2019
Kansas Junior
Meat Goat
Producer Day
Educational Resource
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Contributions

Special thanks to these people for their contributions to the Junior Meat Goat Producer Day program and this educational resource.

Animal ID, Inc.
Dr. Alison Crane
Lexie Hayes
Dr. Terry Houser
Joseph Hubbard
Dr. Emily Reppert
Spencer Scotten
Anna Wines

Youth for the Quality Care of Animals (YQCA)
**Meat Goat Project Selection**

Spencer Scotten  
Scotten Livestock  
Nevada, MO

**Selection**

- Where do I find a goat?
  - Find a reputable breeder.
  - Someone you can trust.
  - If you don’t know how to pick one out ask someone who has some experience to help you look for the right things.

**Selection**

- What to look for...
  - What makes a good meat goat?
    - Genetic Potential
    - Muscle/Width
    - Sound Structure
    - Balance/Attractiveness
Goat Nutrition Made Simple

Alison Crane, Ph.D.
Assistant Professor, Sheep and Meat Goat Extension Specialist
Animal Sciences & Industry, Kansas State University

General

• But, what is nutrition?
  – The sum of the processes by which an animal takes in and assimilates the nutrients in feeds

Production Goals

• Meat
• Fiber
• Specialty milk and cheese
• Lifestyle livestock

Digestive System

Unique Aspects of Goat Nutrition

• Voluntary dry matter intake is relatively high:
  – Sheep: 2.5 to 4.0% of body weight
  – Goats: 3.0 to 5.0% of body weight
  – Cattle: 1.5 to 3.0% of body weight
Does how much a goat needs to eat change?

- YES!
  - Are they active?
  - Having Kids? How many?
  - Are they growing?
  - Is it hot or cold?
  - Are they growing fiber? Producing milk?

What else do we need to consider?

- Weight
- Maturity
- Sex
- Body Condition
  - What are your goals?
    - Market
    - Breeding
    - Showing
    - Pet

Mature Doe Maintenance (110 vs. 132 lb)

<table>
<thead>
<tr>
<th>Body Weight (lb)</th>
<th>Feed Intake (lb/day)</th>
<th>Energy as TDN (lb/day)</th>
<th>Energy % TDN (%)</th>
<th>Protein (lb/day)</th>
<th>Protein (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>2.2</td>
<td>1.17</td>
<td>53.2</td>
<td>0.15</td>
<td>6.8</td>
</tr>
<tr>
<td>132</td>
<td>3.2</td>
<td>1.32</td>
<td>41.3</td>
<td>0.17</td>
<td>5.3</td>
</tr>
</tbody>
</table>

Important Note

- Smaller animals
  - Eat less
  - Require higher quality (energy and protein- percentage base)
  - Compared to larger counterparts

Mature Doe (132 lb) at different production stages

<table>
<thead>
<tr>
<th>Productivity</th>
<th>Feed Intake (lb)</th>
<th>Energy as TDN (lb/d)</th>
<th>Energy % TDN (%)</th>
<th>Protein (lb/d)</th>
<th>Protein (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>3.2</td>
<td>1.3</td>
<td>40.6</td>
<td>0.17</td>
<td>5.3</td>
</tr>
<tr>
<td>Late Pregnancy (twins)</td>
<td>4.3</td>
<td>2.8</td>
<td>65.1</td>
<td>0.47</td>
<td>11.0</td>
</tr>
<tr>
<td>Early Lactation (twins)</td>
<td>4.1</td>
<td>2.2</td>
<td>53.7</td>
<td>0.23</td>
<td>5.7</td>
</tr>
</tbody>
</table>

Newborn Kids

- Colostrum
- Within an hour
Most Important

• Highest nutrient requirement:
  – Late pregnancy

• Watch feed intake!

• Don’t let pregnant does get too fat

Mature Buck (275 lb) at Maintenance & Pre-breeding

<table>
<thead>
<tr>
<th>Activity</th>
<th>Feed Intake (lb/day)</th>
<th>Energy as TDN (lb/day)</th>
<th>Energy as TDN (%)</th>
<th>Protein (lb/day)</th>
<th>Protein (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maint.</td>
<td>5.0</td>
<td>2.65</td>
<td>52.9</td>
<td>0.32</td>
<td>6.4</td>
</tr>
<tr>
<td>Pre-breeding</td>
<td>5.5</td>
<td>2.91</td>
<td>52.9</td>
<td>0.35</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Growing Doelings and Wethers (0.22 lbs/d gain)

<table>
<thead>
<tr>
<th>Body Weight (lb)</th>
<th>Feed Intake (lb/day)</th>
<th>Energy as TDN (lb/day)</th>
<th>Energy as TDN (%)</th>
<th>Protein (lb/day)</th>
<th>Protein (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>1.43</td>
<td>0.97</td>
<td>67.8</td>
<td>0.21</td>
<td>15.3</td>
</tr>
<tr>
<td>77</td>
<td>2.65</td>
<td>1.27</td>
<td>48.3</td>
<td>0.27</td>
<td>10.0</td>
</tr>
</tbody>
</table>

