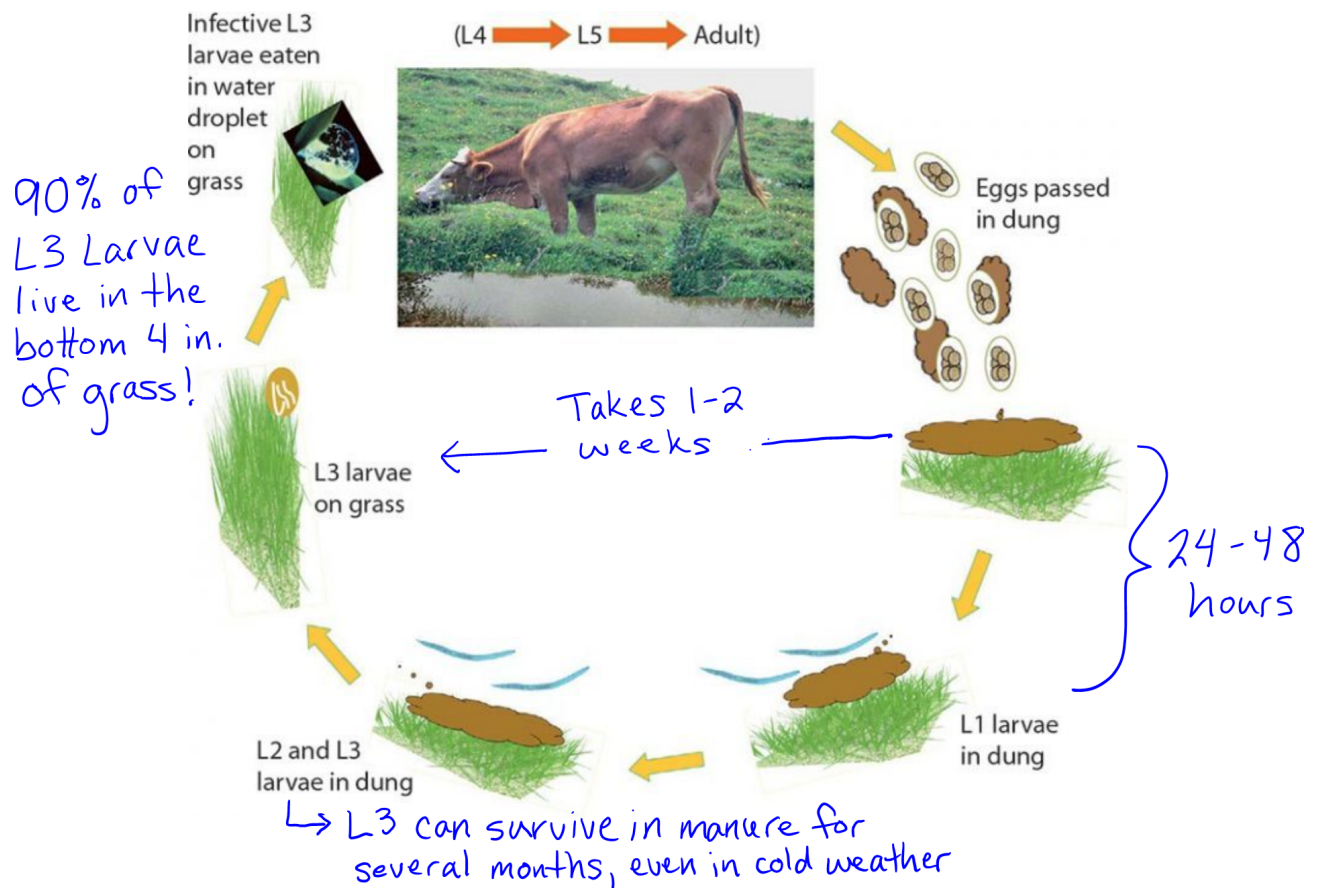


# Beef Cattle Worm Management

## Life Cycle of Cattle Gastrointestinal Worms:



- Adult cattle on a **good plane of nutrition** typically shed low levels of worm eggs
- Young stock shed large volumes of worm eggs until they develop some degree of immunity

## Beef Cattle Worm Management

<b>Cattle Dewormers</b>		
<b>Drug Class</b>	<b>Medication</b>	<b>Products Available</b>
<b>Benzimidazoles</b> - Oral drench	Fenbendazole	Panacur, SafeGuard
	Albendazole	Valbazen
	Oxfendazole	Synanthic
<b>Macrocyclic Lactones</b> - Pour On - Injectable	Ivermectin	Ivomec, Vetrimec, others
	Moxidectin	Cydectin
	Eprinomectin	Eprinex, LongRange
	Doramectin	Dectomax
<b>Nicotinic Agonists</b> - Oral feed/water additives	Morantel	Rumatel
	Levamisole	Prohibit, Levasol
<b>Combination Products</b> - Injectable	Levamisole + Doramectin	Valcor

No new dewormers have been developed since 1981. Because of wide-spread, repeated use over the past 40+ years, worms have become **resistant to dewormers**, especially the Macrocyclic Lactones (Ivermectin-type dewormers). This means we need to think differently about parasite control to ensure we have effective treatments in the future.

