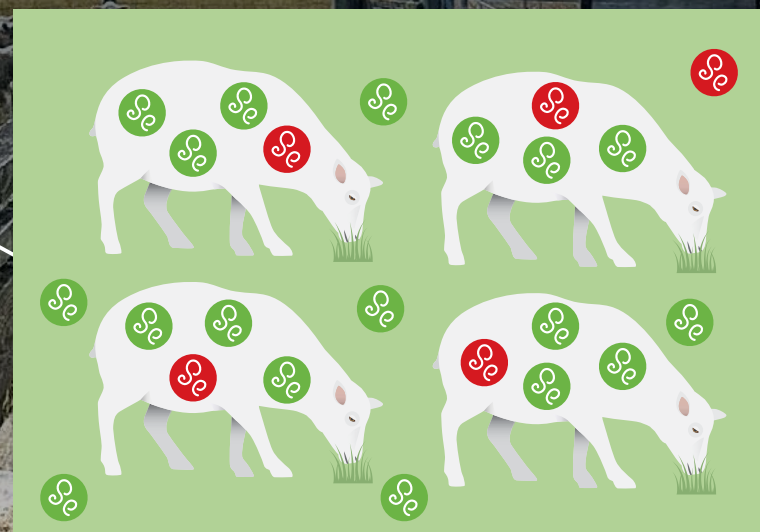
 Susceptible worms

 Resistant worms

Without refugia



 With refugia



## WAYS TO INTRODUCE REFUGIA ON YOUR FARM

- Leave some stock undrenched - for young stock, make sure this is safe to do so.
- Leave older animals undrenched unless there is a demonstrated need.
- Put undrenched older animals on pasture previously grazed by drenched young stock.
- Don't drench animals straight onto new grass or pasture that is likely to have a low level of worm larvae on it.
- Draft out tail-end 2-tooth ewes and graze these with undrenched lambs.
- Keep drench intervals at 28 days or more.



Scan for more information on Wormwise refugia



# March 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
24	25	26	27	28	1	2
3	4	5	6	7	8	9
10 Taranaki Anniversary Day	11	12	13	14	15	16
17	18	19	20	21	22	23
24 Otago Anniversary Day	25	26	27	28	29	30
31	1 Apr	2	3	4	5	6

Daylight Savings  
Time ends

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

**For brought-in trade lambs, use a quarantine protocol to minimise resistant worms coming onto your farm**

- Check out Wormwise for up-to-date information on quarantine treatments.
- Keep lambs off pasture for at least 24 hours. Eggs from resistant worms will pass onto bare ground preventing further growth.
- After the 24-hour quarantine period, initial paddocks for new lambs should be older pasture (not 'clean pasture') to 'dilute out' any worms surviving the quarantine process.

### **Consider your grazing management**

- Do your feed budget to ensure the percent of light ewes is minimised and feed levels are optimal.

### Cattle

**Use refugia to protect your susceptible worms**

- Consider targeted selective treatment for dairy-beef calves as they get bigger and more robust.
  - Leaving a small percentage of the best-performing calves untreated for one drench can help maintain refugia in their grazing area.
  - Use individual ID's and carefully monitor visually.

### **Considerations for drenching**

- Ideally, drench beef calves with an oral combination drench at weaning as opposed to an injection or pour-on.



Scan for more information on Wormwise quarantine best practice



“Good genetics in your ewes underpins a good parasite management programme. Great body condition, well-fed sheep, and the added confidence of those genetics underpins the resilience of the farm system to worms.”

Ginny Dodunski, Wormwise Programme Manager





# April 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
31	1	2	3	4	5	6
					Daylight Savings Time ends	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
Easter Monday	Southland Anniversary Day			Good Friday	Easter Sunday	
28	29	30	1 May	2	3	4
5	6	7	8	9	10	11
					Mother's Day	

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

- Consider a 'knockout' drench for lambs**
- At the 4th to 5th drench, a 'knockout' drench can remove worms that have survived routine combination drenches. The 'knockout' drench should contain a novel active (Monepantel (in Zolvix™) or Derquantel (in Startect®)).