Gaining 0.45 lbs/d

<table>
<thead>
<tr>
<th>Body Weight (lb)</th>
<th>Feed Intake (lb/day)</th>
<th>Energy as TDN (lb/day)</th>
<th>Energy as TDN (%)</th>
<th>Protein (lb/day)</th>
<th>Protein (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>44</td>
<td>1.46</td>
<td>1.30</td>
<td>69.4</td>
<td>0.34</td>
<td>23.4</td>
</tr>
<tr>
<td>77</td>
<td>2.43</td>
<td>1.63</td>
<td>67.1</td>
<td>0.39</td>
<td>16.2</td>
</tr>
</tbody>
</table>

Protein Requirement

Protein Considerations

• All proteins are not created equal

• Different protein feeds influence the amount of protein required in the diet

• To accurately balance, the protein source must be considered
More Considerations

- Pasture-based diets will require greater amounts of CP for the animal
- Soy-corn based diets will require lesser amounts of CP

Grass/Clover Hay

<table>
<thead>
<tr>
<th>CRUDE PROTEIN (%)</th>
<th>LOW-PROTEIN (5-8% CP)</th>
<th>MID-PROTEIN (8-11% CP)</th>
<th>HIGH-PROTEIN (12-16% CP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL DIGESTIBLE NUTRIENTS (%)</td>
<td>6.9</td>
<td>9.9</td>
<td>12.5</td>
</tr>
<tr>
<td>% OF SAMPLES</td>
<td>64</td>
<td>28</td>
<td>8</td>
</tr>
</tbody>
</table>

Grass/Alfalfa Hay

<table>
<thead>
<tr>
<th>ALFALFA/GRASS MIX</th>
<th>ALFALFA</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRUDE PROTEIN (%)</td>
<td>17 - 20</td>
</tr>
<tr>
<td>TOTAL DIGESTIBLE NUTRIENTS (%)</td>
<td>59 - 61</td>
</tr>
</tbody>
</table>

High Stocking Rate

- Stocking rate is the most important aspect of pasture management
- Stocking rate is a function of intake

<table>
<thead>
<tr>
<th>Animal Class</th>
<th>Animal Unit Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,000 lb Cow + calf</td>
<td>1.00</td>
</tr>
<tr>
<td>Nursing Calf</td>
<td>0.80</td>
</tr>
<tr>
<td>Mature Horse</td>
<td>1.25</td>
</tr>
<tr>
<td>Mature Sheep</td>
<td>0.30</td>
</tr>
<tr>
<td>Lamb</td>
<td>0.15</td>
</tr>
<tr>
<td>Mature Goat</td>
<td>0.15</td>
</tr>
<tr>
<td>Kid Goat</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Quiz

- Question #1
  Are goats grazers or browsers or.................?

Utilizing Herbage and Browse

- Preference =
  - Shrubs, tree leaves, grass heads
  - Select from wide array of plants
  - Will eat more of a preferred species
  - Brows contain higher levels of protein & P, during growing season than grasses
  - Some browse is unpalatable
    - Lignin, silica, oils, etc.
Nutrient Content of Browse

<table>
<thead>
<tr>
<th>Browses</th>
<th>Protein (%)</th>
<th>Energy (%TDN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blackberry - July - Sept</td>
<td>8.6 - 8.2</td>
<td>72 - 73</td>
</tr>
<tr>
<td>Oak</td>
<td>11 - 17</td>
<td>70</td>
</tr>
<tr>
<td>Elm</td>
<td>7.8</td>
<td>45</td>
</tr>
<tr>
<td>Mesquite</td>
<td>16.2</td>
<td>59</td>
</tr>
<tr>
<td>Bamboo</td>
<td>17.0</td>
<td>72</td>
</tr>
<tr>
<td>Grapevine leaves</td>
<td>9.0</td>
<td>72</td>
</tr>
</tbody>
</table>

Source: Nutrient Requirements of Small Ruminants (NRC 2000)

Stocking Rate

- Minimal overlap in selection preferences allows multi-species grazing
  - Pastures with a diverse forage base will support full stocking of 2 to 3 species of livestock
  - Allows multiple income resources without an increase in pasture acreage and the expense associated with it
  - Functionally, grazing pressure on pastures is not increased

Protein Supplements

<table>
<thead>
<tr>
<th>Description</th>
<th>Protein %</th>
<th>Energy (TDN)%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa Hay</td>
<td>18 - 24</td>
<td>60 - 65</td>
</tr>
<tr>
<td>Cottonseed Meal</td>
<td>46</td>
<td>80</td>
</tr>
<tr>
<td>Soybean Meal</td>
<td>44</td>
<td>84</td>
</tr>
<tr>
<td>Peas</td>
<td>25</td>
<td>86</td>
</tr>
<tr>
<td>Pellets</td>
<td>Varies (see tag)</td>
<td></td>
</tr>
<tr>
<td>Blocks</td>
<td>Varies (see tag)</td>
<td></td>
</tr>
</tbody>
</table>

