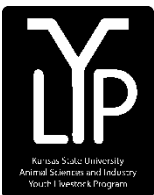
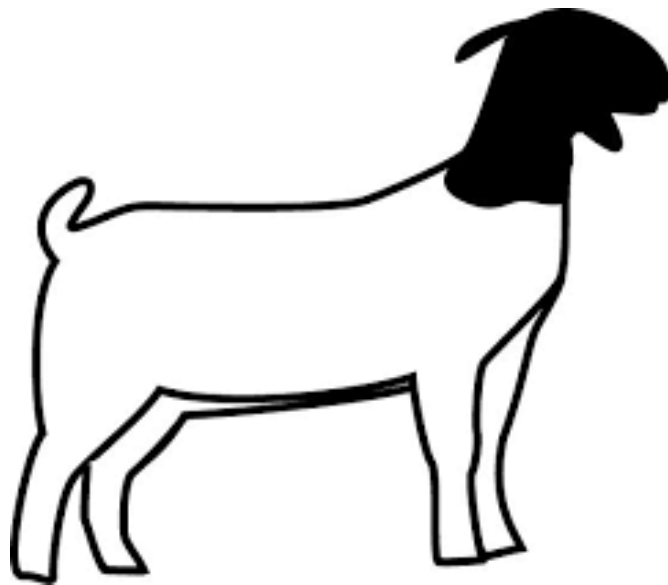


2019 Kansas Junior Meat Goat Producer Day Educational Resource



Youth Livestock Program • Kansas State University
214 Weber Hall • 1424 Claflin Road • Manhattan, KS 66506



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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

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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

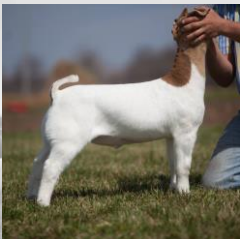
- What to look for...
 - What makes a good meat goat?
 - Genetic Potential
 - Muscle/Width
 - Sound Structure
 - Balance/Attractiveness

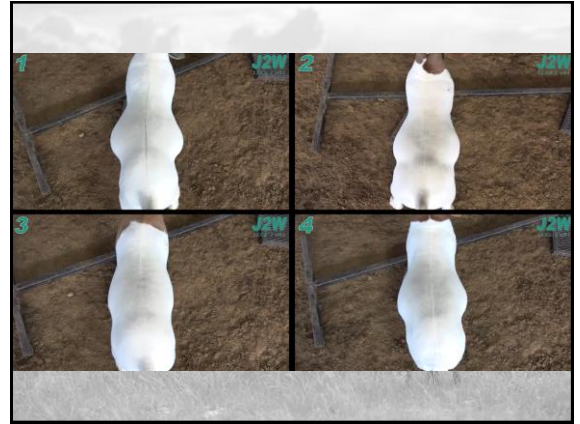


Selection



Selection







Knowledge for Life

Goat Nutrition Made Simple






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

Knowledge for Life

General

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

Knowledge for Life

Production Goals

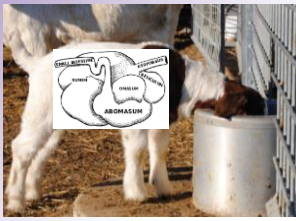

- Meat
- Fiber
- Specialty milk and cheese
- Lifestyle livestock





Knowledge for Life


Digestive System

Knowledge for Life

The Nutrition Puzzle


FEED NUTRIENTS	ANIMAL REQUIREMENTS
PROTEIN ENERGY MINERALS	MAINTENANCE
	GROWTH
	PREGNANCY
	PRODUCTION



Knowledge for Life

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



Knowledge for Life

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?

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Knowledge for Life

What else do we need to consider?

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

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Knowledge for Life

Mature Doe Maintenance (110 vs. 132 lb)

Body Weight (lb)	Feed Intake (lb/day)	Energy as TND (lb/day)	Energy % TDN (%)	Protein (lb/day)	Protein (%)
110	2.2	1.17	53.2	0.15	6.8
132	3.2	1.32	41.3	0.17	5.3

NRC 2006

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Knowledge for Life

Important Note

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

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Knowledge for Life

Mature Doe (132 lb) at different production stages

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


NRC 2006

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Knowledge for Life

Newborn Kids

- Colostrum
- Within an hour



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Most Important

- Highest nutrient requirement:
 - Late pregnancy
- Watch feed intake!
- Don't let pregnant does get too fat

