



Goat Care & Handling

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<http://extensionpubs.unl.edu/publication/9000017564927/goat-production-basics-in-nebraska-g2267/>

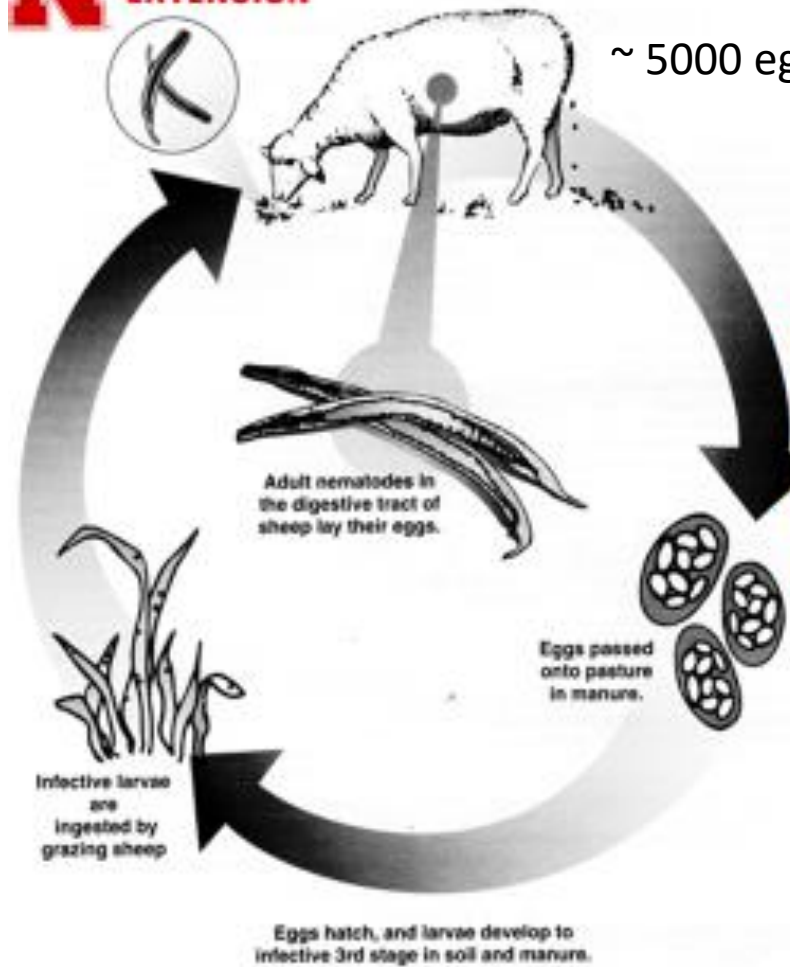


Basic Tips About Goats

- Goats are referred to as small ruminants meaning they have a four-chambered stomach like sheep and cattle.
- Goats do not like to get wet and will seek shelter in the rain. (they were developed in desert climates)
- Goats prefer to browse brush and trees. They will get on their hind legs to eat.
- Goats seem to be more susceptible to parasites in grazing situations than cattle.
- Goats can be contained in properly constructed fences.
 - More strands of electric wire will be needed to control goats than are needed for cattle. The fence should have two or three strands for division fences and at least five strands for the perimeter.
- Fences – 42” high predator proof, galvanized 5’ livestock panels w 4” squares
- Barns/Sheds – 15 ft² per goat, ventilation, cool in the summer, protection from weather
- Feeders – hung at shoulder height

Health Issues (Parasites)

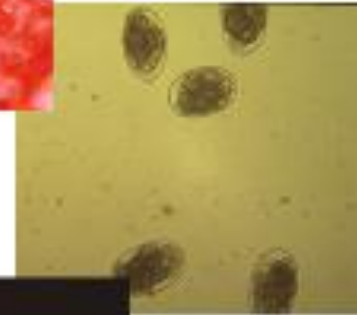
- The No. 1 cause of death in goats in the United States is the blood- sucking gastrointestinal parasite *Haemonchus contortus*, or barber pole worm.
 - The reproductive capacity of this parasite and its resistance to many dewormers make parasite control one of the limiting factors in goat production.
- Internal parasite management to reduce parasite loads includes
 - Proper and rotational grazing allowing at least **five to six weeks** between each grazing.
 - Frequent and timely animal inspection using the FAMACHA© system to aid in diagnosing anemia resulting from the internal blood-sucking parasite *Haemonchus contortus* and to determine the need for deworming, <http://www.wormx.info/>
 - Selective deworming products and correct dosages.
 - Eliminating animals from the goat herd that need frequent deworming treatment.



