

Market Goat Primer

Adapted for the 2017 Berkeley County Youth Fair Workshop

Raising a Market Goat

HOME RAISED

- Vaccinate does with Clostridium C&D Toxoid plus Tetnus (CD&T) 3 to 4 weeks before kidding. This vaccine is very sensitive keep refrigerated at all times. Covexin 8 is one possibility for this.
- Treat navels with 7% iodine at birth, this prevents joint ill - an infection of the navel cord.
- Disbud at 2-14 days old. Always give tetanus antitoxin at every surgery (dehorning & castration) especially if the does haven't been vaccinated.
- Watch for coccidia, this usually affects kids about one month of age. Start on 16%-17% goat ration with a coccidiostat and ammonia chloride or ammonia sulfate to prevent urinary calculi.
- Vaccinate with CD&T at 12 weeks.
- Give CD&T booster 21-30 days later.
- Treat for worms at 4 to 6 weeks old - dosage & effective products vary with climate and management conditions (pasture or pen raised) consult a local vet, local breeders or your extension office for the appropriate wormers & dosages.
- Wait till at least 12 weeks old to castrate, this will help prevent urinary calculi problems by allowing the urethra process to mature.

PURCHASED WETHERS

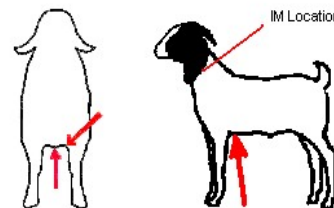
- If you can purchase a goat that has been castrated, disbudded if necessary, weaned and on feed. This will prevent a lot of setbacks. It is worth paying extra for a goat that is ready to go.
- Inquire about past vaccination & medication history - write it down!
- Booster or start CD&T vaccinations and sore-mouth if appropriate.
- Check for worms & coccidia - you can have a fecal run at the vet - treat if necessary.
- Administer a probiotic (Fasttrack or Probis) and B Complex weekly to stimulate appetite.
- Start goats on a commercial goat ration - prepared rations have all the vitamins and minerals needed for a growing goat. Purchase one that contains a coccidiostat and ammonium chloride or ammonium sulfate to prevent urinary calculi.
- Goats are ruminants, they need daily access to hay. Provide a leafy grass hay such as Sudan or Haygrazer, and a limited amount of alfalfa.
- Goats also need free choice minerals & salt. Loose minerals are preferred over mineral blocks.
- Watch for respiratory infections and coccidiosis the first week especially.
- After eating feed and healthy for at least one week castrate & dehorn if needed. Don't do both at the same time. Dehorning a grown goat is very stressful on an animal. It is safer to disbud goats as kids. Do not dehorn during fly season. Dehorning leaves an open wound into the sinus cavity. This is best done in cooler weather. Dehorning will set your goat back, plan ahead.

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GIVING INJECTIONS TO MARKET GOATS

- Remember your project is a market animal and will end up in the food chain. Carcass quality is important avoid giving injections in the hindquarters which is the most valuable part of the carcass.
- ALL injections should be in brisket, armpit, or in pectoral muscle. The "ideal" injection site for a show goat is under the skin of the left armpit. If it does make a bump - it is less likely to be seen by the judge. Give all vaccinations here or in the "V" in the brisket.
- Check drugs for approval for food animals
- Be careful and watch withdraw dates on medications given, keep track on calendar with show dates.
- Always keep a dose of epinephrine in the fridge. Goats and other animals can go into anaphylactic shock. This usually happens when giving repeated doses, and is more likely to happen when giving penicillin IM. Goats are sensitive to the carrier in most penicillin.



TRAINING YOUR GOAT FOR SHOW

- First step to training is putting a chain collar on your goat and tie him up. **Never leave a tied goat unattended.** A goat can hang himself or break his neck very quickly.
- When teaching your goat to lead, keep the collar up next to the jaw. This gives you more leverage and control.
- Teach your goat to stand a little at a time, be happy with little advancements. Make him stand a little longer every time.
- Don't over work your goat, work in short sessions. Quit practice on a good note. Make sure he does something good before you let him go or feed him.