# **Beef Cattle Worm Management**

## **Developing an effective parasite control program:**

### **1. Choose the most effective dewormer**

- a. **Pour-on dewormers are least effective** for internal parasites
  - i. But these are effective against lice/external parasites
- b. Injectable dewormers are more effective than pour-ons
- c. **Oral dewormers are the most effective**—more worms come in contact with the drug
- d. Using a combination of products from 2 different drug classes will *significantly* increase efficacy!

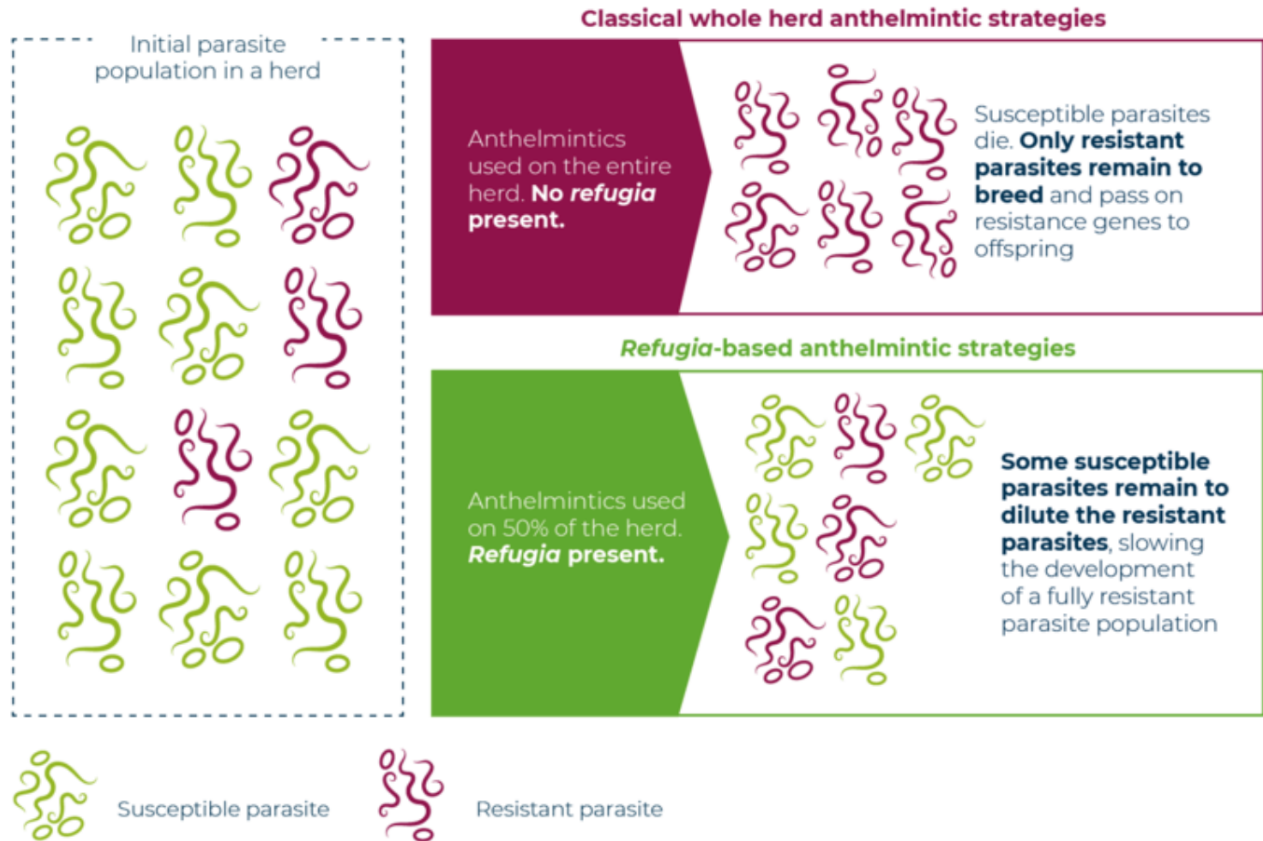
### **2. Grazing management:**

- a. Do not graze pastures below 4” of growth (90% of the infective L3 larvae live in the bottom 4” of grass)
- b. If grazing on a rotation, move animals to clean pastures every 7 days (before larvae reach the infective L3 stage)
  - i. Moving animals to clean pasture about 5-6 days after deworming may be especially helpful
  - ii. Pastures should be taller than 4” before being grazed again
- c. Worms are species-specific so grazing horses or sheep after cattle can “clean up” cattle parasites from pasture
- d. Worm loads will be higher during drought years when grass is grazed to the dirt
  - i. May not need to deworm in years with ample tall grass

### **3. Refugia!!**

- a. Refugia: the portion of a worm population that has not been exposed to a dewormer (these worms are “in refuge” from the medication)
- b. Selective deworming of the herd allows “Refugia” to dilute the population of worms that are resistant to dewormers

# Beef Cattle Worm Management



## c. Practical selective deworming/refugia-based strategies:

- i. Deworming 70-90% of each production group
  1. Do not treat the heaviest/healthiest animals
- ii. Test the herd! Some groups may not need to be dewormed.
  1. CMVS offers fecal egg counts to monitor for parasites
    - a. Clients are eligible for 10 free individual or pooled tests per year and more samples can be sent to Merck for additional free testing
  2. Bring 10-20 fresh (<24 hours old) fecal samples per production group to the clinic
  3. We'll determine if a worm problem exists and help you decide which groups need to be treated
- iii. Deworm 90% of calves or yearlings and leave cows untreated
  1. This works for herds that do not have a worm problem in the older cows