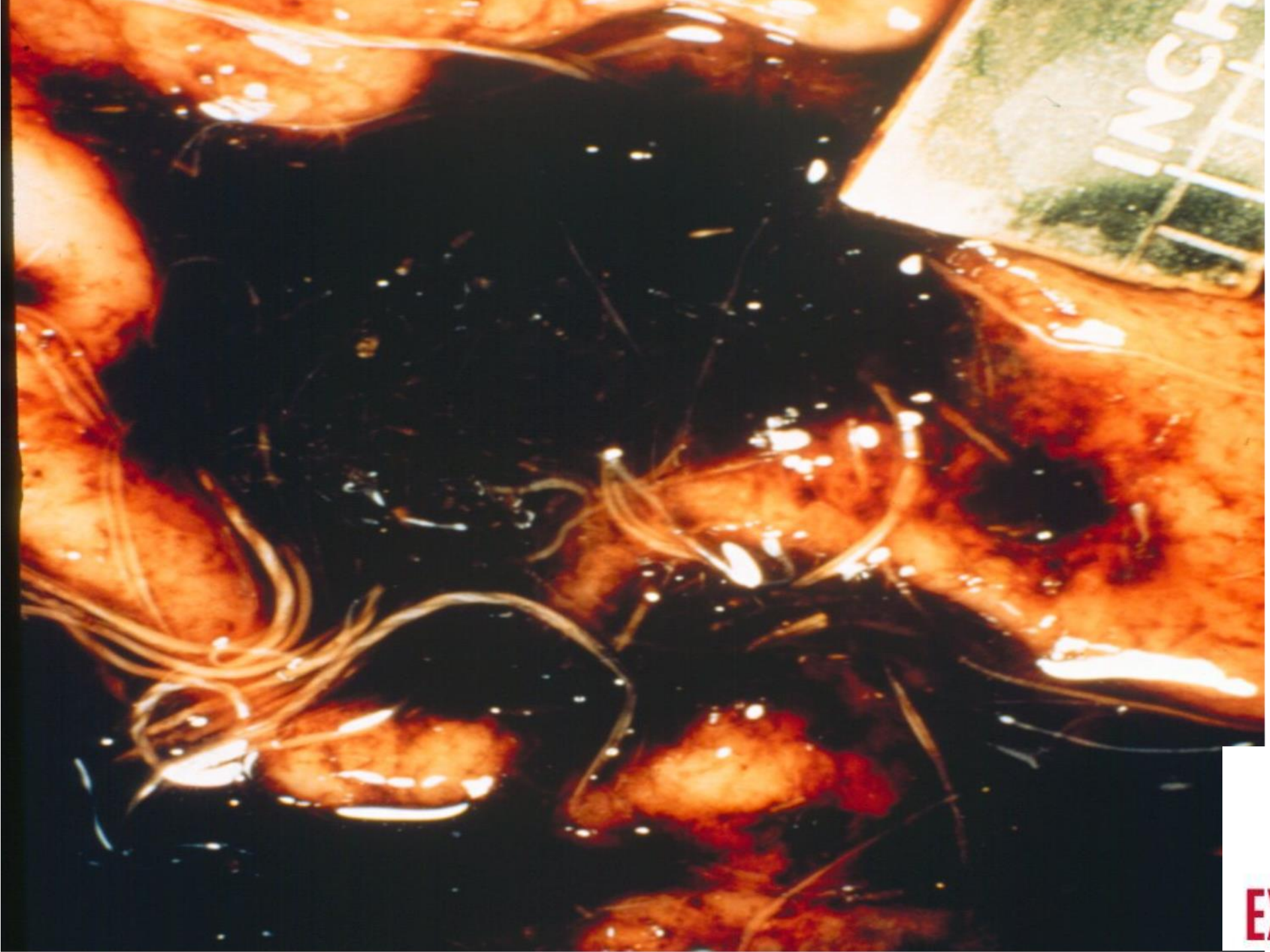
~ 5000 eggs per day

Life Cycle of *H. contortus*

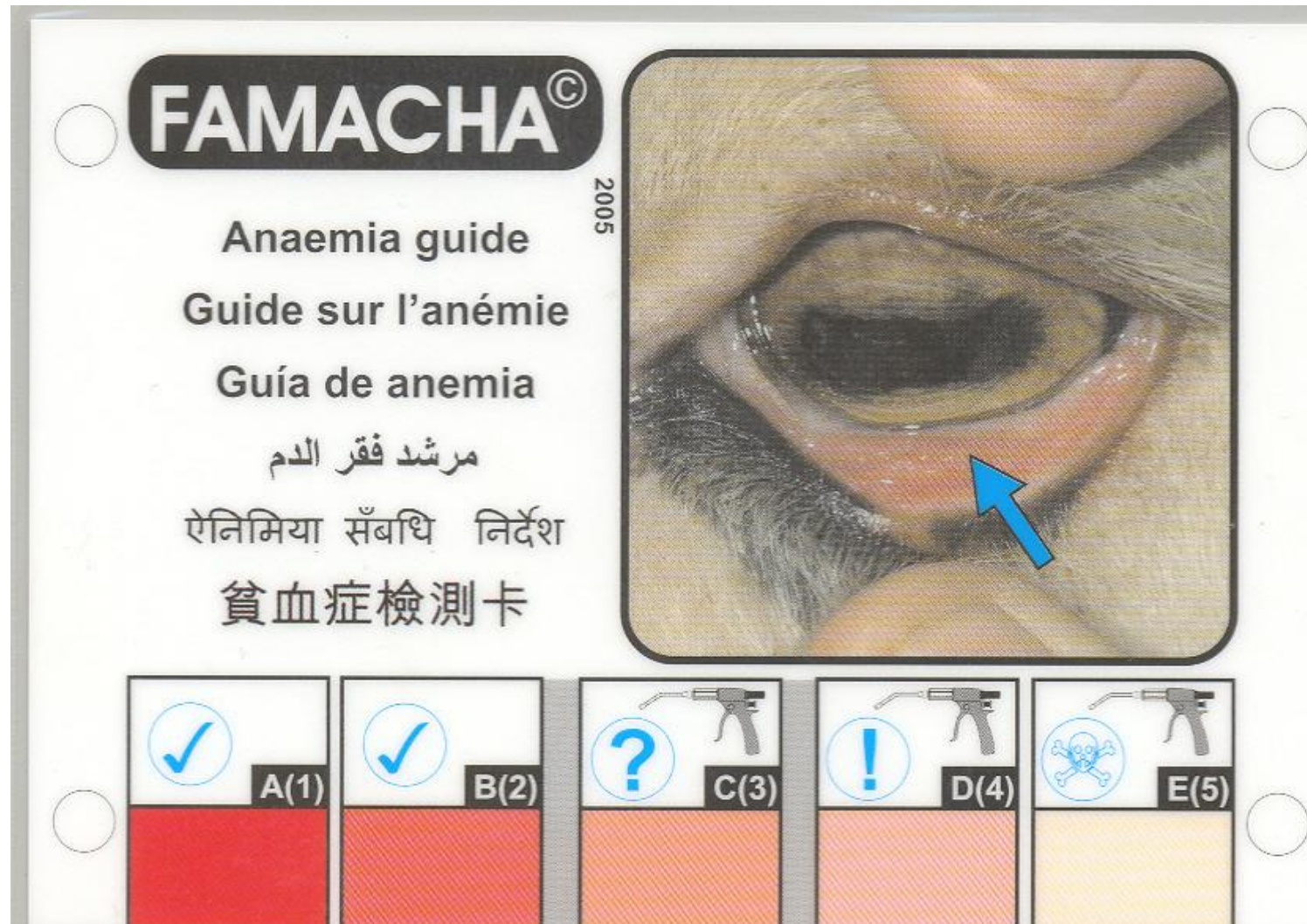
