PRACTICE ABSTRACT: 7

Sustainable PARasite Control in Grazing Ruminants

TITLE: Pasture rotation - practical tips for goat and sheep farmers on how to reduce the frequency of anthelmintic treatment

Pasture rotation, or rotational grazing, is a practical livestock management strategy where sheep and goats are systematically moved through a series of subdivided paddocks, allowing grazed areas time to rest and recover. This approach improves pasture productivity, forage utilization, and persistence by preventing overgrazing and promoting even grazing patterns. In practice, producers use temporary or permanent fencing to create multiple paddocks, moving animals every few days based on forage availability and growth rates. Water access is managed through fixed or portable systems to support frequent movement.

A key benefit of pasture rotation is the reduction of internal parasite burdens. By rotating sheep and goats to fresh paddocks before parasite eggs are deposited in manure and hatch and develop into infective larvae (typically within 4–5 days), the risk of animals ingesting parasites is minimised. Rest periods between grazing allow time for parasite larvae to die off, further reducing infection pressure. This system also encourages healthier animals, more resilient pastures, and can reduce reliance on chemical dewormers.

Overall, pasture rotation in sheep and goats is a cost-effective, sustainable practice that enhances animal health, optimizes forage use, and supports long-term pasture and flock productivity.

How the rotation works:

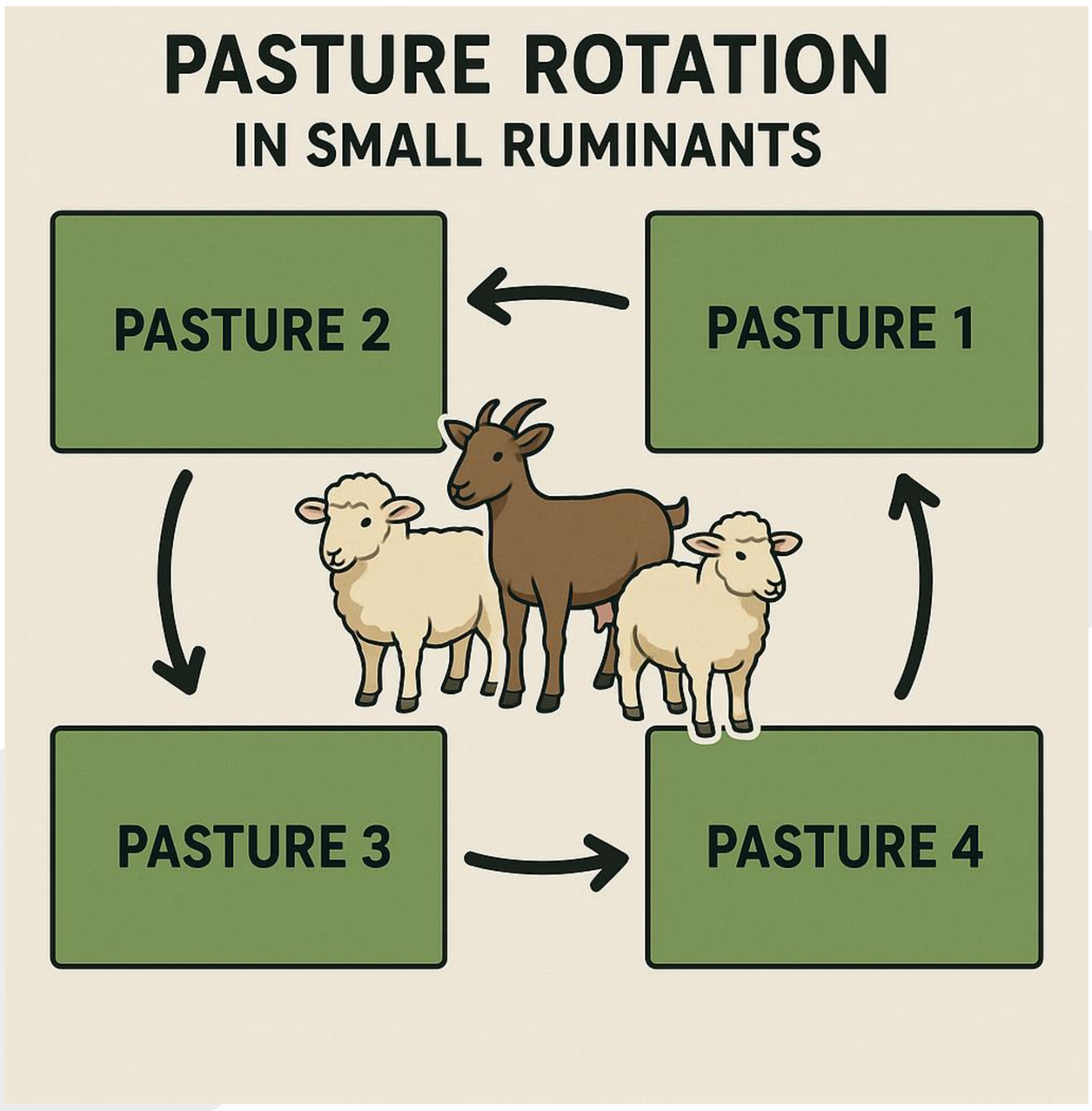
- Start: Sheep and goats begin grazing in Paddock 1, while Paddocks 2, 3, and 4 are resting and regrowing.
- Move: After a set grazing period (e.g., 1–2 weeks), animals are moved to Paddock 2. Paddock 1 now begins its rest period.
- Continue: The process continues, with animals moving sequentially through each paddock.
- Cycle: Once all paddocks have been grazed, the cycle repeats, always allowing each paddock a sufficient rest period before being grazed again.

Key Elements:

- Water Access: Place water sources centrally or portable, so animals have access regardless of paddock location.
- Fencing: Use permanent or temporary fencing to subdivide pastures.
- Rest Periods: Each paddock rests and regrows while others are grazed, reducing overgrazing and parasite risk.
- Rotation Timing: Adjust grazing and rest periods based on forage growth and season (e.g., 1–2 weeks grazing, 3–6 weeks rest).

Alternative Designs:

- Clockwise/Counterclockwise Movement: Animals can move in a set direction through paddocks, returning to the start after a full rotation.
- Central Water Source (Wagon Wheel/Cell Grazing): Paddocks radiate from a central water point, and livestock move outward in rotation.



By following these guidelines, farmers can implement a pasture management strategy to control gastrointestinal nematodes while reducing the risk of anthelmintic resistance in their flocks and herds.

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