Illini Meat Goat Health Management Calendar

A.R. Cobb, D. Oswald, J. Miller

This management calendar is provided to assist meat goat producers with the management of their herds. From our research for this project, we determined that there are two main production styles of meat goats: high input and low input. Intensive production typically involves a feeding program that includes hay and concentrates, drylots, close observation of does due to kid, and creep feed for kids. Low input production typically involves pastured goats with limited housing, little to no concentrates, no creep feeding of kids and limited health care. We are not endorsing either production method as being superior. It is up to you, the producer, to evaluate your expected profits and expenses in conjunction with the resources you have available (land, buildings) in order to determine which system will be appropriate for your operation. Please see our companion handout *Are you thinking of raising meat goats.*

Dick Cobb, Extension Sheep and Meat Goat Specialist, University of Illinois, arcobb@illinois.edu,
Dean Oswald, Animal Systems Educator University of Illinois Extension, oswaldd@illinois.edu
Jennifer Miller, Veterinarian, info@rushcreekfarms.com

Meat Goat Health Facts

?Body temperature: 101.5 to 103.5
?Heart Rate: 70 to 80/ minute
?Respiratory rate: 12 to 15 breaths / minute (20 to 35 for kids)
?Ruminal Movements: 1 to 1.5 / minute

Observe your goats in their surroundings, noting
?Attitude: alert, inquisitive, sociable
?Appetite: eating and drinking normally, not off by themselves
?Normal weight for breed and type – parasites can affect gain
?Eyes: bright not watery or pale eyelids
?Nose: cool and dry
?Gait: steady, not limping
?Skin/Coat: no external parasites or lumps
?Droppings: firm pellets
?Voice: normal sounds

Consult a veterinarian to discuss goat health issues on your farm. Develop a veterinarian/client/patient relationship so your animals can be treated properly.

Developing a closed herd

In order to eliminate the risk of diseases like Caseous Lymphadenitis (CL) and Caprine Arthritis-Encephalitis (CAE), many farms strive for a "closed herd" where replacement doelings are retained from kids born on the farm and there is no movement of new animals into the herd without strict testing and quarantining. New arrivals and/or show animals should be held in quarantine for 30 days prior to entering the general population. Also, blood tests for CL, CAE and other infectious diseases can be performed on incoming animals. Please contact your veterinarian for recommended testing protocols.

Developing a breeding schedule

Prior to breeding your goats, you should look at potential markets (ie: slaughter kids or show wethers) and the peak times when goats are needed. For example, market kids are desired for many ethnic holidays. There are calendars available that list these days, and you can count backwards to determine when to breed your does. If Ramadan begins on September 2, 2008 and 60 lb kid is desired, work backwards – 1-2 weeks for kid to go through market channels to store, 4-6 month old kid to get to market size, 5 month gestation, then you need to put your bucks in late October through late December 2007. Also consider weather conditions. Will it be easier to kid on an annual schedule utilizing peaks in forage, or will you be relying on concentrates, so forage is not as important? Will you kid in a barn, so weather extremes are minimized, or do you need milder spring weather for outside kidding? Will the costs of production be offset by sale prices?

60 Days Before Breeding

Body condition score (BCS) all breeding does and bucks. Goats should not be too thin or fat (see below). Thin goats will have lower productivity (fewer twins, lower milk production and weaning weights). Fat does could experience pregnancy toxemia. Bucks must be in proper condition to be fertile and aggressive breeders. Group does by body condition – increase nutrients for thin does so they can reach the 2.5-3 BSC. Intensive systems can increase concentrates while pasture-based systems can move does to higher quality pasture.

Score	Spinous process	Rib cage	Loin eye
BCS 1 Very thin	Easy to see and feel, sharp	Easy to feel and can feel under	No fat covering
BCS 2 Thin	Easy to feel, but smooth	Smooth, slightly rounded, need to use slight pressure to feel	Smooth, even fat cover
BCS 3 Good Condition	Smooth and rounded	Smooth, even feel	Smooth, even fat cover
BCS 4 Fat	Can feel with firm pressure, no points can be felt	Individual ribs can not be felt, but can still feel indent between ribs	Thick fat
BCS 5 Obese	Smooth, no individual vertebra can be felt	Individual ribs can not be felt. No separation of ribs felt	Thick fat covering, may be lumpy and "jiggly"

30 days before breeding

- Vaccinate does and bucks. All does and bucks should be vaccinated for Clostridium C & D and tetanus annually (CD&T toxoid). *Most farms vaccinate for CD&T *30 days prior to kidding* to ensure that the does will pass on immunity to their kids through colostrum. If your goats receive concentrates, then it is

recommended to vaccinate them for CD&T twice a year. There are also vaccines for pasturella, Chlamydia, leptosporosis, soremouth, caseous lymphadenitis and rabies. These vaccines are only advised if there is a problem within the herd, so consult with your veterinarian.

- Trim feet

14 days before breeding

"Flush" does to increase the ovulation rate. Flushing can be accomplished by moving does to a higher quality pasture or by gradually introducing ½ pound of corn per head per day. Do not allow does to become fat.

Breeding time

Prior to breeding, bucks should be isolated from the does. When the buck is placed in with the does, the does should come into heat within 3-10 days. A yearling buck should be able to cover 20-50 does while a mature buck should easily cover 100 does. Bucks should be kept in with the does for a minimum of 32 days (1.5 reproductive cycles). Many farms leave the buck in for 42 days, to ensure that any missed does are bred on the second cycle. You can also remove the buck for two weeks and replace him with a second buck to "clean up" any open does.