- Consider your grazing management**
- Do your feed budget to ensure the percent of light ewes is minimised and feed levels are optimal.

### Cattle

- Is your calf weaning drench working?**
- Drench check 10 individual beef calves.
- Considerations for drenching**
- Ideally, drench beef calves with an oral combination drench at weaning as opposed to an injection or pour-on.



to find out more about genetic tools and information visit [www.sil.co.nz](http://www.sil.co.nz) or scan the QR code



# Generalised seasonal pattern of infective larval species on the pasture arising from untreated livestock



*Ostertagia (Teladorsagia) circumcincta*



*Nematodirus* species



Barber's pole worm (*Haemonchus contortus*)



*Trichostrongylus* species (*Trichs*)



*Cooperia* species



*Ostertagia ostertagi*



*Strongyloides*



Aug

Sept

Oct

Nov

Dec

Jan

Feb

Mar

Apr

May

Jun

Jul

Spring

Summer

Autumn

Winter



# May 2025



## THINGS TO THINK ABOUT THIS MONTH



Mon	Tue	Wed	Thu	Fri	Sat	Sun
28	29	30	1	2	3	4
				Opening weekend of duck hunting season		
5	6	7	8	9	10	11
					Mother's Day	
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1 Jun
2	3	4	5	6	7	8
King's Birthday						

### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Light ewes at ram removal.
- Trade lambs and ewe replacements 28 days post drench to check for re-infection.
  - Strict drench intervals may not be needed over winter as the lambs' immunity to worms is developing BUT keep monitoring.

#### Consider your grazing management

- Do your feed budget to ensure the percent of light ewes is minimised and feed levels are optimal.

If killing tail-end ewes for dogs, check ewe livers for fluke.


### Cattle

#### Considerations for drenching

A drench pre-winter may benefit:

- R2 cattle and light beef cows that are behind target for autumn liveweight gain.
- Cows that have weaned in poor condition and are not gaining weight.
  - Worms are not the only cause of reduced liveweight gain, seek advice.
- Use a product containing a 'mectin'/ML if drenching R2 cattle or light beef cows.





“Look at your system to see if it looks like it is a high or low risk system for worms... The higher risk system that you’re running, the more monitoring you need to have in place to see where you are at.”

Garth Riddle, vet and Wormwise facilitator, Northland



# June 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
26	27	28	29	30	31	1
2	3	4	5	6	7	8
King's Birthday						
9	10	11	12	13	14	15
16	17	18	19	20	21	22
			Matariki			
23	24	25	26	27	28	29
30	1 Jul	2	3	4	5	6

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Ewes prior to scanning.
- Early lambers prior to pre-lamb vaccinations.

#### Consider your grazing management

- Take out ewes < BCS 3 and preferentially feed.
- Separate triplets at scanning to prevent weight loss in the last trimester.

### Cattle

#### Consider your grazing management

- Ensure all cattle on winter crops are being fed adequately. Insufficient intake is the biggest cause of poor performance on crops.

#### Considerations for drenching

- Drench R1 cattle prior to going onto winter crop.
- R2 cattle that have been performing below average may benefit from a drench prior to going onto winter crop.
  - Parasites are not the only cause of reduced liveweight gain, seek advice.