300 worms 1.5 million eggs per animal



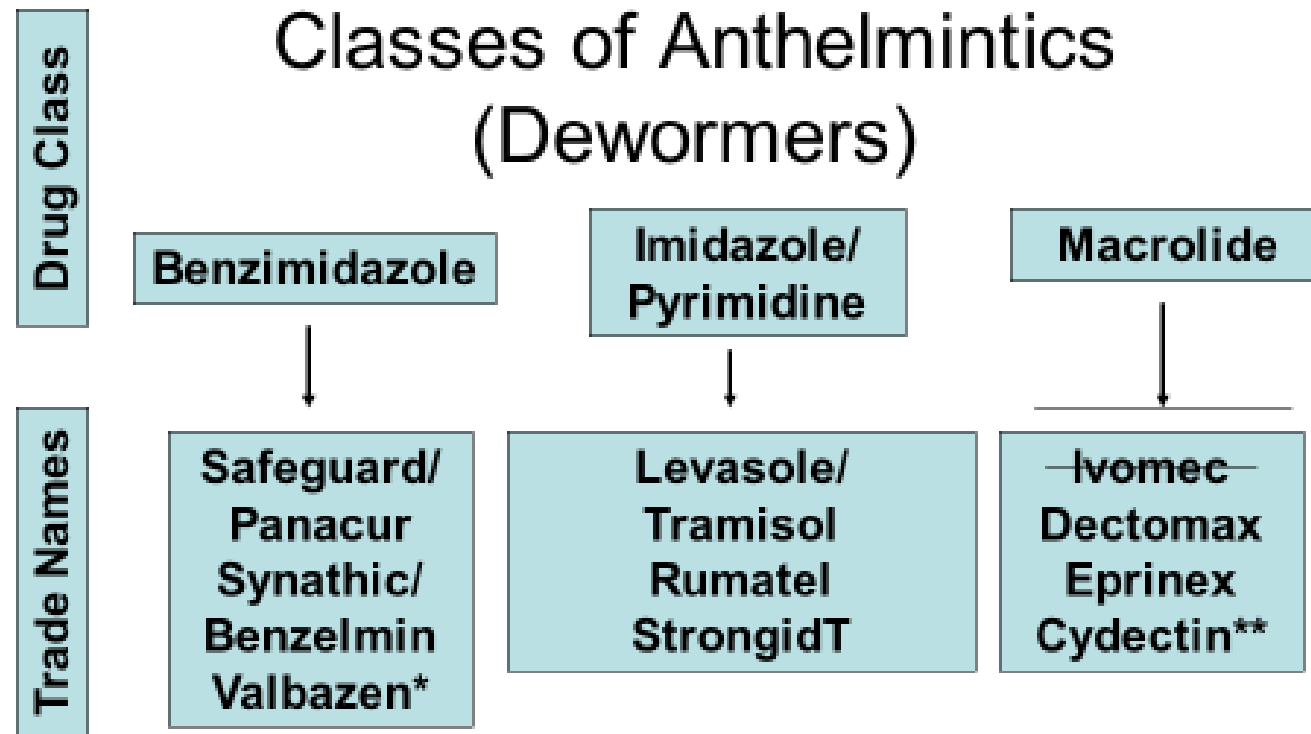
<http://www.ext.vt.edu/pubs/sheep/410-027/figure1.html>



