

# Small Ruminant Health Evaluation for Parasites

2020 University of Hawaii at Manoa College of Tropical Agriculture and Human Resources Virtual Livestock Industry Field Day

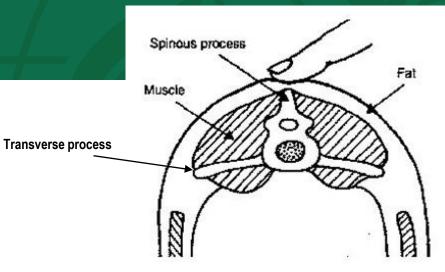
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## Five-point check for health

#### **1.** body condition scoring



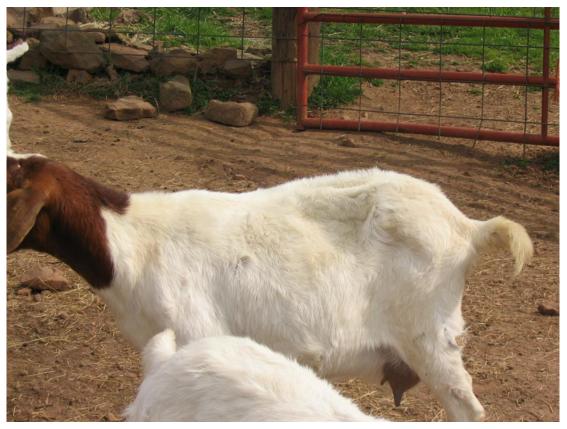
Score	Spinous Process	Transverse Process	Loin Eye Muscle	Fat Cover Over Loin Eye Muscle
1	sharp and prominent	sharp	shallow	none
2	sharp and prominent	smooth, lightly rounded	medium depth	little
3	smooth and rounded	smooth, well-covered	full	medium
4	palpable as firm line with pressure	not palpable	full	thick
5	not palpable	not palpable	very full	very thick

Images: Ewe Lamb Nutrition, Susan Schoenian, UMD, NCAT/WSARE Table: Sheep & Goat Medicine, Pugh & Baird, 2012. Elsevier Inc.





### BCS 1/5



## BCS 2/5





BCS 3/5







BCS 4/5









## Five-point check for health

#### 2. Jaw swelling (edema)

- "bottle jaw"
- Can be a symptom of parasitism







## Five-point check for health

- 3. diarrhea ("dags")
  - Can see soiling of the britches area
  - Not specific for internal parasites

#### What are dags?

Dried feces left dangling on the wool on a sheep's rear end.

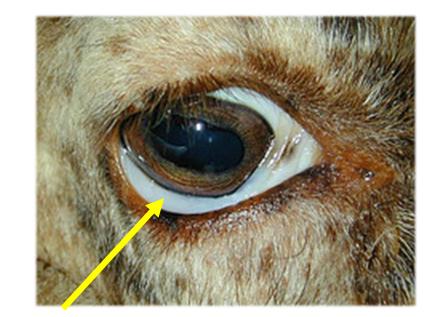


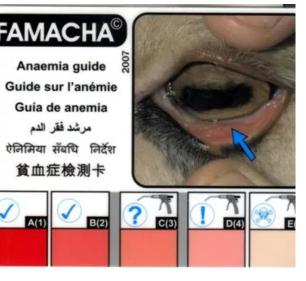




## Five-point check for health

- 4. FAMACHA (eye) score
  - Francois "Faffa" Malan Chart
  - Evaluate level of anemia
    - Evaluates level of Barber Pole Worm infection
    - (1 & 2) good
    - (3) treat if there are other indications
    - (4) treat
    - (5) treat, this animal is critically ill