Energy Supplements

<table>
<thead>
<tr>
<th>Grain</th>
<th>Protein %</th>
<th>Energy (TDN)%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corn</td>
<td>9</td>
<td>88</td>
</tr>
<tr>
<td>Oats</td>
<td>13</td>
<td>76</td>
</tr>
<tr>
<td>Barley</td>
<td>12</td>
<td>84</td>
</tr>
<tr>
<td>COB</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Mineral Supplementation

- A complete goat mineral: offer year-round, free choice
- Copper
- Selenium
- Manganese
- Cobalt
- Iodine
- Zinc

Growing Season: Pasture

- Vegetative growth = sufficient
- Meets: protein, energy, vitamins
- Low Cost
- Feed mineral
- Goats prefer browse to grass
Grazing Management

• Graze to desired stubble height
  – Parasites = 4-6 inches

• Allow adequate rest for regrowth

• Identify key species and measure to desired height

Feed Rules

• Low quality grass hay
  – Pregnant, lactating, growing

• Supplementation

• Clean, fresh water at ALL times

• Weigh feed

Ration Balancing

• Langston University
  – http://www2.lurexst.edu
  – Click on goats
  – Click on nutrient calculators

Unique Aspects of Small Ruminant Nutrition

Multiple births are commonplace

Single

Triplets

Nutrition of Breeding Females

• Energy supplementation can be used to “flush” ewes
  – Increases ovulation rate and the number of offspring per female
  – Does not work with over-conditioned does

• Flushing can increase lambing by 10 to 25%

Nutrition of Breeding Females

• Phytoestrogens: Delayed estrus can result from flushing or breeding does on legume pastures

• Pregnancy Toxemia (Ketosis): Caused by rapid fat mobilization during late pregnancy
  – Most common in over- or under-conditioned females
  – Also commonly affects does with triplets or quads
  – Glucose (oral, sub q, or i.v.) is the usual treatment

• Milk Fever: can occur prepartum or postpartum
  – Symptoms similar to pregnancy toxaemia
  – Response to calcium therapy (oral or i.v.) is the definitive indicator
Feeding the Female

- Grass hay or pasture during the **first 3-4 months** of gestation
- Alfalfa hay during the **last 1-2 months**
- Concentrate to balance
  - Feed to an adequate **body condition score**
- Offer free choice mineral or mix in ration

**Example Late Pregnancy Doe Ration (132 lb)**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa hay</td>
<td>0.5 lb/day</td>
</tr>
<tr>
<td>Grass hay</td>
<td>0.8 lb/day</td>
</tr>
<tr>
<td>Corn</td>
<td>1.25 lb/day</td>
</tr>
</tbody>
</table>

**Target BCS**

- 1.5 to 2.5 Body Condition Score
- 2.5 to 3.5 - Body Condition Score
- 3.5 to 4 - Body Condition Score

*Stage of Production:*
- Early Postpartum
- Mid Postpartum
- Late Postpartum
- Early Lactation
- Mid Lactation
- Late Lactation
Feeding the Growing Kid

- Start them off strong!
- Feed the female to feed the baby

Quiz

- Question #4

Define “creep feed”

Creep Feed

- Offer free choice creep feed within the first 7 days of life
- Feed should be
  - Micropellet/Meal
  - Highly palatable
  - Higher fat
- Can also offer free choice alfalfa

Creep Feed Example

Growing Doeling ration (gain 0.22 lb/d)

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alfalfa hay</td>
<td>1.8 lb/day As fed</td>
</tr>
<tr>
<td>Grass hay</td>
<td>0.0 lb/day</td>
</tr>
<tr>
<td>Corn</td>
<td>0.5 lb/day</td>
</tr>
</tbody>
</table>

Show Feed Example
Medicated or Non-medicated

- If you want to increase ADG and FE, medicated
  - Lasalocid (Bovatec®) or Monensin (Rumensin®)
  - Ionophore
  - Coccidiocide
  - Reduces gram-positive bacteria in the rumen
    - Improves nitrogen utilization
    - Increase propionate production
  - Decoquinate (Deccox®)
    - Coccidiostat
    - Improved feed efficiency

Urinary Calculi

- Ca:P Imbalance
- Phosphorus content
  - Be leery of products with > 0.50% Minimum
  - Urinary calculi common in males

Bucks

- Protein
- Over-feeding
- 1 lb grain/d plus forages
- Adjust grain to body condition

Rules for Changing Feed

- Done slowly/gradually
- Changing type or amount takes time
- Introduce ¼ lb/d
- Feed at same time each day
- Feed twice per day

Summary

- Identify nutritional needs
- Remember that they change
- Match animal requirements to nutrient value of feeds
- Use BCS to fine tune nutrition program
- Always... Always... Always
  - Mineral and Water