FAMACHA CARD



Parasites become resistant to each class of wormers so need to change classes



Commonly used dewormers in goats (Oral route of administration only)

Dewormer	Approval	Dosage/100 Lbs	<u>Withdrawal Time</u>	
			Meat	Milk
Fenbendazole (Safeguard/Panacur)	Approved	2.3 ml	14 days	4 days
Morantel tartrate (Rumatel)	Approved	1 ml / 10 lbs	30 days	0 days
Albendazole (Valbazen)	Extra-label	8 ml	7 days	5 days
Levamisole (Levasol, Tramisol)	Extra-label	12 ml	10 days	4 days
Ivermectin (Ivomec for Sheep)	Extra-label	24 ml	14 days	9 days
Moxidectin (Cydectin)	Extra-label	4 ml	23 days	56 days

Source: Meat Goat Production Handbook

Extra label use requires a veterinarian-client-patient relationship and an appropriate medical diagnosis has been made by the veterinarian.

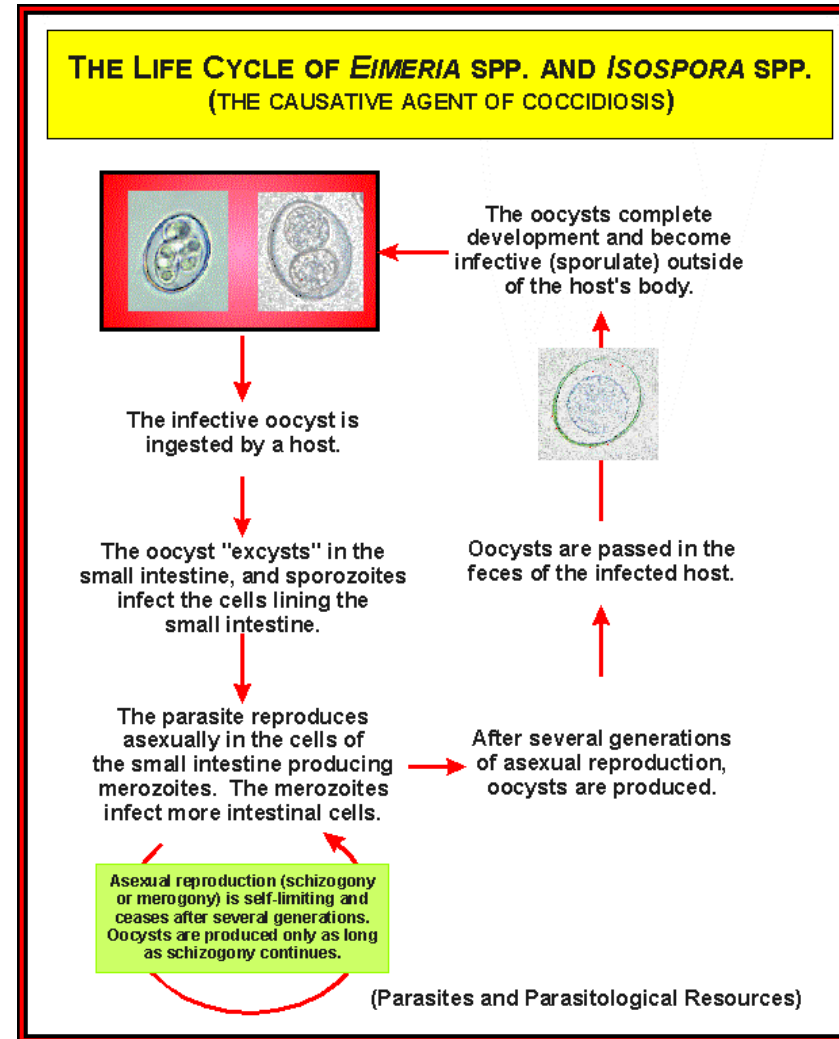
Do Not Buy Resistant Worms

- All new additions should be quarantined and aggressively dewormed upon arrival
- Deworm with 3 anthelmintics from different drug classes
- Should remain in quarantine for 10 – 14 days – perform FEC to confirm no eggs