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

Activity	Feed Intake (lb/day)	Energy as TND (lb/day)	Energy as TDN (%)	Protein (lb/day)	Protein (%)
Maint.	5.0	2.65	52.9	0.32	6.4
Pre-breeding	5.5	2.91	52.9	0.35	6.5

NRC 2006

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Growing Doelings and Wethers (0.22 lbs/d gain)

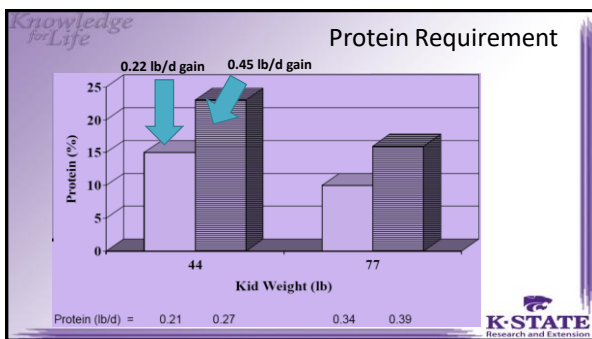
Body Weight (lb)	Feed Intake (lb/day)	Energy as TND (lb/day)	Energy as TDN (%)	Protein (lb/day)	Protein (%)
44	1.43	0.97	67.8	0.21	15.3
77	2.65	1.27	48.3	0.27	10.0

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Gaining 0.45 lbs/d

Body Weight (lb)	Feed Intake (lb/day)	Energy as TND (lb/day)	Energy as TDN (%)	Protein (lb/day)	Protein (%)
44	1.46	1.30	89.4	0.34	23.4
77	2.43	1.63	67.1	0.39	16.2

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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

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Knowledge for Life

More Considerations

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

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Grass/Clover Hay

	LOW- PROTEIN (5-8.9%CP)	MID- PROTEIN (9-11.9%CP)	HIGH- PROTEIN (12-16%CP)
CRUDE PROTEIN (%)	6.9	9.9	12.5
TOTAL DIGESTIBLE NUTRIENTS (%)	56	58	60
% OF SAMPLES	64	28	8

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Knowledge for Life

Grass/Alfalfa Hay

	ALFALFA/ GRASS MIX	ALFALFA
CRUDE PROTEIN (%)	17 - 20	16 - 24
TOTAL DIGESTIBLE NUTRIENTS (%)	59 - 61	56 - 65

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Knowledge for Life

High Stocking Rate

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

Animal Class	Animal Unit Equivalent
1,000 lb Cow + calf	1.00
Calf	0.60
Yearling Calf	0.80
Mature Horse	1.25
Mature Sheep	0.20
Lamb	0.15
Mature Goat	0.15
Kid Goat	0.10

5 sheep = 1 Cow+calf
6.7 sheep = 1 Cow+calf

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Knowledge for Life

Quiz

- Question #1


Are goats grazers or browsers or.....?

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Knowledge for Life

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.



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Knowledge for Life

Nutrient Content of Browse

Browse	Protein (%)	Energy (%TDN)
Blackberry - July	8.6	72
- Sept	8.2	73
Oak	11 - 17	-
Myrtle	9	70
Elm	7.8	-
Mesquite	16.2	45
Bamboo	17	59
Grapevine leaves	9	72
Source: Nutrient Requirements of Small Ruminants (NRC 2006)		

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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

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Knowledge for Life

Protein Supplements

Description	Protein %	Energy (TDN%)
Alfalfa hay	18 - 24	60 - 65
Cottonseed meal	46	80
Soybean meal	44	84
Peas	25	86
Pellets	Varies (see tag)	
Blocks	Varies (see tag)	

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Energy Supplements

Grain	Protein %	Energy (TDN%)
Corn	9	88
Oats	13	76
Barley	12	84
COB		

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Mineral Supplementation

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

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Knowledge for Life

Growing Season: Pasture

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

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Knowledge for Life

Grazing Management

- Graze to desired stubble height
 - Parasites = 4-6 inches
- Allow adequate rest for regrowth
- Identify key species and measure to desired height

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Feed Rules


- Low quality grass hay
 - Pregnant, lactating, growing
- Supplementation
- Clean, fresh water at ALL times
- Weigh feed

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Knowledge for Life

Ration Balancing

- Langston University
 - <http://www2.luresext.edu>
 - Click on goats
 - Click on nutrient calculators




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Knowledge for Life


Unique Aspects of Small Ruminant Nutrition

Multiple births are commonplace

Single



Triplets

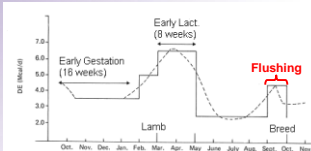


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Knowledge for Life

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%



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Knowledge for Life

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 toxemia
 - Response to calcium therapy (oral or i.v.) is the definitive indicator

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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

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Example Late Pregnancy Doe Ration (132 lb)

Alfalfa hay	0.5 lb/day As fed
Grass hay	0.6 lb/day
Corn	1.25 lb/day

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BCS 1.0

Visual aspect of the goat: Emaciated and frail-looking. The backbone is highly visible and forms a continuous ridge. The ribs are visible. There is no meat and significant protrusion over the transverse process (TAP).

