

## Integrative Parasite Management: The Barber Pole Worm

### Key Points

#### General

1. Integrative management is holistic: deworming with refugia, pasture management, and genetic selection.
2. The Barber Pole worm is by far the greatest parasite threat to sheep. It sucks blood, causing anemia, which can lead to poor lamb gain, reproduction, and even death.
3. You must have grass. Irrigated pastures are great environment for the Barber Pole Worm. Range: probably not, but watch out for sub irrigated pastures and irrigated pastures at ranch headquarters where rams, old ewes, and bum lambs are grazed.
4. Barber Pole Worm Life cycle takes 22 to 28 days, depending on temperature and moisture. It involves adult worms living in the sheep abomasum and larvae on grass.
5. Adult worms can live 6- 8 months in the abomasum, shedding several thousand eggs per day.

#### Dewormers and Parasite Resistance to Them

1. ALWAYS FAMACHA FIRST BEFORE DEWORMING. DEWORM F3-F5 ANIMALS, CREATING REFUGIA.
2. Three classes of dewormers
3. Cost to deworm ranges from \$0.24 to \$0.84 per cwt of animal.
4. Dewormer resistance is brought on by exposure to the dewormer.
5. Use FEC, FAMACHA scoring and the DrechRite Assay to determine if a dewormer is working.

#### FAMACHA and Refugia

1. Refugia limits exposure to the dewormer, allowing ineffective worms to breed with infective worms, and thus diluting down the genetic base of the worm population in a flock.
2. A FAMACHA card quantitatively determines the amount of anemia in the animal.
3. FAMACHA scoring provides a way to selectively deworm sheep, creating refugia.
4. Deworm F3, F4, F5 sheep and leave the rest. Typically you will only deworm 20-30% of the flock.

#### Grazing to Control the Barber Pole Worm

1. Strategic grazing limits ingestion of worm larvae.
2. The three grazing rules to limit infection are:
  - 35 to 40 days of pasture rest
  - 4 day or less paddock grazing periods
  - 6-8 inch paddock residual
3. Multi species grazing is another tool to control the Barber Pole Worm.
4. Fenceline weaning creates less stress on the lambs, decreasing their susceptibility to worm infection.

#### Genetic Selection

1. Genetic progress can be made in breeding less susceptible sheep. Inheritance is relatively high and sires greatly determine the genetics of a flock.