Other Internal Parasites

- Lung worm
- Coccidia
- Liver fluke
- Tape worm



Heath Issues (other significant diseases)



- **Foot scald/foot rot** is another common health issue that results in lameness and often develops into a major economically significant disease.
 - Frequent foot trimming helps reduce the incidence of foot scald by keeping mud from packing into foot crevices
 - Foot baths using zinc sulfate are the most effective treatment of foot scald.
- **Abortion** occurs when a female loses her offspring during pregnancy or gives birth to weak or deformed babies. There are vaccines (individual and combination) for several of the agents that cause abortion in sheep, including enzootic (EAE, *Chlamydia sp.*) and vibriosis (*Campylobacter fetus*). Abortion vaccines should be administered prior to breeding.

Vaccinations

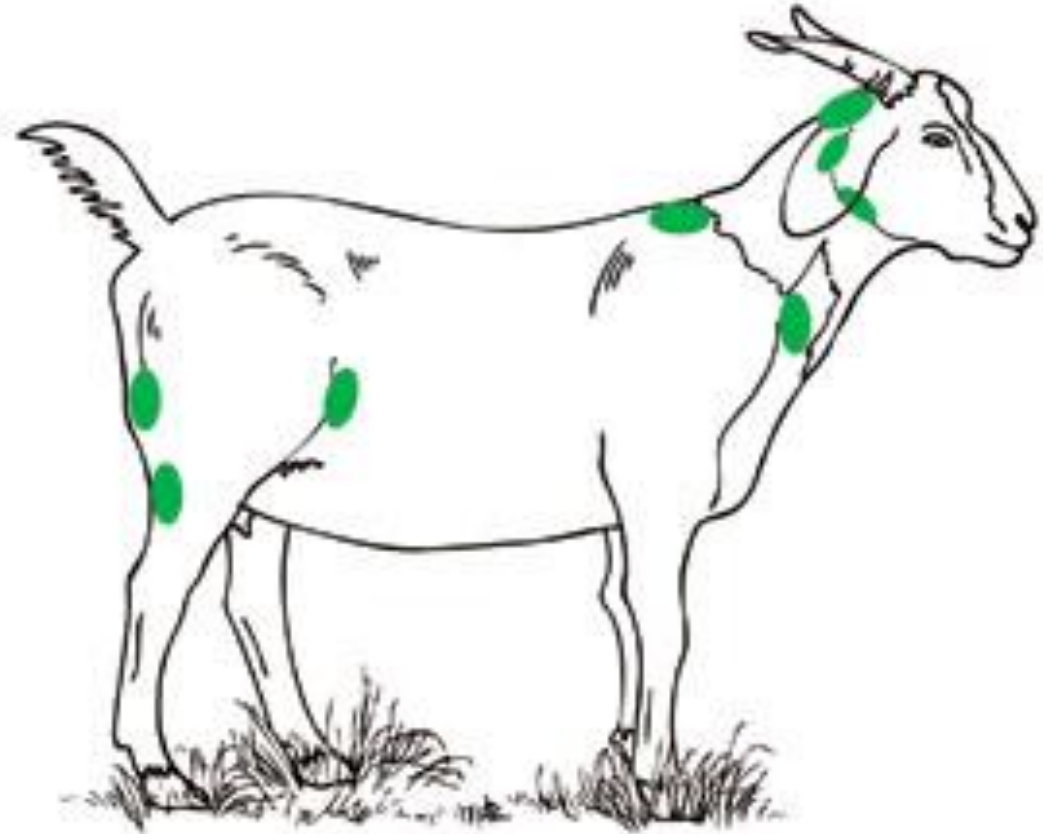


- ***Clostridium perfringens* types C and D** (overeating disease) and **tetanus** is the most common disease in goats and should be immunized against using vaccine to all ages of goats.
 - Covexin, Bar Vac CD-T
 - When initiating vaccination for a given sheep or goat, all **enterotoxemia/tetanus** vaccines require two doses to induce effective immunity.
 - Boost every 6 to 8 weeks (show goats)
- If you are having abortions in does you might consider vaccinating for
 - Chlamydia
 - Campylobacter
 - Leptospirosis
- Thiamin or B Complex every 6-8 weeks
 - Show goats
- Sore Mouth?