The spine process of the lumbar vertebrae can be palpated easily between the ribs and the hindquarters. The spine process is highly protruding and forming a continuous appearance. Very little muscle and fat is visible between the ribs and hips. There is a sharp depression from the spine to transverse process.

The hind can easily grasp the transverse process of the lumbar vertebrae with its front paws. Clearly, all of the length of the transverse process is discernible.

Referred to as the 'rod' or 'rod-like' appearance. The ribs are very thin and protrude from the side to the side. The cartilage and joints protrude and are very visible.

BCS 2.0

Visual aspect of the goat: Slightly emaciated, the backbone is still visible but continuous ridge. There is no meat and significant protrusion over the transverse process (TAP).

The spine process of the lumbar vertebrae is visible and can still be palpated between the ribs and the hindquarters. However, a muscle mass can be felt between the ribs and hips. There is no depression from the spine to transverse process.

The hind can grasp the transverse process of the lumbar vertebrae with its front paws. Clearly, all of the length of the transverse process is discernible.

Referred to as the 'rod' or 'rod-like' appearance. The ribs are very thin and protrude from the side to the side. The cartilage and joints protrude and are very visible.

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BCS 3.0

Visual aspect of the goat: The backbone is no longer visible. The ribs are still visible but the spine process is slightly protruding. There is no meat and significant protrusion over the transverse process (TAP).

The spine process of the lumbar vertebrae cannot be easily palpated between the ribs and the hindquarters. The vertebrae is still visible. When running a finger over the spine process, a ridge is felt. There is a small angle in the transition from the spine to transverse process.

The outline of the transverse process of the lumbar vertebrae is slightly discernible. The hind can grasp the transverse process of the lumbar vertebrae with its front paws.

Referred to as the 'rod' or 'rod-like' appearance. The ribs are very thin and protrude from the side to the side. The cartilage and joints protrude and are very visible.

BCS 4.0

Visual aspect of the goat: The backbone cannot be seen. The ribs are not seen. The spine process is not visible.

It is impossible to grasp the spine process of the lumbar vertebrae, which is covered by a thick layer of muscle and fat. The spine process forms a continuous line. There is no depression from the spine to transverse process.

The outline of the transverse process of the lumbar vertebrae is no longer discernible. The transverse process forms a continuous, rounded line, with no visible depression.

Referred to as the 'rod' or 'rod-like' appearance. The ribs are very thin and protrude from the side to the side. The cartilage and joints protrude and are very visible.

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BCS 5.0

Visual aspect of the goat: The backbone is barely visible. The ribs are not visible. The spine process is not visible.

The thickness of the muscle and fat is so great that reference marks on the spine process are lost. The spine process forms a continuous line along the back and there is a hump in the transition from the spine to transverse process.

The thickness of the muscle and fat is so great that reference marks on the transverse process are also lost. It is impossible to grasp the transverse process.

The chest for most animals and covers the sternum, cartilage, cartilage and ribs. It cannot be grasped.

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Target BCS

Target Body Condition Score

Stage of Production	Target Body Condition Score
Dry	2.2
Breeding	3.0
Early Gestation	3.2
Late Gestation	3.5
Early Lactation	2.5
Late Lactation	2.2

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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