Questions
State Livestock Nomination Process

Lexie Hayes
KSU Youth Livestock Program Coordinator
March 2019

Nomination Process Overview

• Must formally nominate market or commercial animals to be shown at a state show:
  ✓ Kansas State Fair (Grand Drive)
  ✓ Kansas Junior Livestock Show (KJLS)

• 2019 Nomination paperwork MUST be used
  ✓ “February 2019” on bottom of form
  ✓ All other forms will be returned to you

• 2019 Nomination Information and Forms available via local Extension Offices or K-State Youth Livestock Program website
  www.youthlivestock.ksu.edu Nomination Information
  OR

Deadlines

May 1, 2019
Deadline – Market Beef

June 15, 2019
Deadline - Market Swine, Commercial Gilts, Market Lambs, Commercial Ewes, All Meat Goats, and Commercial Heifer

No registered breeding doe show! ALL wethers & does MUST be nominated to show.

Nomination Process

Step 1: Animals eligible for KJLS or KSF will need a Kansas 4-H EID ear tag placed in the ear of the animal BY THE AGENT
  - Let local Extension Office know you plan to state nominate animals

Step 2: Exhibitors will fill out the Declaration Form & specie Nomination Form(s)
  - Print from http://bit.ly/ksunominations or request from Extension Agent
  - Attach YQCA certificate or copy of Youth PQA+ card to Declaration Form

Step 3: Exhibitors will pull a DNA sample from the animal and place it in an official DNA envelope (DO NOT CUT THE HAIR)
  - Envelopes may be obtained from local Extension Office
  - Instructions on pulling DNA are in educational resource or on the youth livestock website
  - Instructional videos on youth livestock website

Nomination Process (Cont.)

Step 4: Exhibitors will have their agent sign declaration/ nomination paperwork & place barcode stickers on forms

Step 5: Exhibitors will mail their completed Declaration Form, YQCA Certificate(s), Nomination Form, DNA, and Payment to be processed by K-State
  - Certified mail is HIGHLY suggested ($3.50-$6.30 for peace of mind)

Step 6: K-State will process these nominations and post weekly updates online regarding complete/incomplete nominations.
  - Once processed, letters sent to families stating if nomination is complete/incomplete.
  - Exhibitor/family’s opportunity to verify the accuracy of the nomination information received by K-State.

Scrapie Tag #

• FULL SCRAPIE TAGs are required for all meat goat nominations
• Submit Flock/Premise ID AND Individual #
  ✓ Farm/custom tags – look on back of tag for Flock ID
• Resources available:
  ✓ Rookie Guide
  ✓ KSU Youth Livestock website
Nomination Materials to Mail
• Declaration Form (with YQCA certificates attached)
• Specie Nomination Form
• DNA Envelopes
• Payment - $8/animal made payable to KJLS

Tips & Resources
Visit the website
Use the specie checklist!
Refer to the Rookie Guide!

2019 Nomination Updates
• YQCA certification required for all exhibitors
  ✓ Valid Youth PQA+ #s accepted until they expire
  ✓ Needs to be completed at the time of nomination (Meat Goats - June 15)
• Age added to Declaration Form
• Breeding Doe show added to Grand Drive – all goats must be nominated
• “Extra” Forms reinstated – must be in addition to regular specie nomination form
• Forms are form-fillable PDFs
  ✓ Original signatures still REQUIRED!
• Additional information on DNA envelopes
• Ear notch and Scrapie Tag # requirements continue

Show Entry
• REMINDER: A livestock nomination is NOT an entry for Kansas Junior Livestock Show
  or Kansas State Fair
• K-State processes and manages nominations, but KSF and KJLS manage their own
  shows and entry processes.
  • 3 SEPARATE processes
• Exhibitors must submit an entry online through ShoWorks for each of these shows
  once they have completed the nomination process
  • get entry information from Extension Office OR show website(s)

Kansas State Fair
• Date: September 6-15, 2019
• Grand Drive: September 6-8, 2019
• Entries Due: July 15
• Show held in Hutchinson, KS
• www.kansasstatefair.com

Kansas Junior Livestock Show
• Date: September 27 – September 29, 2019
• Entries Due: August 15
• Show held in Hutchinson, KS
• www.kjls.org

Thank You!
adhayes@ksu.edu
(785)532-1264
www.YouthLivestock.ksu.edu
Kansas State Youth Livestock Program

Tips & Resources
If it’s on the form – it’s required!

Incomplete Fee
$20 one time/year incompletion fee
If paperwork has to be returned for any reason, any field is blank, or any nomination materials are missing.
Sheep & Goat Hair Sample Collection Instructions

1. Check the ear tag number of the animal, and record it on the hair sample envelope. Clean the sample area to remove dirt or other contaminants.

2. Pull a tuft of hair from the leg, just above the toes. Pull the hair directly away from the skin, NOT at an angle. This will allow the root to come out with the hair. Pull at least twice.