## High risk factors for increasing drench resistance

Activity	Management
Using long-acting products pre-lambing	Long-term: Look to good-practice feeding and ewe body condition to eliminate need for these products. Short-term: Identify individuals in each mob that can most safely be left untreated, to provide refugia. Try to avoid weaning lambs back onto areas grazed by treated ewes.
Preventative lamb drenching from weaning (low - high risk)	Consider the interval between drenches - 28 days should be the minimum. While drenching lambs on demand based on FEC is likely to reduce selection for drench resistance, careful monitoring needs to be performed to achieve this successfully. It is much easier to do on 'clean' feed (see below).
Drenching onto 'low-contamination /clean' pasture	Drenching sheep onto 'clean' feed like newly sown pasture, can strongly select for drench resistance. Leave a small proportion of the heaviest lambs undrenched or use undrenched older sheep as leaders or followers.
Buying stock with resistant worms	Follow a strict quarantine protocol for incoming stock including holding them off pasture for 24 hours after an effective treatment. Double and triple combinations are not effective quarantine drenches. Alternatively, buy stock from farms able to document a low drench resistance status to avoid the need for this protocol.
Continued use of ineffective product	Use regular drench checks and FECRT to determine drench efficacy on farm.



# July 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
30	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1 Aug	2	3
4	5	6	7	8	9	10

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Ewes prior to scanning
- Hoggets

#### Consider your grazing management

- Separate triplets and preferentially feed so they don't lose weight in the last trimester.
- At ram removal/scanning take out ewes < BCS 3 and preferentially feed.





## Moderate risk factors for increasing drench resistance

---

### Activity

### Management

---

Ewe drenching at docking/  
tailing

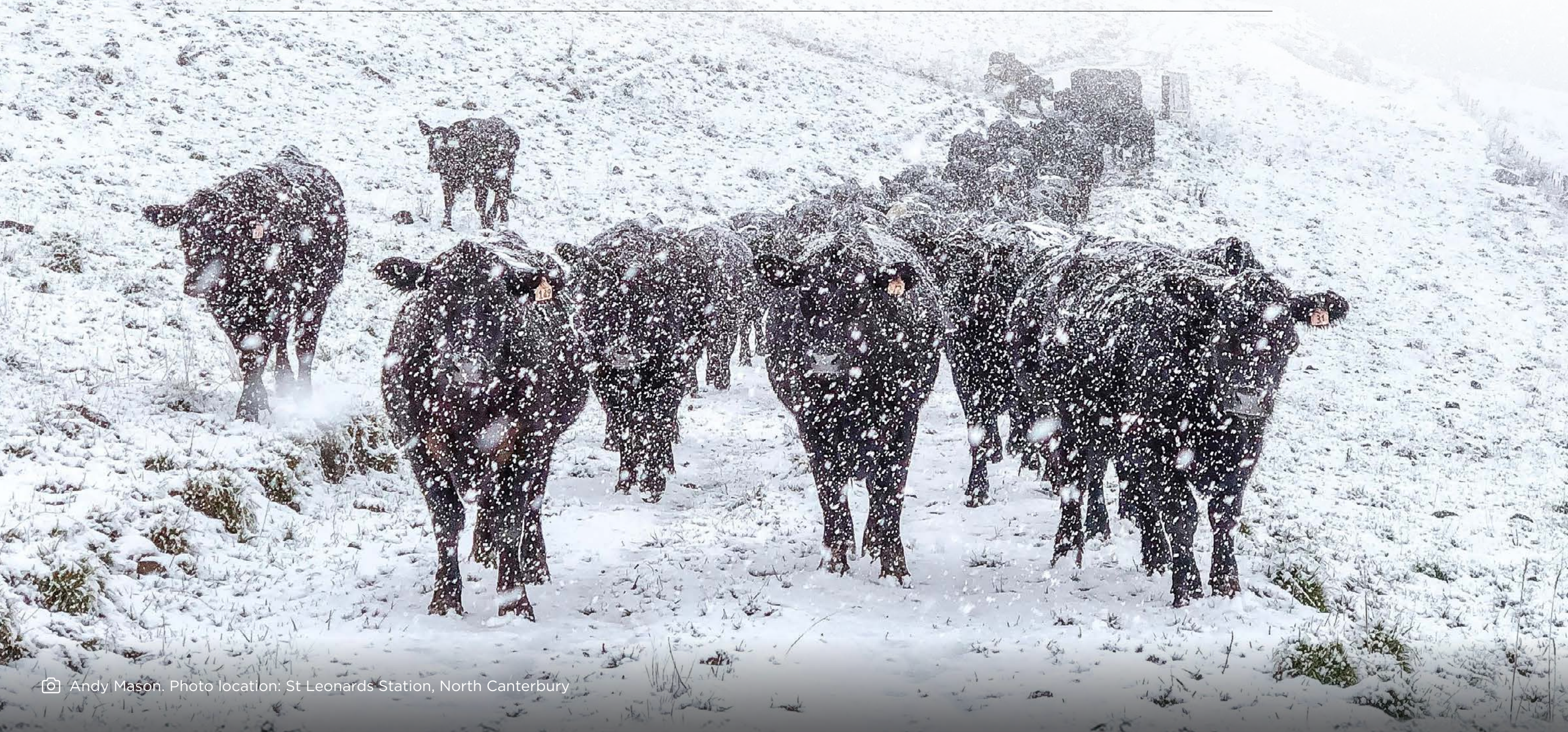
In NZ, ewes usually gain immunity to worms by docking/tailing time. Not drenching will ensure both resistant and susceptible eggs are deposited onto pasture and should not result in production losses if animals are well-fed.

