Recommendation Guide for Cattle

Five important points

1. Average Daily Gain (ADG) and lactation decrease as WEC increases.
2. Mortality risk increases as WEC increases, particularly with barber's pole worm.
3. Plan WEC tests 10d before musters for management events to allow count and larval diff to be completed. Different species of worms have different impacts on cattle.
4. Consider the farm as a whole and not just individual mobs of cattle, especially when preparing low-risk weaning paddocks.
5. Consult **ParaBoss.com.au** for information about cattle parasites and treatment options.

Interpret Worm Egg Counts (WECs) and Worm ID tests – follow the steps

A

WEC - Categorise strongyle WECs into low, medium, high & very high risk.
Nematodirus WEC is counted separately- impact is similar to strongyle WEC.

Risk	Beef cattle (epg)*	Decreased ADG (%)*	Decreased lactation
Low	25-50	5%	5-10% average
Medium	50-150	7%	
High	150-500	10%	
Very high	>500	15%+	

B

Worm ID tests provide details of the strongyle worms present

- Brown stomach worms (*Ostertagia)* may be up to 90% inhibited and not laying eggs. Only lay 200 eggs/d so important even at low WECs.
- Barber's pole worms and *Cooperia* lay about 1-2,000 eggs/day. Factor WECs up (x2) if *Haemonchus/Cooperia* above 40% in mob.
- *Cooperia* may affect appetite and decrease growth rates even at moderate WECs. Various species of *Cooperia* have different impact.

C

Consider how the SNAPP features will impact WEC categories:

1. Season- rain and warm weather (>20^{o}C) will allow rapid development of larvae. Cool weather will allow good survival of *Ostertagia* and *Cooperia* eggs and all larvae on pasture and, while frosts and cold weather will kill barber's pole worm eggs, but larvae will still survive. Hot dry weather will kill all worm eggs and larvae, but protection of dung pats allows eggs to survive and hatch after rain events.
2. Nutrition – cattle on good feed (>1,500 kg/DM/ha) with high palatability and protein will have some resilience against worms. Cattle on low energy or protein ration or pastures with low palatability have high susceptibility.
3. Animal- young animals are most susceptible as they develop some immunity after 18-24m of age. Check body condition score and clinical signs including pale colour and scours. Activity (walking and feeding) decreases with higher WECs.
4. Paddock- permanent pastures with low sward & broad-leaf plants have highest larval contamination. Lower survival of larvae with pasture rotation (following sheep), spelling, cropping or haymaking, high % upright plants.
5. Previous tests- WEC for this mob, resistance test on this farm.

❖ ADG impacts based on various research studies in feedlots and on pasture. See George (2020) MLA report B.FLT.3002, Shephard et al. (2022) Vet Parasitol. 309