ACTIVE DRUG INGREDIENT		0.0015%
(8 mg mg)		
Decapacitate	GUARANTEED ANALYSIS	
Croak Protein, Min.	20.0%	
(This includes not more than 1.25% equivalent croak protein from non-green ingrown)		
Croak Protein, Min.	12.0%	
Croak Protein, Min.	6.0%	
Calcium (Ca), Min.	0.75%	1.25%
Phosphorus (P), Min.	0.75%	1.25%
Salt (NaCl), Min.	0.75%	1.25%
Selenium (Se), Min.	0.30%	0.30%
Vitamin A, Min.	6,000 IU per pound	
1.18 to 21% CP		
1. High Fat – Young lams are in an energy dependent stage of growth		
3. Ammonium Chloride to acidify urine and help prevent urinary calculi		
INGREDIENTS		
Plant Protein Products, Animal Protein Products, Processed Grain By-Products, Grain Products, Forage Products, Calcium Lignin Sulfonate, Case Mosaic, Ammonium Chloride, Ammonium Sulfate, Ammonium Nitrate, Ammonium Phosphate, Ammonium Bicarbonate, Ammonium Acetate, Ammonium Citrate, Ammonium Oxide, Ammonium Hydroxide, Ammonium Carbonate, Ammonium Sulfate, Ammonium Nitrate, Ammonium Phosphate, Ammonium Bicarbonate, Ammonium Acetate, Ammonium Citrate, Ammonium Oxide, Ammonium Hydroxide, Ammonium Carbonate, Ammonium Sulfate, Ammonium Nitrate, Ammonium Phosphate, Ammonium Bicarbonate, Ammonium Acetate, Ammonium Citrate, Ammonium Oxide, Ammonium Hydroxide, Ammonium Carbonate, Ammonium Sulfate, Ammonium Nitrate, Ammonium Phosphate, Ammonium Bicarbonate, Ammonium Acetate, Ammonium Citrate, Ammonium Oxide, Ammonium Hydroxide, Ammonium Carbonate, Ammonium Sulfate, Ammonium Nitrate, Ammonium Phosphate, Ammonium Bicarbonate, Ammonium Acetate, Ammonium Citrate, Ammonium Oxide, Ammonium Hydroxide, 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Growing Doeling ration (gain 0.22 lb/d)

Alfalfa hay	1.8 lb/day As fed
Grass hay	0.0 lb/day
Corn	0.5 lb/day

Show Feed Example

[illegible]

Knowledge for Life

Medicated or Non-medicated


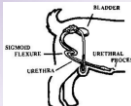

- If you want to increase ADG and FE, medicated
 - Lasalocid (Bovatec®) or Monensin (Rumensin®)
 - Ionophore
 - Coccidiocide
 - Reduces gram-positive bacteria in the rumen
 - Improves nitrogen utilization
 - Increase propionate production
- Decoquinate (Deccox®)
 - Coccidiostat
 - Improved feed efficiency

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Knowledge for Life

Urinary Calculi

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

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Knowledge for Life

Bucks

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

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Knowledge for Life

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

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Knowledge for Life

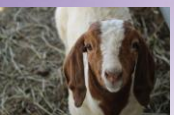



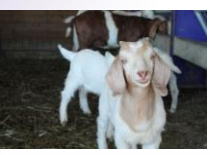
Summary

- 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

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Research and Extension

Knowledge for Life

Questions

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Research and Extension

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

<http://bit.ly/ksunominations>



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 tag 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 compete/incomplete.
 - Exhibitor/family's opportunity to verify the accuracy of the nomination information received by K-State.



Scrapie Tag

- FULL SCRAPIE TAG #s 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



Flock ID/
Premise ID

Individual
Animal #



Nomination Materials to Mail

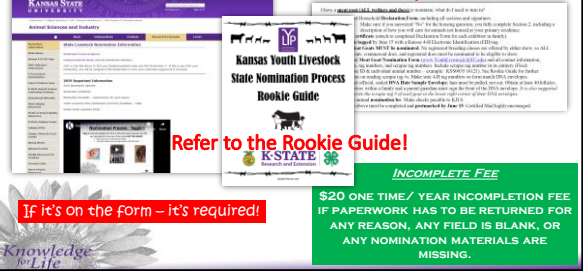
- Declaration Form (with YQCA certificates attached)
- Specie Nomination Form
- DNA Envelopes
- Payment - \$8/animal made payable to KJLS



Tips & Resources

Visit the website!

Use the specie checklist!



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 KSJF 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



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.

Use bent, long or needle nose pliers to collect the sample.



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

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.



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



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

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 1st of the show year will be eligible to participate at the Kansas Junior Livestock Show.