3. Inspect the hairs sample to ensure at least 30 hair follicles or roots. The roots are easy to see in goats (like human hairs with a bulb at the end), but difficult in sheep. In sheep, you may notice a color variation which indicates that the root is intact.

   Note: Do NOT cut the hair from the animal. The hair MUST CONTAIN ROOTS for DNA testing. Avoid touching the roots and make sure the hair is dry.

4. Place the sample in the hair sample envelope, and then seal the envelope in the presence of the exhibitor and parent/supervisor. Do not put hairs in a plastic bag.

5. Fill out the remaining information lines on the envelope, and have the witnesses sign.

6. REMEMBER: Cleanse hands and pliers between animal samples to ensure that hairs from different animals are not mixed.

Sheep & Goat Sample Checklist

- Select collection area - we suggest above toes
- Insert ear tag number on the envelope
- Obtain at least 30 hairs with follicles
- Take at least 2 pulls
- Inspect for follicles – do not touch follicles
- Obtain exhibitor signature & seal envelope
- Clean pliers and hands between animals

*Instructional videos available on the DNA page of the KSU Youth Livestock website (www.youthlivestock.ksu.edu).

If viewing this resource book electronically, click here: DNA Videos.
### 2019 Youth Livestock Nomination and Entry Deadlines

**Kansas State Fair Grand Drive (KSF) and Kansas Junior Livestock Show (KJLS)**

**AGE REQUIREMENTS: Kansas State Fair:** Only Kansas 4-H members who were 9 years of age but not yet 19 years of age before January 1 of the current year are eligible to compete in this division. **KJLS:** All Kansas 4-H members that have reached the age of 7 before January 1\textsuperscript{st} of the show year will be eligible to participate at the Kansas Junior Livestock Show.

<table>
<thead>
<tr>
<th>Entry</th>
<th>Required Materials for Nomination</th>
<th>Cost to Nominate</th>
<th>Nomination Declaration*</th>
<th>Nomination Deadline</th>
<th>Show Entry Deadline</th>
<th>Registration Papers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Market Steers</strong></td>
<td>EID tagged, Declaration Form*, Market Beef Nomination Form*, sealed DNA Hair Sample envelope*, YQCA certified youth, all postmarked by May 1.</td>
<td>$8</td>
<td>Required every year</td>
<td>May 1</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Market Heifers</strong></td>
<td>EID tagged, Declaration Form*, Market Beef Nomination Form*, sealed DNA Hair Sample envelope*, YQCA certified youth, all postmarked by May 1.</td>
<td>$8</td>
<td>Required every year</td>
<td>May 1</td>
<td>KSF – July 15</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Commercial (Crossbred) Heifers</strong></td>
<td>EID tagged, Declaration Form*, Commercial Heifer Nomination Form*, sealed DNA Hair Sample envelope*, YQCA certified youth, all postmarked by June 15.</td>
<td>$8</td>
<td>Required every year</td>
<td>June 15</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Registered Breeding Heifers</strong></td>
<td>No. YQCA certificate submitted at time of show entry.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Market Lambs</strong></td>
<td>EID tagged, Declaration Form*, Market Lamb/Commercial Ewe Nomination Form*, sealed DNA Hair Sample envelope*, scrapie tag #, YQCA certified youth, all postmarked by June 15.</td>
<td>$8</td>
<td>Required every year</td>
<td>June 15</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Commercial Ewes (Wether Dams)</strong></td>
<td>EID tagged, Declaration Form*, Market Lamb/Commercial Ewe Nomination Form*, sealed DNA Hair Sample envelope*, scrapie tag #, YQCA certified youth, all postmarked by June 15.</td>
<td>$8</td>
<td>Required every year</td>
<td>June 15</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Registered Breeding Ewes</strong></td>
<td>No. YQCA certificate submitted at time of show entry.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>KSF Market Hogs/KJLS Barrows</strong>*</td>
<td>EID tagged, Declaration Form*, Swine Nomination Form*, sealed DNA Hair Sample envelope*, YPQA+ or YQCA Certified, ear notches, all postmarked by June 15.</td>
<td>$8</td>
<td>Required every year</td>
<td>June 15</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Purebred/Pedigreed Breeding Gilts</strong></td>
<td>No. YQCA certificate submitted at time of show entry.</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>Commercial Breeding Gilts</strong></td>
<td>EID tagged, Declaration Form*, Swine Nomination Form*, sealed DNA Hair Sample envelope*, YPQA+ or YQCA Certified, ear notches, all postmarked by June 15.</td>
<td>$8</td>
<td>Required every year</td>
<td>June 15</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
<tr>
<td><strong>All Meat Goats</strong>**</td>
<td>EID tagged, Declaration Form*, Meat Goat Nomination Form*, sealed DNA Hair Sample envelope*, scrapie tag #, YQCA certified youth, all postmarked by June 15.</td>
<td>$8</td>
<td>Required every year</td>
<td>June 15</td>
<td>KSF – July 15</td>
<td>KJLS – August 15</td>
</tr>
</tbody>
</table>

\* The Declaration form and specie Nomination forms are available at [www.YouthLivestock.KSU.edu](http://www.YouthLivestock.KSU.edu). Declaration Forms are due at the time of nomination. Contact the local extension office to have animals tagged (for all species) and obtain official DNA Hair Sample Envelopes. **All exhibitors are required to be YPQA+ or YQCA certified.**

\** There is no market heifer show at KJLS.