Pathogen Detection-CL

- Abscessed lymph nodes
 - Swollen lymph nodes
 - Draining abscesses
- Infection is caused primarily by exposure to pus from abscesses
- No effective treatment
- Prevention: Isolate/Cull any animals with draining abscesses



Biosecurity

- Limit foot and vehicle traffic – boot washing station or disposable boots
- Quarantine new animals for 4 wk – no contact; vaccinate, deworm, treat for foot rot, external parasites
- Disinfect shearing equipment
- Common sense



Note the maggots between the toes

Foraging Behavior of Goats



“Clean-up Artists”

“Clean-up Artists”

- ✗ Opportunistic grazers.
- ✗ Browsers - prefer woody plants, shrubs, and vines.
- ✗ Do not like clover, but will eat it.
- ✗ Do not like to graze close to soil surface.
 - ✗ Inclined to graze higher, drier areas.
 - ✗ Tolerance for tannins and bitter compounds and fewer problems with plant toxicities.

Browse => Forbs => Grass

Feeding & Management Goals

Taking a
Brush Eater



Turning into

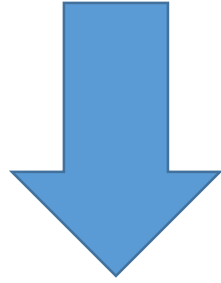


Grain Eating
Athlete



Feeding and Management

- Meat Show Goats should be fed a grain based diet with minimal amounts of hay



- Will improve body composition by adding skeleton and muscle



Feeding & Management (DO NOTS)

- Many people feed high roughage diets
 - Fine for breeding animal development
- Common to take a show feed and add to it
 - Ruins the balance of the formulated feed
 - Is that bag of feed really that cheap if you are adding to it?



Grains/corn add energy to the ration.



Minerals/vitamins in small quantities for bone growth and immunity

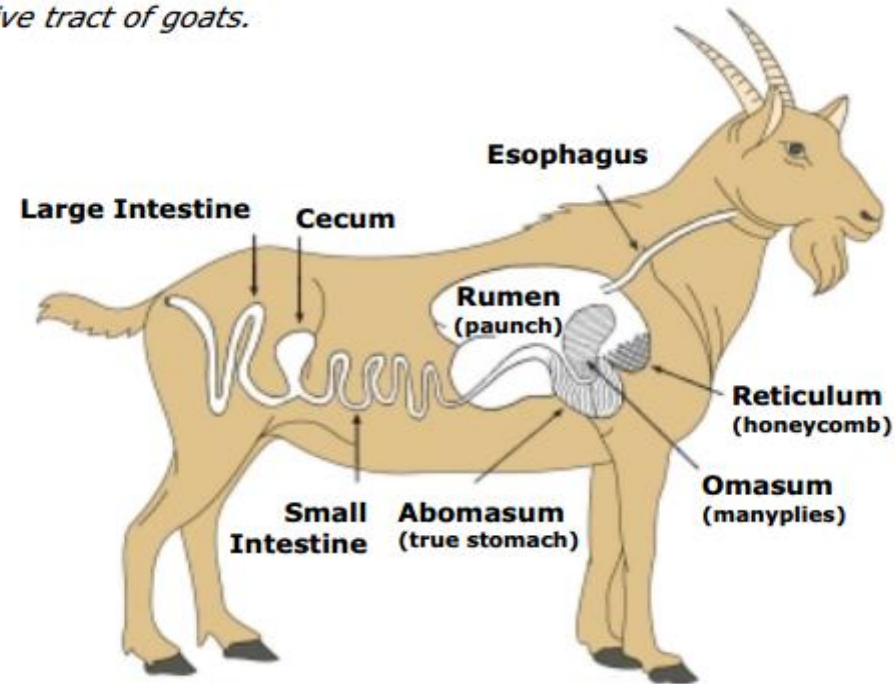


Cotton seed or soybeans
Add protein to the ration.

Feeding Management

- Recommended Nutrient Specs:
 - Protein 15 – 17%
 - Fat 3 - 4%
 - Fiber 10 – 15%
- All inclusive
- Pelleted

The digestive tract of goats.



Feeding & Management

- Quality Ingredients (ASK QUESTIONS!!)
- Organic or chelated trace minerals
- Yeast (for optimized gut health and digestion)
- Ammonium chloride (urine acidifier helps keep from stone formation)
- Coccidiostat (typically rumensin or deccox)

Remember performance animals need to be fed as such

Feeding & Management

- Monitor body condition;
 - adjust with volume of feed, protein & fat levels, and exercise
 - What is body condition? Body condition is a measurement of fat & muscle on the carcass.
- When do I adjust what? Protein builds muscle & burns fat.