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

* The Declaration form and specie Nomination forms are available at 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.**

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



Nora Schrag DVM

Emily Reppert DVM,MS,DACVIM

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Veterinary Care for Goats

- Annual Maintenance
 - Vaccinating
 - Deworming
 - Hoof trimming
- Common emergencies
 - Obstructive urolithiasis (“blocked”)
 - Predator attack
 - Weak
 - Dystocia

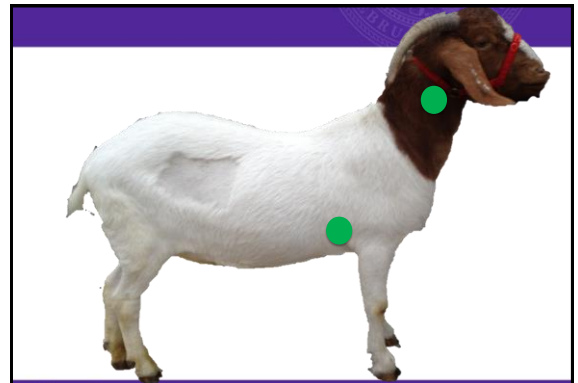
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Vaccination

- “Over eating disease”
- Clostridium perfringens type C & D plus tetanus (CDT)



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CD&T Vaccination Recommendations

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

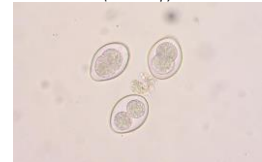
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Small Ruminant Parasites

STOMACH WORM
(*Haemonchus contortus*)



COCCIDIA
(*Eimeria* sp)



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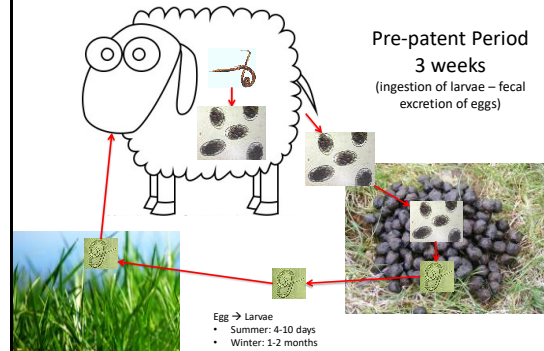
Gastrointestinal Parasite Infections

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



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Life Cycle



Clinical Signs

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



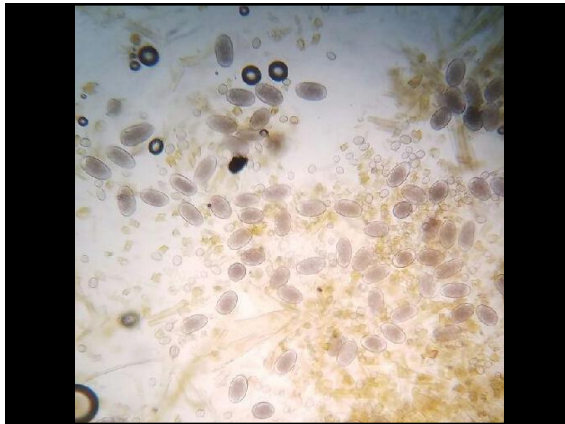
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H. contortus – Clinical Signs



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Why Don't Dewormers Work?

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

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Four Types of Dewormers



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Who to Deworm?

- FAMACHA
- 5 Point Check
- Strategic deworming



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FAMACHA System

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

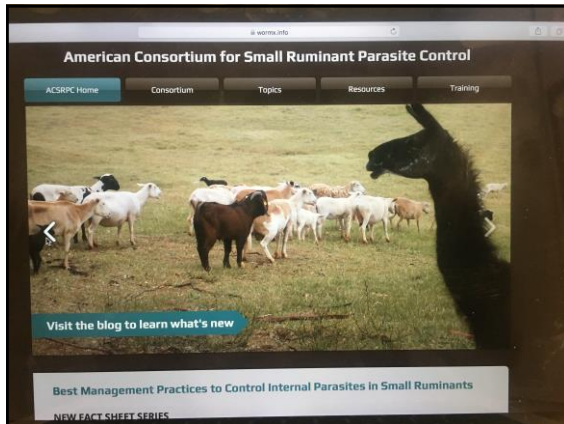
NOTE:

- Only appropriate for adult animals
- Significantly increases amount of labor
- Effective for identification of *H. contortus*
- Does not account for other causes of anemia

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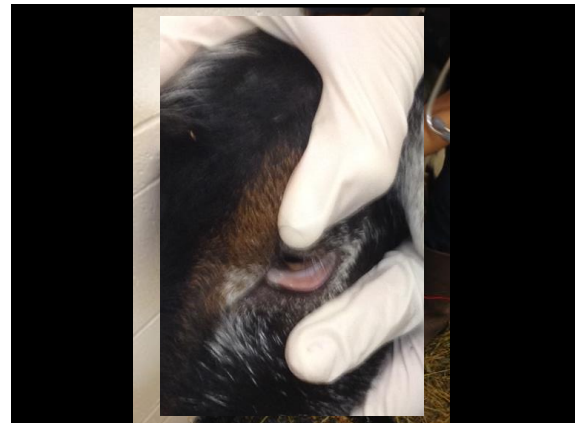
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Dewormer Chart for Goats