HELPFUL HINTS FOR RAISING HEALTHY, HAPPY, AND CHAMPION GOATS

- Check and clean water daily - no animal wants to drink dirty water.
- Treat for parasites and trim feet every 21-30 days. It is important to keep these show wethers feet trimmed so they grow straight and correct.
- Feed a commercial goat feed. These usually are well balanced and contain everything your goat needs in a concentrate.
- Goats need roughage (hay) to keep their rumen functioning. They do not do well on just grains. Alfalfa and leafy grass hays - such as Sudan, Haygrazer or Johnson Grass make good palatable hay for goats.
- Keep baking soda out free choice - it is good for an occasional belly ache, and will help prevent acidosis.
- Feed twice a day & clean out feeders before feeding. Set your feeders up high - makes them stretch and keeps manure out of them.

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- Watch wethers urinate when they get up, they should urinate a steady stream. At first sign of dribbling urine or straining call the vet. Chances are good that the goat can be saved, but you must act fast!
- Start training to lead when young. A #4 flat chain works great for collars & can be bought at Walmart, use OB Chain for white necked goats - it doesn't turn their neck gray. Bit snaps make great collar fasteners be careful leaving collars on goats - make sure they can't hang it on anything.
- Double end snaps are indispensable - use to tie goats and hang buckets and feeders.
- Give B complex vitamins (injectable kind orally 2cc-3cc) and probiotic once a week to stimulate appetite, prevent tummy aches & complications from stress.
- Change water a few days before the show. Get goats used to drinking out of same bucket that you will take to the show.
- If goats quit eating or are not eating well, take off grain for 24 hours and feed alfalfa or grass hay. Give them a dose of probiotic and B Complex.
- 30-45 days before the big show add Showbloom & whole corn, it seems to help firm them up & keep them eating. Showbloom makes a good treat, it can be hand fed. Watch feeding whole corn to wethers who are losing their teeth - it may hasten the process.
- Have fun at the shows!

GUIDELINES FOR SHOWMANSHIP

- Always keep your goat between you and the judge. Never block the judge's view of your animal with your body.
- When turning or moving your goat, move in front of the goat, not behind him.
- Always watch the judge, but don't forget your goat - keep him set up square.
- Be prepared - train your goat to lead and stand at home before the first show. Before the show, walk your goat in the show arena if possible, this way he will be accustomed to the new surroundings, and footing.
- Know what your goat weighs, how old he is and what breed he is. Common questions in showmanship include what, how much, and what protein feed you use, what you worm with (including dosage), and what do you use to vaccinate you goats.

GOING TO YOUR FIRST SHOW

- Decide what shows you are going to and get a copy of the show rules from your 4H leader, County Extension Office, or the show office for major shows.
- Read the rules, most shows have age requirements (tooth rule), weight limits, shearing, and horn rules. This will determine what breed and age goat you need. Most county shows have a validation date. Some shows require a health certificate from the vet within 30 days of the show.
- Read the rules before the show. Remember some shows do not let you clip on the show grounds.



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- Keep a notebook in your show box. Keep track of the Judges name, how you placed what he looks for - this will help you greatly later.
- Some shows require slick sheared goats, some 3/8" clip, others just a trim. Try to do this before the show, slick shear goats around one week before the show, provide a blanket and/or warm shelter if the weather is cold.
- Watch you goat and make sure he doesn't dehydrate. Traveling stresses your goats. If you pinch the goats skin up and it stands up, instead of returning to normal in a couple seconds your goat is dehydrated and needs fluids.
- Arrive early, make sure your in time for the weigh-in.
- Make a check-list before hand of everything you need to take so you don't forget something in the excitement (Some people forget their goats!)
- Goat show box - you won't need as much going to a one-day show as traveling overnight to one. Be prepared. You can use a plastic gearbox with a lockable lid, works great, it's inexpensive, and light weight.
 - extra collar
 - double end snaps & a couple short pieces of chain
 - Show notebook & pen
 - Paper work - registration, membership cards, entry forms & health papers if requested or if traveling out of state.
 - brush & rags (wet washrag in plastic bag to clean up exhibitor)
 - hoof trimmers (this should ideally be done at home)
 - water bucket, pack your own water if your goat is picky
 - feed, hay, & feeders
 - clippers, extension cords, and stands - if allowed some shows do not let you clip on the grounds.
 - electrolytes & drench gun for dehydration (pedialite works fine)
 - Pepto or Kaopectate for scours & 12cc syringes
 - dry clean shampoo - to clean up scours
 - ear taggers if you have them for the big shows - saves time signing theirs out.
 - Fly spray