---

Ewe drenching at other times

Do you actually need to drench ewes? Or can other management practices improve ewe performance? Assess the 3 F's: FECs, Feed, and Fatness and consider treating only part of a flock based on risk (e.g. pregnancy rank, age or condition score). 2-tooth ewes can be more prone to parasitism and may need to be considered separately.

---





# August 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1 Sep	2	3	4	5	6	7
					Father's Day	

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Ewes prior to lambing.

#### Are your ewes at BCS 3 or better?

- Monitor ewes pre-lamb. If they are <BCS 3, separate them, give them more feed and lower their stocking density.

#### Consider your grazing management

- Reduce the risk of drench resistance by minimising the need for long-acting treatment in ewes through nutrition.
  - Provide great nutrition pre-lamb and early lactation by set-stocking onto target covers of 1400+kgDM/ha.

### Cattle

#### Considerations for drenching

- It is often not necessary to drench R2 cattle. However, parasites can still be a cause of poor performance in R2 cattle.
- A spring drench in R1 cattle that have the best live weight gain may not be required.
- Use a product containing a 'mectin'/ML if drenching R1 or R2 cattle to target *Ostertagia*.



“[Our Livestock Parasite Management Group] did some economic modelling to see how much drench resistance is costing if you don't do anything about it. This surprised everyone when you plug in the numbers how much that can affect the bottom line.”

Sara Sutherland, Wairarapa veterinarian





# September 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1 Oct	2	3	4	5
6	7	8	9	10	11	12

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Ewes prior to lambing.


#### Considerations for drenching at docking/tailing?

- To reduce the risk of drench resistance avoid whole-flock docking/tailing drench as an annual policy.
  - A ewe drench at docking/tailing is unlikely to give a positive production response.

#### Consider your grazing management

- Reduce the risk of drench resistance by minimising the need for long-acting treatment in ewes through nutrition.
  - Provide great nutrition pre-lamb and early lactation by set-stocking onto target covers of 1400+kgDM/ha.
- Monitor pasture covers to ensure sufficient feed for ewes over lambing through to docking/tailing. Plan for options to increase feed to mobs if needed.



A photograph of a rural landscape featuring rolling green hills under a clear sky. In the foreground, a circular frame made of metal and wood is superimposed over the scene. Inside the frame, several black cattle are grazing on a field of large-leafed green plants. In the background, a herd of cattle is visible on a distant ridge. The lighting suggests late afternoon or early morning, with long shadows and warm tones.

