🛡️ Livestock Parasite Management

Internal parasites, particularly gastrointestinal nematodes (worms), are a major health and economic concern for livestock producers, especially in small ruminants (sheep and goats). A strategic, integrated approach is key to keeping your animals healthy and slowing the development of dewormer resistance.

👁️ Targeted Selective Treatment: The FAMACHA® System

The **FAMACHA® (FAffa MAlan CHArt) System** is a tool used primarily in sheep and goats to monitor the level of anemia caused by the barber pole worm (*Haemonchus contortus*), a blood-sucking parasite. It promotes **Targeted Selective Treatment (TST)**, meaning you only deworm the animals that actually need it.

How to Check the FAMACHA® Score

This system uses a color-coded card to assess the color of the animal's lower eyelid mucous membranes (conjunctiva), which reflects the amount of red blood cells (anemia).

1. **COVER:** Gently cover the top eyelid with your hand to shield the eye from sunlight.
2. **PUSH:** Press gently on the eyeball, through the top eyelid.
3. **PULL:** Gently pull down on the lower eyelid. This exposes the mucous membrane.
4. **POP:** The membrane color "pops" out. **Compare this color** immediately to the official FAMACHA® card.
    - **Score 1 (Red):** Not anemic - **DO NOT TREAT.**
    - **Score 2 (Red-Pink):** Not anemic - **DO NOT TREAT.**
    - **Score 3 (Pink):** Mildly anemic - **TREAT** if the animal is young, lactating, or showing other symptoms. Otherwise, monitor closely.
    - **Score 4 (Pink-White):** Anemic - **TREAT IMMEDIATELY.**
    - **Score 5 (White):** Severely anemic - **TREAT IMMEDIATELY.**

Important Note: FAMACHA® is *only* an indicator of barber pole worm infection and must be used as part of a total control program. **Proper training is essential** before implementing this system.

🌿 Pasture Management: Breaking the Parasite Cycle

Infective larvae are picked up as animals graze. Managing your pasture helps reduce the number of parasites available for ingestion.

Rotational Grazing for Parasite Control

Continuous grazing allows parasites to thrive. A well-designed rotational system helps disrupt the worm lifecycle.

- **Move Frequently:** Move animals to a new paddock when the grass height gets low (below 3–4 inches). In warm, wet conditions (high parasite risk), consider moving every **4–7 days**.
- **Allow Adequate Rest (Refugia):** Pastures should be rested for a minimum of **30 to 60 days** (depending on weather and parasite type) to allow most of the infective larvae to die off before the animals return. The longer the rest, the cleaner the pasture.
- **Graze Strategically:**
    - Graze the most susceptible animals (young, lactating) on the "cleanest" pastures (those rested the longest or previously grazed by a different species).
    - **Co-Grazing:** Alternate or mix different livestock species (e.g., cattle and sheep). Most sheep parasites cannot survive in cattle and vice-versa, which effectively "vacuums" the pasture clean.

Stocking Rate and Density

Overcrowding your pasture increases contamination and forces animals to graze closer to manure, where larvae are concentrated.

Concept	Definition	Goal for Parasite Control
Stocking Rate	The number of animals a pasture can support over a long period. (e.g., 2 animals/acre for the whole season)	**Match your stocking rate to your land's carrying capacity.** Overstocking leads to high parasite loads and overgrazing.
Stocking Density	The number of animals on a *specific area* at *one point in time*. (e.g., 50 animals on a half-acre plot for 3 days)	**Use a high density with rapid rotation.** This improves manure distribution and forces uniform grazing, then the animals are moved off quickly for a long rest period.

Pro Tip: In areas of moderate productivity, a basic stocking rate might be around **400 lbs. liveweight per acre** for the entire season. Your specific needs will vary greatly by region and forage type.

⚕ Working with Your Veterinarian

Never guess about parasite control. Partner with your veterinarian to develop a customized and effective health plan.

Developing a Strategic Deworming Schedule

The goal is to deworm *when* it matters most to reduce contamination, not just on a calendar date.

- **Fecal Egg Counts (FEC):** This is the single most important diagnostic tool. Your vet can perform an FEC to identify which parasite species are present and the severity of the infection.
- **Targeted Timing:**
    - **Small Ruminants (Sheep/Goats):** Often relies heavily on FAMACHA® and FEC results. **Avoid** blanket deworming unless advised by your vet.
    - **Cattle:** Deworming is often strategic—before turning out to pasture, mid-season, or at the end of the grazing season, depending on your operation and climate.
    - **Horses:** Deworming is typically based on an individual's FEC results to classify them as a low, moderate, or high shedder.
- **Dewormer Rotation:** Using the same dewormer (or class of dewormer) repeatedly leads to resistance. Your vet can advise you on rotating drug classes and verifying that the product is actually effective on your property using a **Fecal Egg Count Reduction Test (FECRT)**.

Crucial Steps to Discuss with Your Vet:

1. **FEC Testing:** Establish a routine for testing your herd/flock.
2. **Dewormer Efficacy:** Confirm which dewormers work on your farm through FECRTs.
3. **Treatment of New Animals:** Establish a quarantine protocol for all new animals, which should include deworming and an FEC to ensure they don't bring resistant parasites onto your property.
4. **Cull Protocol:** Identify and cull animals that repeatedly require deworming (high-shedders), as they are genetically susceptible and contaminate the pasture for others.