45-60 days after buck is turned in

There are several ways that pregnancy can be diagnosed in the goat. At 30 days pregnancy, a blood sample can be tested for Pregnancy Specific Protein B (www.biotracking.com).

30 days prior to kidding (high input)

- Vaccinate with CD&T toxoid (many farms will vaccinate all does and bucks at this time)
- Ensure that your does have access to loose goat mineral at all times
- Make sure you have adequate facilities related to weather conditions
- Minimize stress
- Begin feeding grain in addition to roughage, and work does up to 1/3 to 1 pound of grain per head per day. Be sure to keep does between 2.5 to 3 BCS.
- Clean barns to bare ground, then put down 4-6 inches of field-grade limestone and cover with fresh bedding.
- Place does on a coccidiostat and continue through weaning

30 days prior to kidding (low input)

- Vaccinate with CD&T toxoid (many farms will vaccinate all does and bucks at this time)
- Ensure that your does have access to loose goat mineral at all times
- Make sure you have adequate facilities related to weather conditions
- Minimize stress
- Move does to higher quality pasture. Be sure to keep does between 2.5 to 3 BCS

10 days before you expect kidding to begin

- Check your equipment and medical supplies:
  scale, bucket or sling, pencil and paper, ear tags and tag applicator, feeding tubes, plastic bucket, paper towels, surgical soap, sterile lubricating jelly, kid snare, 7% iodine for dipping navels, iodine cup, tools for castration and disbudding, tetanus antitoxin, Clostridium CD antitoxin, injectable Vitamin E and Selenium (Bo-Se® or L-Se®), heat lamps, disposable needles and syringes, milk replacer, frozen colostrum *Pay attention to drugs that require refrigeration.
- Identify does that will kid early in the season
- Deworm does –(maybe) – there is a rise in fecal egg production starting 1-2 weeks prior to kidding. Deworming does around the time of kidding will decrease the numbers of eggs deposited onto pastures, therefore, decreasing pasture contamination. However, kidding in clean pens or under rotational grazing situations may eliminate the need for this deworming. Please consult your veterinarian for advice.

Kidding (high input)

- Pen expectant does in kidding pens
- Check udder and be sure teats are open and colostrum is present – wash udder with soap and water.
- Make sure that kids nurse. It is important that the kids receive colostrum.
- Apply iodine to navels of kids.
- Give kids Clostridium CD antitoxin if the does were not vaccinated.
- Inject kids with Vitamin E and selenium subcutaneously (L-Se® or Bo-Se®).
- Check for turned-under eyelids, and correct if the condition exists.
- Use heat lamp or hair dryer, if needed, to dry kids off, but do not overuse.
- Start production records (put information on barn record, weigh kids, tag or tattoo.)
- Leave animals in kidding pens 1 to 3 days, depending on the strength of the kids and mothering ability of the doe.
- Consider castrating males when removing from pens. (give Tetanus antitoxin).
- Dehorning/disbudding baby goats could be done at this time.

Kidding (Low Input)

- Check doe herd daily
- Weigh and tag newborn kids daily
- Consider castrating males at 1-3 days of age (give tetanus antitoxin)

One week after kidding begins (high input)

Creep feeding (or supplemental feeding) allows kids access to a highly palatable feed to increase weight gains. To encourage kids to use the creep feeder, place it along a normal travel route, make sure kids can see their dams, place a light over the creep and use a palatable ration. Make sure that kids can't contaminate the feed with fecal pellets. Use a feed with a coccidiostat to prevent coccidiosis.

30 & 60 days after kidding

Vaccinate 30-day-old kids with CD&T toxoid and booster in one month

One week before weaning (high input)

- Sort out the does that you plan to wean kids from in a week and remove grain and protein supplements.
- Limit nursing of the kids

90 days after kidding – weaning time

- Wean kids that are about 90 days old. *consider weaning bucklings 2-3 weeks prior to prevent accidental breedings
- Leave does on roughage, allowing no grain until udders are dried up
- Watch udders closely and treat any problems immediately
- Allow time to flush does before turning them in with the buck for another breeding cycle
- Weigh kids at weaning and record
- Sort kids and sell when they reach market weight

Miscellaneous items

- Take a FAMACHA® training course so you can properly identify when to deworm your goats. Most people deworm their goats too much, contributing to the high incidence of stomach worms that are resistant to dewormers.
- Keep production data on your entire herd. These data will allow you to make informed decisions on which animals to cull from the herd.
- Dip, spray or dust for external parasites, if needed
- Utilize pasture rotation
- Keep pastures soil tested, fertilized, limed and seeded as necessary
- Clip pastures before weeds mature and grasses go to seed. This keeps the pasture in a more nutritious state. Goats will usually keep the pastures weed free.
- Fresh water and access to loose goat mineral must be available at all times.
- Develop an efficient goat handling system on your farm

While this is intended as a guide for meat goat production in Illinois, it is not all-inclusive for goat management. There are numerous books, magazines, websites and chat groups that can assist you with goat care. You should be familiar with:

.

Buck care: Can you care for bucks even during the non-breeding season?
Kidding: Can you handle a doe properly before and after kidding? Can you assist her as needed or recognize more serious problems? What do you do with a newborn kid?
Baby kid care: Do you know the basics?
Weaning: Do you know about the weaning process?
Vaccination: Can you recognize the important diseases? Do you have a vaccination schedule?
Internal and external parasite control: Every goat has parasites. Can you set up an effective parasite control program?
Foot trimming: Do you know how to do this? (It can be hard on your back!)