Body condition 2



Body condition 3



Body Condition 4



Body Condition 5

Feeding & Management

- Feed minimal hay
 - Bird nest sized hand full 2x a week to (daily) if on a high grain feed
 - Meat goat judges don't want to see a huge belly
- Free choice mineral (cheap insurance policy)
- Feed 2-3% of body weight (1.5 -3lbs depending on type and kind)
 - Most market goats will max out at 2.5 lbs. of feed
 - Weigh animals frequently if possible

Feeding & Management

- Consistency and Management make the big difference.
- Try to feed the same time every day
- Clean water, pen, & feeder when needed
- Watch for signs of parasites or Coccidiosis
- 15% of effort makes a 50% difference!!

Feeding & Management

- Feeding 2 or 3 times per day will help maintain a healthy rumen, and encourage appetite.
- This will also allow you to see your project multiple times a day in case anything is wrong?
- Make feed changes gradually
- What problems should you look for when feeding?

Water is the most important resource

- Water should be kept fresh and monitored daily
- Smaller quantities of water is best
- Hand fill vs. automatic fill water trough



Clean fresh water is important.

Water is the most important resource

- Muscle is up to 70% water!
- Digestion requires water
- Body temperature control requires water!
- Immune system requires water!
- Increased water intake will lower the chance of urinary calculi!

Exercise

- Tailor your exercise to the individual goat
- If they are too thin, hold off on sprints
- Don't wait until over finished to start
- Monitor body condition every week (loin area)

Exercise (Toning)

- Daily activities in their pens
- Walks to the scale, showmanship practice
- Any exercise your goat gets is likely toning
- Entire project period
- Do this like you are taking them to show

How do goats see the world?



- Excellent peripheral (wide angle) vision
- Excellent distant vision
- Difficulty judging distances
- Color perception
- Move towards light
- Fearful of shadows
- Sensitive hearing

How do goats differ from sheep and other livestock



- Goats are more difficult to handle than sheep and cattle when using handling equipment.
- Goats stress more easily
- When they get fearful, they lie down and sulk and may pack together in a corner.
- They can become aggressive towards each other
- You may need higher gates than those used for sheep, though sheep equipment will generally work.
- Goats find the “escape” spots in the system.

Tame animals



- Goats raised in close contact with people experience less stress when being handled.
- Tame goats may not have a flight zone.
- They can be difficult to drive
- Lead with a feed bucket or halter
- Animals can be trained to accept restraint voluntarily.

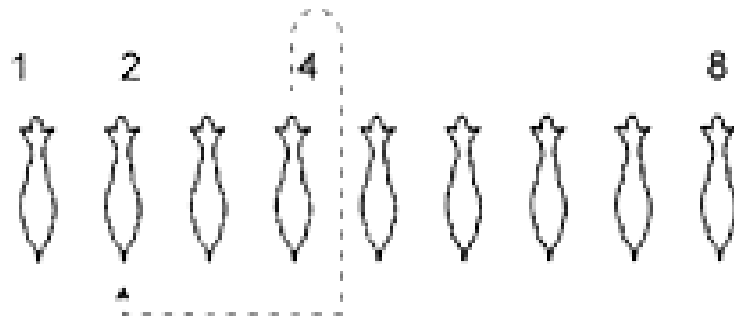
Horns – Asset or Liability?



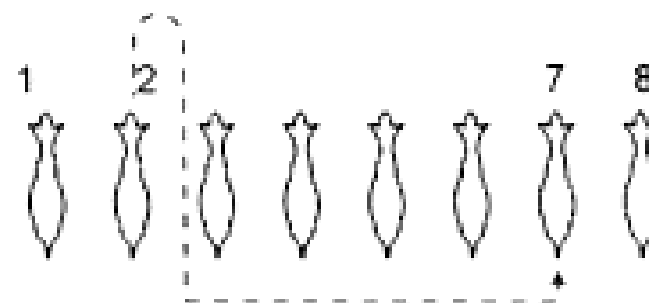
- Goats should never be caught or dragged by the horns.
- They should be picked up by their body, not horns or hair
- Can restrain a goat by holding base of horns not tip.
- Tip horns to blunt and prevent injury.

Showmanship

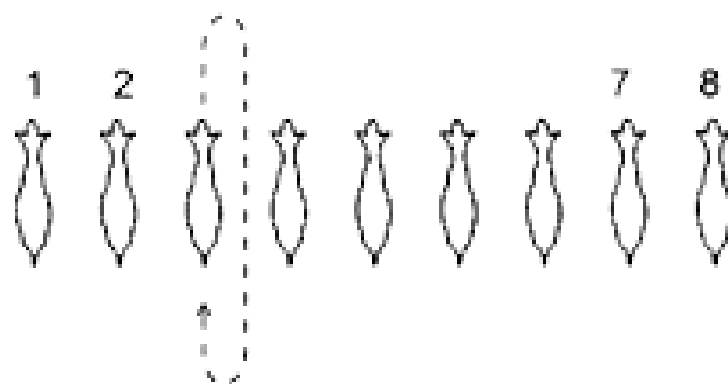
- Showmanship is the art of making your animal look as good as possible.
- You should be a second thought to your goat.
- Showmanship starts with work at home
- Start at home by teaching your goat to lead and stand still while you are holding him on the chain.
- Practice and hard work at home will pay off.