\**** For pedigreed market barrows, ear notches on registration papers must match the pig’s ear notches to be able to show.

\***** Commercial doe show available at BOTH KSF & KJLS; ALL market and breeding meat goats must be nominated to show (no registered breeding doe show for either).

\***** Health papers are only required at KSF for animals originating outside of Kansas.

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There is a one-time/year $20.00 fee if any part of a nomination is incomplete or has to be returned. February 2019
Goat Wellness

Emily Reppert DVM, MS, DACVIM
Nora Schrag DVM

Veterinary Care for Goats

- Annual Maintenance
  - Vaccinating
  - Deworming
  - Hoof trimming
- Common emergencies
  - Obstructive urolithiasis ("blocked")
  - Predator attach
  - Weak
  - Dystocia

Vaccination

- "Over eating disease"
- Clostridium perfringens type C and D plus tetanus (CDT)

CD&T Vaccination Recommendations

<table>
<thead>
<tr>
<th>Age of Animal</th>
<th>Timing of CD &amp; T Vaccination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult doe</td>
<td>2-3 weeks prior to kidding</td>
</tr>
<tr>
<td>Primiparous doe (1st timer)</td>
<td>6 weeks prior to kidding &amp;</td>
</tr>
<tr>
<td></td>
<td>3 weeks prior to kidding</td>
</tr>
<tr>
<td>Kids from vaccinated dams</td>
<td>6 weeks of age</td>
</tr>
<tr>
<td></td>
<td>10 weeks of age</td>
</tr>
<tr>
<td>Kids from un-vaccinated dams</td>
<td>1-3 weeks of age &amp;</td>
</tr>
<tr>
<td></td>
<td>2 boosters</td>
</tr>
<tr>
<td></td>
<td>3-4 weeks after initial vaccination</td>
</tr>
<tr>
<td>Bucks, wethers</td>
<td>Annual booster</td>
</tr>
<tr>
<td></td>
<td>[if on high grain diet: 2-3 times annually]</td>
</tr>
</tbody>
</table>

Small Ruminant Parasites

STOMACH WORM
(************)

COCCIDIA
(************)
Gastrointestinal Parasite Infections

- Most susceptible
  - Young
  - Pregnant
  - Nutritionally stressed (Poor body condition)
  - Immuno-compromised

Life Cycle

- Pre-patent Period
  - 3 weeks (ingestion of larvae – fecal excretion of eggs)
- Egg → Larvae
  - Summer: 4-10 days
  - Winter: 1-2 months

Clinical Signs

- Sudden death
- Lethargy
- Bottle jaw
- Weight loss
- Diarrhea???

H. contortus – Clinical Signs
Why Don’t Dewormers Work?

1. Treating the wrong parasite
2. Inappropriate dose
3. Resistance

Who to Deworm?

- FAMACHA
- 5 Point Check
- Strategic deworming

FAMACHA System

- System of identifying anemic animals, scoring the anemia and treating based on severity of disease
- More pallor = greater worm burden

NOTE:
- Only appropriate for adult animals
- Significantly increases amount of labor
- Effective for identification of H.contortus
- Does not account for other causes of anemia
Take Home Message

- Treat only animals that need to be dewormed
- Administer an appropriate dose
- Develop relationship with veterinarian for extralabel drug use
- Use smart drenching techniques

Principles for Anthelmintic Use

- Ensure that the correct dose is being used
- Use oral anthelmintics
- Withhold feed for 12-24
- Avoid long acting dewormers (Longrange)
- DO NOT treat all of the animals
- Exhaust the same anthelmintic/combo
Coccidiosis

- 1-6 month old kids
- Diarrhea
  - +/- hematochezia
- Anorexia
- Dehydration
- Weight loss

Treatment

Supportive Care

- Intravenous fluids
- Vitamin B complex
- Blood transfusion

Treatment

Anti-coccidial Drugs

Coccidiostat
- Ionophores
- Decoquinate

Coccidiocidal
- Amprolim
  - (50 mg/kg, PO 5 days)
- Triazinones

NO DRUGS APPROVED FOR TREATMENT OF COCCIDIOSIS IN GOATS

Questions

Annual Wellness Exam

- General physical examination
- Routine vaccination
- Fecal (+/-) deworming

References

American Consortium for Parasite Control
http://www.wormx.info
- Deworming charts
- Up-to-date literature regarding A. parasiticum

Maryland Small Rumint Page
www.sheepandgoat.com
Repro Options
Spencer Scotten
Scotten Livestock

Timeline
- Show as a doe kid and possibly the next year too.
- After life as a show goat they will probably need slowed down on feed.
- I would shoot to kid them at around 2 years of age.