HEALTH PROBLEMS IN MEAT GOATS

- Treat penned goats for parasites (worms) every 21-30 days, or as directed by your vet.
- Tape worms do not show up on a fecal test, they look like grains of rice in fresh feces.
- Watch out for coccidiosis. Young kids will scour and go down quickly, treat with Albon, Corrid, or Sulmet give Fasttrack or probis to restart rumen activity. Coccidiosis can be verified by the vet with a fecal sample.
- Fungi - goats that travel can pick up diseases from other goats, pens, and trailers. Ringworm and the itch are common and both contagious to humans. Treat with betadine



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or nolvason ointment. Wear gloves when treating. We spray our goats with a Kaptan or clorox solution before we load them up from a show. Also spray anything you took in the barn - show box, feeders, buckets, brushes, and the bottoms of your boots. This helps prevent bringing it home.

- If your goat is scratching check for lice or mites. Avermectins and topical applications (dips, spray on, & pour on) are available to control external parasites.
- Soremouth - wart like sores around the mouth. Can be transmitted to the doe's udder and to humans. Vaccines are available. Once a goat has had sore-mouth, they will not get it again.
- Bloat - the goat's gut is greatly distended and has trouble breathing or moving. This is serious and prompt treatment is required. Feed choice baking soda will help prevent bloat. Bloat can be treated by drenching or tubing with vegetable oil.
- Polio - this is a thiamin deficiency caused by a bacterial infection or treatment with a thiamin-depleting drug such as Corrid. The goat stumbles, is lame, and can't see. This needs to be treated immediately with large doses of thiamin.
- Keep tetanus and Extrotoximia (overeating) vaccinations up to date. Goats on heavy feed should be vaccinated every six months.
- Urinary calculi - calcium stones form in the male's urinary tract similar to kidney stones in people. Feed feeds with ammonium sulfate or ammonium chloride added or top dress your rations with these additives to prevent these problems. If your goat strains to urinate or just dribbles seek qualified help immediately. Keep ammonia chloride on hand and treat immediately (available by special order from most feed stores).

Adapted from <http://www.barnonemeatgoats.com/goat.html>

Listing of medications is for reference only and does not imply endorsement of any product. Some medications listed may be available only through a licensed veterinarian. Please consult a veterinarian on the proper medications to use with your project goats.

Caprine (Goat) Vital Signs

Heart rate – 70 – 80 beats/minute (adults: can be twice as high in kids)

Normal Rectal Temperature - 101.5 – 104 degrees Fahrenheit--Varies with environmental temperature and activity. It is lower in the morning. Test healthy goats in herd for a benchmark

Respiration- 12 – 20 breaths/minute for adults, 20 – 40 breaths/minute for kids

Rumen motility – 1 – 2 movements/minutes -- faster after a meal and slower if stomach is empty

Rumen pH 5.5 – 7.0

Gestation - 148 – 152 days or 5 months

Estrus cycle every 21 days Does are typically in estrus for 24 to 36 hours.



