Basic Meat Goat Facts

NC STATE EXTENSION

Animal Science Facts

Reproductive Aspects

Female	
Age of puberty	7 – 10 months
Breeding weight	60 – 75% of adult weight
Estrous cycle • Length • Duration • Signs	• 18 – 22 days • 12 – 36 hours • Tail wagging, mounting, bleating
Ovulation	12 – 36 hours from onset of standing heat
Gestation length	146 – 155 days
Breeding season	August – January
Seasonal anestrous	February – July
Buck effect on estrous	Positive

Male	
Age of puberty	4 – 8 months
Breeding age	8 – 10 months
Breeding season	All year
Breeding ratio	1 buck : 20 to 30 does

Physiological Data

Temperature	101.7 – 104.5°F
Heart rate	70 – 80 beats/minute
Respiration rate	12 – 15/minute
Ruminal movements	1 – 1.5/minute

Rules for Goat Health

- Provide proper housing
- Practice good sanitation
- Provide adequate nutrition
- Provide clean water
- Observe how much feed (hay, minerals, concentrate) is left over
- Observe your animals daily
- Observe the feces of your animals
- Clean pastures and exercise lots
- Become familiar with the common diseases
- Investigate the source of strange smells
- Use your veterinarian for diagnosis

A Healthy Goat

- Eats well
- Chews its cud
- Has a shiny coat
- Has strong legs and feet
- Is sociable
- Has bright and clear eyes

Signs of Illness

- Off feed, off water
- No sign of cud chewing

- Standing apart from group
- Rough hair coat
- Abnormal temperature
- Heavy mucous in nose and mouth
- Diarrhea
- Runny eyes
- Limping
- Hair falling out
- Swelling on any part of body
- Pale mucosa of eyes and mouth

Purchased Animals

Upon arrival at the farm:

- **Isolate animals for a month**
- Vaccinate
- Deworm aggressively and monitor fecal egg counts
- Test for certain diseases (check with your veterinarian)
- Coccidiosis control program
- Identification tag

Herd Health Practices

Vaccination program – If possible always weigh animals prior to vaccination to 1) calculate and inject the correct dosage of the vaccine and 2) assess the body condition.

Enterotoxemia and tetanus - Clostridium perfringens types C, D + Tetanus Toxoid in one vaccine	
Adult males	Once a year
Breeding females	Once a year (4 to 6 weeks before kidding) or twice a year 4 to 6 weeks before breeding, then 4 to 6 weeks before kidding
Kids	Week 8, then booster on week 12

Deworming Program

If possible, always weigh animals prior to deworming to calculate and inject or drench the correct dosage of the dewormer.

- Assess body condition.
- Administer all drugs orally: pour-ons drugs applied as such are poorly absorbed.
- Under-dosing of goats because of failure to weigh the animals or because of underestimating their live weight is a very common but costly mistake because this may lead to faster parasite resistance to dewormers. Therefore, determine the dose according to the heaviest animal in the group. On the other hand, overdosing of certain dewormers can cause health problems.
- Goats metabolize drugs much more rapidly that other species of livestock and require a higher dosage. **RULE OF THUMB: goats should be given twice the dose for sheep or cattle. EXCEPTION: goats should only be given 1.5 the dose for sheep or cattle when using Levamisole (Levasol and Tramisol)**
- If deworming animals during pregnancy, before kidding, and during lactation, make sure that the dewormer used is safe for pregnant does. **Oxfendazole (Synanthic) should not be used in pregnant or lactating goats. Albendazole (Valbazen) should not be used during the first third of pregnancy.**
- Natural immunity and resilience vanes following kidding (also called the periparturient period). This means that even the resistant does can become susceptible to parasites during this period.
- Kids and pregnant does are more susceptible to parasite burdens.
- Respect dewormers withdrawal times for meat and milk.

Become familiar with the FAMACHA system, which is a new method of selective deworming. The FAMACHA system is only useful when *Haemonchus contortus* (the barber pole worm) is the preponderant gastrointestinal parasite. The FAMACHA system is based on the level of anemia of an animal by comparing the color of the lower mucus membrane of the eye to a colored chart. Anemic animals will have a pale color, whereas healthy animals will have a red color. The advantages of using the FAMACHA system include decreased number of treated animals, slower resistance to dewormers, selection of more resistant animals, identification of anthelmintic resistance, and decreased costs because only animals that need treatment are treated. The FAMACHA system should be used with good management and alternative means of controlling parasites such as alternative forages, good nutrition, sound pasture management, and exposing goats to browse type forages.

All North Carolina cooperative extension livestock agents have been trained in the FAMACHA system. Enquire when the next training will take place in your county. A FAMACHA card and educational materials are available upon completion of the training.

The FAMACHA system can be used all year around. Nevertheless, it is critical to use it during the following periods:

- Adults
    - 2 – 3 weeks before breeding
    - 2 – 3 weeks before kidding, or directly following kidding
    - Strategic, depending on climatic conditions and pasture worm loads
- Kids
    - 30 days of age
    - 60 days of age
    - Strategic, depending on climatic conditions and pasture worm loads

During hot and humid periods, it is recommended to take fecal samples before drenching the animals and 10 to 12 days later to determine fecal egg counts and to determine the effectiveness of the product used.

Coccidiosis control

Coccidiosis usually strikes young animals during periods of stress such as weaning. Level of control depends on the level of infestation.