Breeding Options
- Laparoscopic AI
- SEK or Trans Ova
- Set up with a CIDR (14 days then administer 1 ml pg 600 when pulled)
- Natural Service (Better Conception)
  - Can run with a buck or often times where you purchased your doe will help you out.

flushing
- Fastest way to expand elite genetics.
- Conventional flush
  - Specific Protocol administering certain hormones at specific times
  - “Flush” the fertilized eggs out and put them in recipient does
- In vitro fertilization (IVF)
  - Newer process where unfertilized oocytes are aspirated from the donor doe and then mixed with semen in a dish where they are fertilized and then put into recips.
Pregnancy Testing
- The two most popular ways are ultrasound and blood testing.
- Ultrasound can detect how many babies are there
- Blood testing can be done without needing help. Order a kit and take the samples then send off.

Available Options
- SEK Genetics
  - AI, Conventional Flushing, Buck Collection, Pregnancy Testing
- Transova
  - AI, Conventional Flushing, IVF
Showmanship
Spencer Scotten
Scotten Livestock
Nevada, MO

Fitting/Showing
• Clipping-Market Goats
  – When to clip?
    • I always clip the day or two before the show.
  – How to clip.
    • I use the blade called “covercote”.
    • Everything above the knee and hock besides the tail.

Fitting/Showing
• Clipping-Breeding Does
  – https://www.youtube.com/watch?v=T8mjfUv_M3g

Links to instructional videos
• https://www.youtube.com/playlist?list=PLrzMLqmyiPcJtZaUaZWx-JKlvkmtAL
• https://www.youtube.com/playlist?list=PLFfiwIFgYlc3XHc5SBVZf5Sx-lFVMwI

Fitting/Showing
• Showmanship
  – Good showmanship can really help how you place.
  – The biggest key to showmanship is to work with your goat at home on this.
  – Start out slowly by breaking them to tie then move on to teaching them to lead.
Fitting/Showing

• Even at the show keep on the same schedule.
  – Just because show day is approaching doesn’t mean you have to do anything special.
  – The only thing I do different is add more electrolytes before traveling to the show and at the show to help with hydration.

Thanks!
Facilities and Equipment
Anna Wines

About Me:
- Hometown: Effingham, IL
- Showed goats for eleven years
- Animal Science Major with a Business Minor

Before You Buy Your Goat:
Shed/ Housing

Before You Buy Your Goat:
Fencing

Before You Buy Your Goat:
Transportation/ Handling

Feeders
WHAT NOT TO DO

- Entry Forms/Money
- Water Buckets
- Feed and Feeders
- Halters and Chains
- Waterless Shampoo
- Hose and Nozzle
- Brush
- Rags/Towels
- Scissors
- Drench Gun
- Muzzle
- Orange Juice/Gatorade
- Safety Pins

For The Show

Basics:
- Blower
- Clippers
- Fitting Supplies (Paint, Adhesive if allowed)
- Fitting Stand
- Blankets/Tubes
- Probiotic
- Hay
- Camera
- Chairs
- Fan
For The Show - Basics

For The Show - Optional

Questions?
MEMO

Date: December 7, 2018

To: Kansas Youth Livestock Families

From: Lexie Hayes, KSU Youth Livestock Program Coordinator
      Pam Van Horn, State Extension Specialist

RE: New YQCA Requirement for 2019 Kansas State Fair Grand Drive & KJLS

As we enter a new year, there is a very important announcement for those who plan to participate in the Kansas State Fair Grand Drive and/or KJLS. **ALL exhibitors will be required to complete Youth for the Quality Care of Animals (YQCA) certification to be eligible for either show in 2019.** This applies to market animal exhibitors, those showing commercial breeding animals, and youth showing registered purebred breeding animals (heifers, gilts, ewes).

The YQCA program is a new, national, multi-species youth livestock quality assurance program available for youth 8-21 years of age. The program focuses on food safety, animal well-being, and character development. This is an annual training, as the learning modules change each year. So, the curriculum grows with young people as they advance through the program. Below are some details about the program and how youth can obtain their certification. Families are also encouraged to communicate with their local extension unit regarding course options available at the local level.

All families who have youth seeking certification will need to create a user account through the YQCA website and pre-register for training, regardless of the delivery method selected. Being officially registered is the only way a child can be issued a certification number upon completion of the training. Kansas 4-H members will need to visit [www.yqca.org](http://www.yqca.org), click the “Sign In/Register” tab on the right side of the screen and log in using their 4HOnline credentials to create a user account (option on the left side of the page). Those who register as 4-H members need to make sure they select the 4-H member from the drop-down menu (rather than type a child’s name in). Otherwise, agents will not be able to confirm via 4HOnline that a young person has completed the course. FFA members will need to create on independent account (option on the right side of the page). All youth need to use their age as of January 1 and will have to pay for their course during the online registration process.