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Goat Health Check

Observation	Signs of Health	Signs of Illness
Appetite Water usage	<ul style="list-style-type: none"> - Appetite normal - Interested in food - Drinking normal 	<ul style="list-style-type: none"> - Won't eat or drink. - Too much interest in food. - Drinking too much water
Attitude Alertness	<ul style="list-style-type: none"> - Bright and alert. - Inquisitive or curious. - Playful. - Normal behavior. 	<ul style="list-style-type: none"> - Hunched back. - Moaning or crying. - No interest in surroundings. - Staring into space. - Tail drooping. - Tremors or shaking. - Unresponsive.
Body condition	<ul style="list-style-type: none"> - Body condition good. 	<ul style="list-style-type: none"> - Too fat or too thin.
Ears	<ul style="list-style-type: none"> - Normal ears 	<ul style="list-style-type: none"> - Shaking head. - Drooping ears. - Visible parasites or discharge.
Eyes	<ul style="list-style-type: none"> - Clear and bright. - No discharge. - Able to see. 	<ul style="list-style-type: none"> - Cloudy or discolored. - Sunken, squinting, or shut. - Discharge, tearing - Blindness.
Feet, hooves, legs, joints, and gait	<ul style="list-style-type: none"> - Stands comfortable. - Moves easily. - Puts equal weight on feet. 	<ul style="list-style-type: none"> - Pain or swelling. - Limping or lameness. - Unwilling to stand.
Lymph nodes	<ul style="list-style-type: none"> - Normal 	<ul style="list-style-type: none"> - Swollen or lumpy.
Manure	<ul style="list-style-type: none"> - Normal pellets. 	<ul style="list-style-type: none"> - Pellets too dry. - Watery stool or mucus present. - Feces bloody.
Mucous membranes (eyes and gums)	<ul style="list-style-type: none"> - Pink. - Moist. 	<ul style="list-style-type: none"> - Pale. - Dry. - Red or off-color.
Respiratory	<ul style="list-style-type: none"> - No abnormal sounds. - Clear or no nasal discharge 	<ul style="list-style-type: none"> - Rasping breath, rapid breathing. - Abnormal cough. - Green or cloudy nasal discharge.
Skin and coat	<ul style="list-style-type: none"> - Skin supple and pliable. - Smooth, silky coat. - No parasites, wounds or sores. 	<ul style="list-style-type: none"> - Skin dry and flaky. - Coat dull or hair falling out. - Wounds or lumps.



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Teeth and mouth	<ul style="list-style-type: none"> - Teeth good. - Breath normal - Mouth and tongue normal 	<ul style="list-style-type: none"> - Teeth missing or broken. - Grinding teeth. - Breath smells abnormal. - Scabs or sores. - Swollen tongue.
Urine	<ul style="list-style-type: none"> - Normal color and amount. 	<ul style="list-style-type: none"> - Blood or crystals. - Visible dribbling or discharge. - Straining.

Adapted from *How to Raise Goats* by Carol Amundson and *Just Browsing* Level 1 Meat Goat Activity Guide, National 4-H Curriculum System, Inc.

Adapted by Mary Beth Bennett, Extension Agent, Berkeley County West Virginia for the 2011 Berkeley County Goat Camp.

Revised by Doug Hovatter, 4-H Agent, Berkeley County West Virginia for 2014 Goat Workshop.

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Answer Key

Clipping:

- 1) In which direction should the goat hair be clipped?
Always clip from the rear toward the head and neck against the hair.
- 2) Where are the small clippers used?
On the udder and other small parts which are hard to reach with the larger clippers.
- 3) How should the tail be trimmed?
Leave a brush-like effect at the tip with approximately one inch of hair remaining beyond the tip of the tail.
- 4) How far ahead of a show should your animal be clipped?
This mainly depends on the color of the animal. White animals should be done about a week ahead of time; the darker animals should be trimmed two weeks ahead of time. The udder should be done the day before show along with any touch ups that should be done.
- 5) What size clippers should be used?
The body should be clipped with a size 10 blade; the udder should be clipped with a size 30 blade.