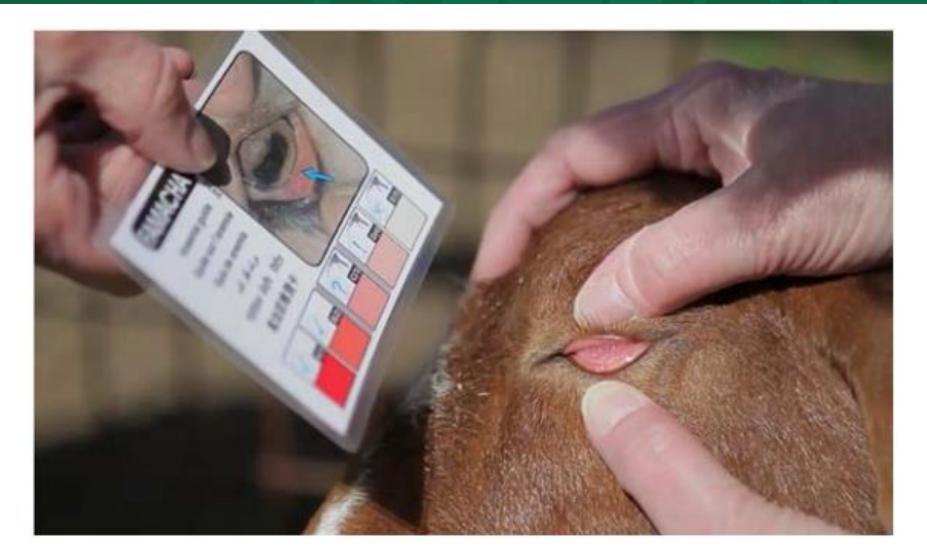






Images: Susan Schoenian, NCAT, WSARE; www.wormx.info.org





https://web.uri.edu/sheepngoat/files/FAMACHA-Scoring\_Final2.pdf



## Five-point check for health

**5.** nasal discharge or coat appearance.





Images: Susan Schoenian, NCAT, WSARE



## Specific tests for internal parasites

- Fecal examination
- Fecal egg count
- Fecal egg count reduction test (FECRT)
- Drench-Rite assay for dewormer resistance





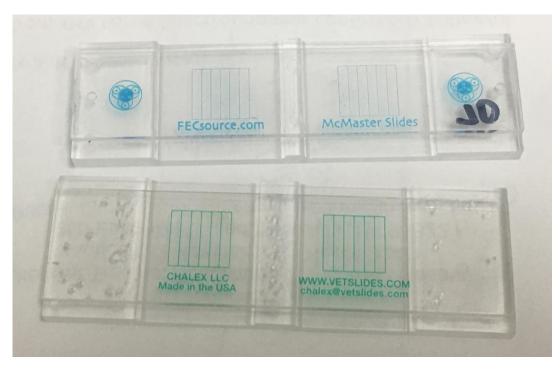
## Fecal examination (qualitative, with limits)

- Easy to perform
- Tells you what type of parasites your animal has
- Tells you relative numbers
- Limitations:
  - Many of the common parasite eggs look alike (many of the Strongyles)



## Fecal egg count (FEC)

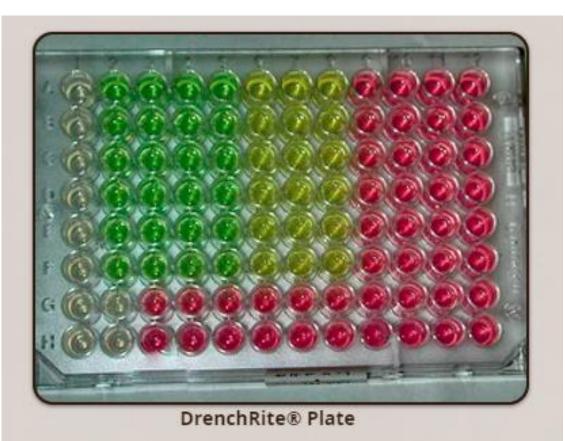
- Determines the # of eggs/gram
  - Strongyle eggs
  - Strongyloides
  - Tapeworm
  - Other
- Fecal egg count reduction test (FECRT)
  - To determine efficacy of your deworming
  - Repeat the FEC 10-14 days after the last dewormer





## Larval Development Assay

- Drench-Rite assay
- To detect dewormer resistance
- Focuses on the Barber Pole worm
- Herd level test
- Feces cannot touch the ground/ plants before collection





## **Useful websites**

- <u>https://www.wormx.info/</u> (American Consortium for Small Ruminant Parasite Control)
- <u>https://web.uri.edu/sheepngoat/famacha/</u> (online FAMACHA certification)

