PRACTICE ABSTRACT: 33

Mixed species grazing

Mixed-species grazing can improve pasture use and reduce parasite burdens

The Opportunity

Mixed-species grazing is a strategy whereby cattle and sheep/goats are grazed together or alternately, offering a natural and efficient solution to worm control. Most gastrointestinal parasites are host-specific, therefore alternating species on the same pasture interrupts the parasite life cycle, lowering infection risk for both groups while improving grass utilisation and regrowth.

Results in the field

Research and on-farm trials show that mixed-species grazing can significantly reduce faecal egg counts and improve daily liveweight gains without additional anthelmintic treatments. Cattle can “clean” pastures for sheep/goat parasites, and vice versa, while allowing more grass to be grazed than in single-species systems. This approach reduces anthelmintic use and enhances pasture productivity.

Grazing sheep and cattle together, either at the same time or alternately, means that each can remove each others’ parasites from the pasture while also reducing build-up of their own parasites due to lower effective stocking density. Horses can also be integrated alongside ruminants. Care must be taken with parasites that cross between host species such as liver fluke.

Practical considerations

Mixed-species grazing is particularly suitable for farms already managing both cattle and small ruminants. It supports integrated parasite management and sustainable pasture use without additional chemical inputs. The system could use different species combinations, for example horses and cattle, or horses and sheep, or horses, cattle and sheep/goats.

Careful attention should be paid to fencing, efficient grass utilisation, and the avoidance of stressful or aggressive interactions between species.

As with all new management systems, monitoring of health, welfare and performance is recommended. Adjustments should be made for local circumstances and over time to arrive at a robust and workable system for a specific farm.

Additional information

Key facilitating elements include access to appropriate fencing and water systems, good livestock handling facilities, and grazing planning advice. Different livestock species graze differently and adjustments to planning will be necessary to ensure adequate nutrition and efficient pasture utilisation. If particular livestock species favour certain areas of the pasture these can become over-grazed and more contaminated by parasites.

Simultaneous co-grazing is only possible with behaviourally compatible livestock, and negative interactions must be monitored carefully. These depend on the breed and temperament of the specific animals involved.

Alternate grazing is also possible such that different species are not present on the same pasture at the same time but follow each other. The order, intensity and duration of such sequential co-grazing should take grazing behaviour, sward height and parasite contamination into account. For example, cattle typically graze at a higher height than small ruminants, so it is logical to give them first access to higher swards with small ruminants then utilising the residual.

Some parasites can cross between ruminant species, notably liver and rumen fluke and some gastrointestinal nematodes. If liver fluke is a problem on the farm great care should be taken especially with pasture grazed by sheep and later by cattle. Among nematodes, *Trichostrongylus axei* can infect cattle, sheep, goats and horses, while *Nematodirus battus* and *Haemonchus contortus* are parasites of small ruminants that can also cause disease in cattle. Sheep and goats share many parasite species and mixed grazing will help little. Drug resistant parasites could also cross species.

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