Important --Please read notes below before using this chart

1 ml = 1cc	Valbazen (albendazole) ORALLY	SafeGuard (fenbendazole) ORALLY	Ivomec Sheep Drench (ivermectin) ORALLY	Prohibit (levamisole) ORALLY	Cydetin Sheep Drench (moxidectin) ORALLY	Rumatel (morantel) Feed Pre-mix ORALLY
Weight Pounds (lbs)	20 mg/kg 2 ml/ 25 lb	10 mg/kg 1.1 ml/ 25 lb	0.4 mg/kg 6 ml/ 25 lb	12 mg/kg 2.7 ml/ 25 lb	0.4 mg/kg 4.5 ml/25 lb	10 mg/kg 45 gm/100 lb BW (Durvet)
20	1.6	0.9	4.8	2.2	3.6	
25	2.0	1.1	6.0	2.7	4.5	11 grams
30	2.4	1.4	7.2	3.3	5.4	
35	2.8	1.6	8.4	3.8	6.5	
40	3.2	1.8	9.6	4.4	7.3	
45	3.6	2.1	10.8	4.9	8.2	
50	4.0	2.3	12.0	5.5	9.0	23 grams
55	4.4	2.5	13.2	6.0	10	
60	4.8	2.7	14.4	6.6	11	
65	5.2	3.0	15.6	7.1	12	
70	5.6	3.2	16.8	7.7	12.7	
75	6.0	3.4	18.0	8.2	13.6	34 grams
80	6.4	3.6	19.2	8.8	14.6	
85	6.8	3.9	20.4	9.3	15.4	



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

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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

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Coccidiosis

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

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Treatment

Supportive Care

- Intravenous fluids
- Vitamin B complex
- Blood transfusion



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Treatment

Anti-coccidial Drugs

- Coccidiostat
 - Ionophores
 - Decoquinate
- Coccidiocidal
 - Amprolium
 - (50 mg/kg, PO 5 days)
 - Triazinones

**NO DRUGS APPROVED
FOR TREATMENT OF
COCCIDIOSIS IN GOATS**



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Questions

Annual Wellness Exam

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



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References

Sheep and Goat Medicine 2nd Edition
-Disease Information



American Consortium for Parasite Control
<https://www.wormx.info>

-Deworming charts
-Up-to-date literature regarding ALL parasites

Maryland Small Ruminant Page
www.sheepandgoat.com

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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 recipis



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



Fitting/Showing

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



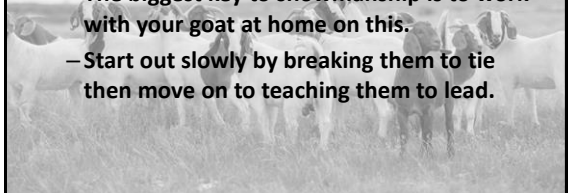
Links to instructional videos

- <https://www.youtube.com/playlist?list=PLrzMlqmyliPclGJtZaUaZWx-JKNvkmAL>
- <https://www.youtube.com/playlist?list=PLFflwiFgYIc3XHc5SBV2ZnflSx-IFVMwl>



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

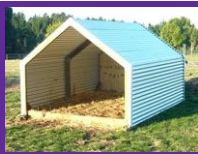
About Me:

- 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



Water



Handling Equipment



WHAT NOT TO DO



For The Show

Basics-

- 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

Optional-

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

For The Show- Basics



For The Show- Basics




For The Show- Basics

A collection of items for a show. On the left is a large bottle of Simply Orange juice. In the center are four small bottles of Gatorade in orange, red, blue, and yellow. On the right is a large medical syringe and a safety pin.

For The Show- Optional

For The Show- Optional

For the Show- Optional



A collage of four images arranged in a 2x2 grid. The top-left image shows a blue folding chair. The top-right image shows a stack of hay bales. The bottom-left image shows a black circular fan. The bottom-right image shows a white square fan.

Questions?

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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, 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 an 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

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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.



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YQCA Registration Instructions:

1. Visit www.yqca.org.
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
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K-State Youth Livestock Program

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KSU Youth Livestock Program
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Twitter:

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3/30/2019