Showing in the Ring

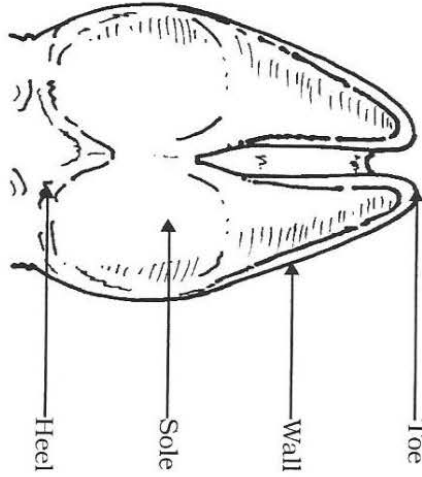
- 1) Where should the doe be in relation to you and the judge?
Always between you and the judge.
- 2) Which direction do you go when you move from one side of the goat to the other?
Around the front of your goat.
- 3) Describe how exhibitors should move their goats around the ring.
Single file clockwise around the circle with approximately three feet between the animals in the ring.
- 4) What do you do when the judge changes your placing while standing in a side-by-side line?
Lead the animal forward out of the line, down or up to the new position, continue through the line, finally making a wide graceful U-turn to get into position.
- 5) What is the proper dress when showing a dairy goat?
Clothes and person should be neat and clean. White clothes are preferred.

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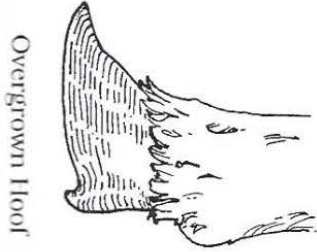
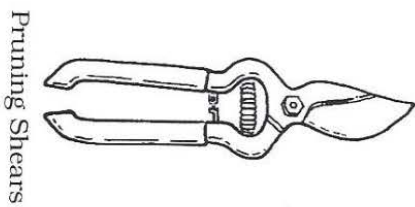
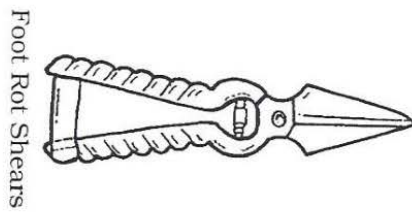
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Goat Hoof Trimming

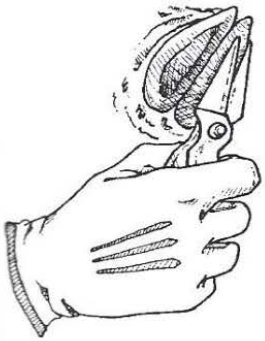
Anatomy



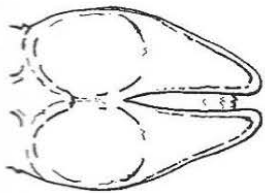
Tools



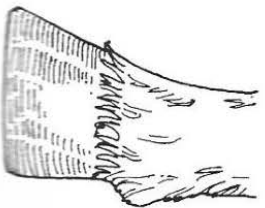
Overgrown Hoof



Cut from Heel to Toe



Properly Trimmed Hoof
Bottom View



Properly Trimmed Hoof

GOAT
LEARNING LABORATORY KIT

Exploratory Learning! Educational Program
This component adapted from materials produced by the Farm Visit School Extension, 4H

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Answer Key

Junior

- a) **Q:** How often should you trim a goat's hooves?
A: **Every two (2) months**
- b) **Q:** Why should you never trim a goat's hooves the day before a show?
A: **Do not trim a goat's hooves the day before a show as it might cause the animal to stand awkwardly or be lame. These problems could cause the goat to be placed further down in the class.**

Intermediate and Senior

- a) **Q:** Why should you cut the hoof from back to front?
A: **Cut the hoof from back to front to prevent cutting the hoof too deep with the very first cut. Also, when the hoof is overgrown, the toes grow too long, not the heel. In order to trim the hoof to the proper level, trim off the excess hoof gradually, watching not to cause bleeding.**
- b) **Q:** Should you trim the heel of the hoof?
A: **No, except to remove flaps of overgrowth.**
- c) **Q:** How do goats with very long toes stand?
A: **Goats with very long toes rock back on their heels.**
- d) **Q:** Why should you clean the dirt out of the hooves before trimming them?
A: **Clean the dirt out of the hooves before trimming to prevent dulling the shears.**



GOAT

LEARNING LABORATORY KIT

Exploratory Learning: Educational Program