**Certification Options:**

- **Instructor-led Training** - $3/child – face-to-face class taught by certified instructor. Class will be at least 60-minutes in length.

- **Online Course** - $12/child – youth complete age specific knowledge builders, skills labs, and quizzes online at their convenience. Must be completed on a computer with high speed internet access; not compatible with mobile devices.

- **Test-out Exam** – YQCA just released this option for 2018-2019. It is only available online for 12 and 15-year-olds (first year of the intermediate and senior age divisions). Youth have one opportunity to pass a
50-question exam. Families will still have to pay the annual fee for certification for the entire age bracket, which is $36 for a 12-year-old and $48 for a 15-year-old. However, eligible youth do not have to pay the fee to attempt the exam. If a young person passes the exam and subsequently submits the appropriate payment, they will receive a multi-year certification. A young person who does not pass will be prompted to complete the annual training, either through registering for an instructor-led class or the online course.

- **National Pork Board Youth PQA** - both shows will honor YPQA+ numbers issued by the National Pork Board until they expire. So, youth who have a current number that will be valid through the end of September 2019 do NOT need to complete the YQCA certification. Their YPQA+ number will be accepted in lieu of YQCA. The YPQA+ program has been retired by the National Pork Board, and they are no longer offering training or issuing new certification numbers. So, once a child’s YPQA+ number expires, they will be expected to complete YQCA training.

- **7-year-olds** are exempt from YQCA certification. The program is not designed to issue certification numbers to youth under the age of 8. So, these youth are encouraged to attend a face-to-face class but are not expected to submit a number to participate in the 2019 shows.

Exhibitors who state nominate animals will provide proof they have met the YQCA certification requirement by attaching a copy of their YQCA and/or YPQA+ certificate/card to their Declaration Form when they submit their nomination materials. Youth who will only exhibit purebred registered breeding females (which are not nominated), will submit their YQCA number as part of the online entry system when they actually enter each respective show.

Abbreviated step-by-step instructions to register for a YQCA class are provided at the end of this memo. An informational flyer about this new requirement may be found on the KSU Youth Livestock Program website, under Youth Livestock Quality Assurance, as well as a visual resource to guide families through the registration and online certification process.

**Certificate** - after youth have completed their training, families need to log back into the YQCA site to access their certification number(s) and certificate(s), using the same procedure they did to register for the class. A red “Print Certificate” button will appear under the name of each child in the family’s YQCA user account. The certificate(s) may be printed, as well as saved to any device. Families will be responsible for managing their own YQCA certification – a child’s number and expiration date may be found on the certificate.

We look forward to this being a great additional educational opportunity for youth involved in livestock projects. Learning to appropriately manage animals while providing a safe, wholesome, and high quality product for consumers is an important aspect of being involved in the livestock industry.

If you have questions about youth completing the YQCA training, please contact your local extension office, or myself at adhayes@ksu.edu or 785-532-1264.
YQCA Registration Instructions:

2. Click the “Sign In/Register” tab on the upper right hand corner of the page.
3. Members who are enrolled and active Kansas 4-H members through 4HOnline need to:
   a. Choose the blue “Sign in with 4HOnline” button on the left side of the page
   b. Select Kansas 4-H Youth Development
   c. Use family 4HOnline credentials to log in
   d. 4-H members skip to step 5
4. FFA or other non-4-H youth need to create an independent user account:
   a. Choose the red “Sign In” button on the right side of the page
   b. Complete the contact information set up, and enter a username/password
5. Once logged in, select the appropriate child to register in a YQCA course from the drop-down menu.
6. Select the appropriate course based on the child’s January 1 age.
7. Choose the course type:
   a. For a face-to-face class, register for the “Instructor-Led Training” on the right, which is $3/child. From the “State” drop-down menu, select Kansas, then the class in which the child plans to attend. All classes offered by a Kansas approved certified instructor will appear on the list.
   b. For the online course, register for the “Web-Based Training” on the left, which is $12/child.
   c. The test-out option only appears for 12 and 15-year-old youth who are eligible based on their January 1 age. This option is at the bottom of the general course list.
8. Click the red “Purchase Course” button and enter payment information.

Sincerely,

Lexie Hayes
Extension Assistant
Youth Livestock Program Coordinator
Department of Animal Sciences & Industry
Kansas State University
adhayes@ksu.edu
785-532-1264
Notes:
K-State Youth Livestock Program

Website:
www.youthlivestock.ksu.edu

Facebook:
Kansas State Youth Livestock Program
@ksuyouthlivestock

Snapchat:
K-State Youth Livestock Program
@ksuylp

Instagram:
KSU Youth Livestock Program
@ksu_ylp

Twitter:
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3/30/2019