1. How to switch from position 4 to position 2.

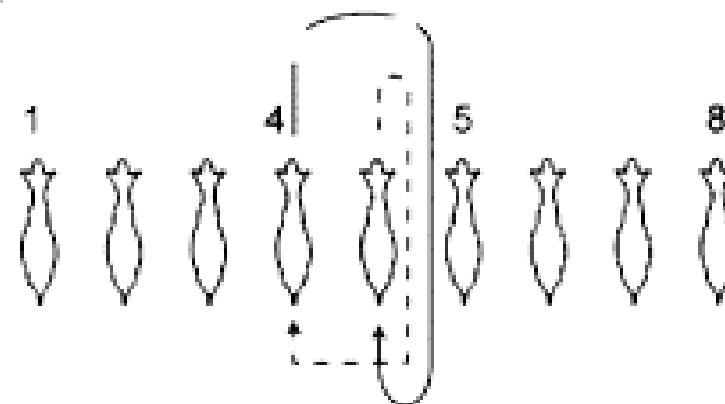


3. How to go from position 2 to position 7.



2. How to reset up in the same position using position 3.

4. How to switch from position 4 and 5. 5 would move out first.



Showmanship Tips

- Chain up your goats at home. This will teach them to give you control of their neck and head.
- Work goats on a show table to teach them to brace without stepping out or back.
- Always end on a good experience. This will be beneficial for your goat and the exhibitor



Restrain your goat by placing your knee in front of shoulders.

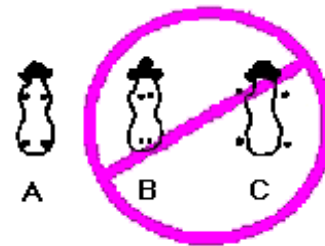
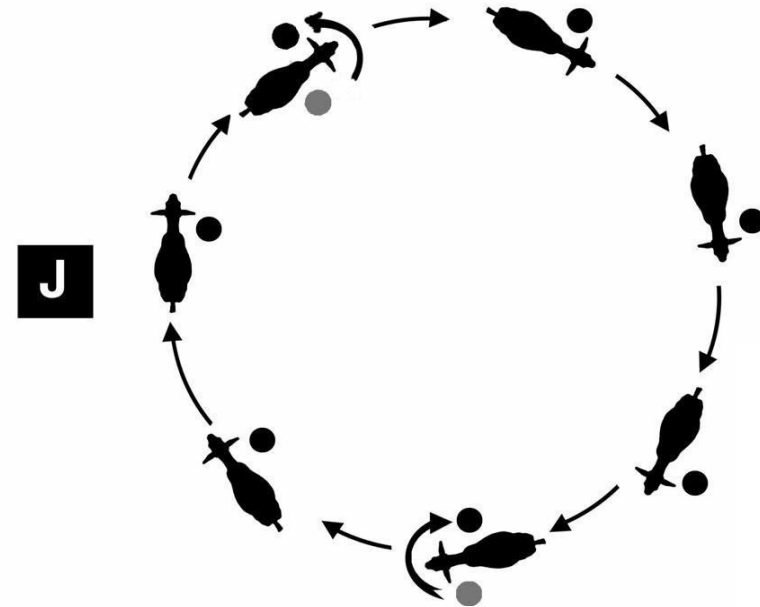
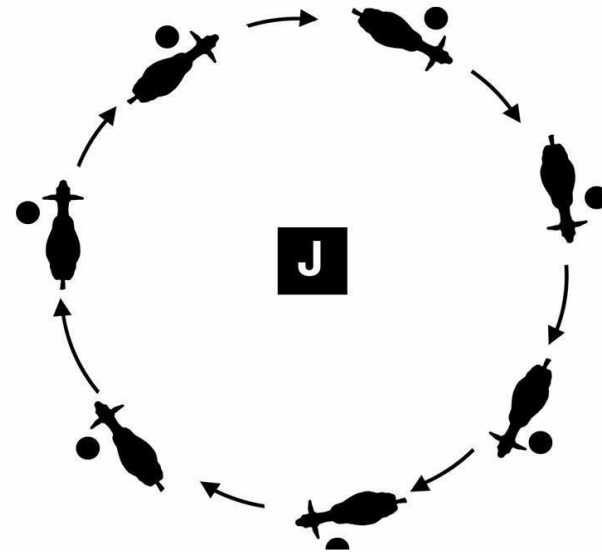


Figure A shows the feet squarely placed beneath the goat Figure B & C are incorrect

The logo for Northern Illinois University Extension, featuring a large red 'N' with a white outline and the word 'EXTENSION' in red capital letters below it.

Thanks! Questions?

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