- At weaning
    - Coccidiostat drench and/or
    - Coccidiostat in water tank (4 ounces in 25 gallons of water)
- At other times (if necessary)
    - Mineral with Bovatec
    - Decoquinate in feed

Kid Health Practice

- At birth
    - Dip navel in iodine
    - Kids should ingest 10% of their live weight in colostrum during first 12 to 24 hours of life.
    - Colostrum should be ingested or bottle-fed (in case of weak kids) as soon as kids have a suckling reflex. In cases of extremely weak kids, they should be tube-fed. It is very important to make sure that the tube is inserted into the esophagus (you should be able

to see the tube go down as it is inserted). The producer must be certain that all newborn kids get colostrum soon after birth (within the first hour after birth, and certainly within the first 6 hours) because the percentage of antibodies found in colostrum decreases rapidly after parturition. Newborn kids should ingest 10% of their body weight in colostrum.

- Castration
    - Elastrator (method of choice: bloodless, less pain)
      The question is: why castrate if you will sell your buck kids for meat at 4 to 5 months of age? However, if not castrated, buck kids should be separated from doe kids at weaning, otherwise some unplanned breeding may occur.

Flushing

Feeding strategy to increase ovulation rate

- Starting **3-4 weeks before the breeding season, and throughout the breeding season**, increase the plane of nutrition of does to be bred. Overly conditioned and fat does will not respond to flushing.
    - Switch does to high quality pasture
    - Supplement does with ½ lb cracked corn or ½ lb whole cottonseed/head/day

After Breeding

To ensure proper embryo development

- During the first month of pregnancy keep the plane of nutrition similar to that of flushing period

Important Production Traits

- Adaptability
    - Ability to survive in given environment
    - Ability to reproduce in given environment
    - Is a lowly heritable trait
- Growth rate
    - Pre-weaning gain
    - Post-weaning gain
- Reproduction

    - Conception rate
    - Kidding or prolificacy
    - Non-seasonality

- Carcass characteristics
    - Dressing percent
    - Lean:fat:bone
    - Muscle distribution

Body Condition Score

- To monitor and fine-tune nutrition program
- To "head off" parasite problem
- Visual evaluation is not adequate, has to touch and feel animal
- Areas to be monitored
    - Tail head
    - Pins
    - Edge of loin
    - Back bone
    - Ribs
    - Hocks
    - Shoulder
    - Longissimus dorsi

- Scale
    - Thin - 1 to 3
    - Moderate - 3 to 4
    - Fat - 7 to 9

- Recommendations
    - End of pregnancy - 5 to 6
    - Start of breeding season - 5 to 6

    - Animals should never have a body condition score of 1 to 3
    - Pregnant does should not have a body condition score of 7 or above toward the end of pregnancy because of the risk of pregnancy toxemia
    - A body condition score of 5 to 6 at kidding should not drop off too quickly during lactation

Fencing

Perimeter Fence

- Smooth high-tensile electrified wire
    - At least 42 inches tall
        - 6 to 8 inches near the ground
        - 8 to 12 inches at the top strands
        - Example (inches from the ground): 6 - 14 - 22 - 32 - 42 - (52)

- Woven wire (6" x 6")
    - Effective
    - Costs at least twice as much as 5 strands of smooth electrified wire
    - Horned goats can get caught
    - Place an electric wire offset about 9 inches from the woven wire fence and about 12 to 15 inches from the ground
    - Reduces control of forage growth at fence line

- Woven wire (6" x 12")
    - Effective
    - Cheaper
    - Horned goats usually do not get caught

- Woven wire (high tensile fixed knot)
    - Very effective (bounces back because of fixed knot)
    - Can be expensive
    - Many opening sizes are available so that goats do not get caught

Interior Fences

- Two to three strands of wires (braided or tape) with tread-in posts
- Electronet

Grazing Management

In a pasture situation, goats are “top down” grazers. They start to eat seedheads or the top of the canopy and progressively take the forage down. This behavior results in uniform grazing. Goats do not like to graze close to the ground. Grazing goats have been observed to

1. Select grass over clover
2. Prefer browse over herbaceous plants
3. Graze along fence lines before grazing the center of a pasture
4. Refuse to graze forage that has been trampled and soiled.

These observations have been put to use in the grazing management of goats: it is preferable to give them a daily allowance of forage and to move the fence accordingly rather than to let them roam freely in a large pasture. This type of management, called control grazing, was developed in Europe and is implemented very successfully in New Zealand and numerous other parts of the world. Control grazing results in better animal performance, higher stocking rates, and increased pasture productivity.

So, You Want to Get in the Goat Business

Are you really, really ready?

- Are your fences, pens, chutes goat proof?
- Is your grazing land adequate?
- Do you have sufficient supplemental feed on hand?
- Is your predator controller in place?
- In your medicine cabinet do you have:
    - Dewormers
    - Iodine
    - Insecticidal powder
    - Stomach tube
    - Vaccines
    - Antibiotic ointment
    - Thermometer
    - Hoof trimmer?

- Do you know the address and phone number of your county extension office?
- Do you know the names of your county extension livestock, forage, and 4-H agents?
- Have you discussed your new venture with your local veterinarian?
- Have you alerted your next door neighbors to the possibility of excessive noises, exotic odors, sexual activity during the breeding season, animals getting out, and allayed their fears of the spreading of diseases?

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There is an alternate Spanish language version of this document here: Caprinos: aspectos básicos

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