“It is scary at first, but if you have the feed and the information behind you to make an informed decision then it is pretty simple. It’s trying to get out of that habit of drench, drench, drench.”

Carlos Segura, sheep and beef farmer, Manunui Station, Taumaranui



# October 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
29	30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1 Nov	2
3	4	5	6	7	8	9

Labour Day

Marlborough Anniversary Day

Hawke's Bay Anniversary Day

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Ewes given a long-acting treatment pre-lamb during the payout period.
  - If eggs are present in treated ewe samples, request a larval culture. This will show which worm species are surviving. Seek management advice.

#### Do you know what drenches are effective on your farm?

- Plan to do a FECRT in summer if you have not done one in the last 2-3 years. This will require some lambs to be left untreated at the first drench.


#### Considerations for drenching

- Lambs do not require a docking/tailing drench except in extreme situations of low feed and poor ewe milk production.
- Drenching ewes at docking/tailing time is unlikely to result in positive production responses but may help to dry up dags.
  - The window of opportunity for fast lamb growth, and high or extended lactation from ewes is largely closed.

#### Consider your grazing management

- Look at all management options to improve feed quality and quantity to lambs and ewes from docking/tailing onwards.
  - Lambs are now functioning ruminants and consume an increasing amount of pasture.



A herd of black sheep is grazing on a grassy hillside. The sheep are scattered across the slope, with some in the foreground and others further up the hill. The background shows a valley with a river and distant hills under a blue sky with scattered clouds. The overall scene is a rural landscape.

“We’ve gotta make a change. Once you commit to not drenching, you need to be more conscious of your feed – feeding properly. I would say a lot of drenching gets done because it is just what we do and they probably don’t need it... And I don’t miss drenching ewes that’s for sure!”

Andrew Law, sheep and beef farmer, Southland



# November 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
27 Labour Day	28	29	30	31	1	2
3 Marlborough Anniversary Day	4	5	6	7	8	9
10	11	12	13 Canterbury Anniversary Day	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1 Dec Chatham Islands, and Westland Anniversary Day	2	3	4	5	6	7

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Do you need to drench and when?

Do a FEC test on:

- Several lamb mobs to understand their worm challenge level.

#### Is your first lamb drench working?

- Drench check 10 individual lambs.

#### Do you know what drenches are effective on your farm?

- If you are doing a FECRT this summer, discuss and book with your advisor. Your FEC tests will inform you when there are enough eggs to start the FECRT.

#### Considerations for pre-weaning/weaning lamb drench

- Seek advice on the use of pre-weaning/weaning lamb drench. A 'traditional' first choice of lamb drench may no longer be appropriate.

### Cattle

#### Considerations for drenching

- Dairy beef calves should not need drenching until after weaning.
- Ensure you know what you are treating. FEC testing can help determine if dirty backsides are a result of worms, coccidiosis or other diseases.



“There is no shame in identifying drench resistance on your farm. First, don’t panic. Second, use the most effective drench you can to tidy things up. Third, take a step back, have a look at your system and get some advice to figure out what you are going to do next year.”

Ginny Dodunski, Wormwise Programme Manager





# December 2025



Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	2	3	4	5	6	7
Chatham Islands and Westland Anniversary Day						
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
		Christmas Eve	Christmas Day	Boxing Day		
29	30	31	1 Jan	2	3	4
		New Year's Eve	New Year's Day	Day after New Year's Day		
5	6	7	8	9	10	11

## THINGS TO THINK ABOUT THIS MONTH



### Sheep

#### Is your weaning drench working?

- Drench check 10 individual weaned lambs.

#### Are eggs present and if so what type of worms are they?

- Do a larval culture on any positive FEC test to know what worm species are surviving your drench.

#### Considerations for pre-weaning/weaning lamb drench

- Seek advice on the use of pre-weaning/weaning lamb drench. A 'traditional' first choice of lamb drench may no longer be appropriate.



Wormwise

Funded by Beef + Lamb New Zealand

