
LIVESTOCK SKILL-A-THON



OBJECTIVES

Targeted Life Skills: self-esteem, decision making, problem solving, critical thinking, communication, cooperation, and teamwork

This activity will provide the framework for 4-H members to learn a variety of topics related to the production, management, and evaluation of beef cattle, sheep, swine, and goats. In their training prior to the annual state contest, the 4-H'ers should learn breeds of livestock, equipment identification, feeds identification, quality assurance procedures, hay evaluation, wool evaluation, meats evaluation and general livestock knowledge. These skills will be necessary to complete the team portion of the contest with includes understanding the needs of a scenario and making the best management decisions given the information. Written and oral communication skills will be promoted through the team portions of the contest. Individuals and teams are encouraged to compete in livestock skills contests as they are available for additional training prior to the state contest.

ACTIVITY

The State 4-H Livestock Skill-a-thon will be held on Thursday, July 30, 2026 at the Hot Spring County Fairgrounds in Malvern, Arkansas. Contest headquarters will be at the Hot Spring County 4-H Youth Center (1407 US-270 Malvern, AR 72104). **All individuals must be registered via ZSuite by July 13, 2026. Agents will register all youth for \$25 per participant.** Agents will then declare their teams to the contest coordinator by Monday, July 20th. ISDs will be initiated from the State Office to bill the county after the registration deadline has passed.

Registration will be from 8:30-9:00 a.m. the day of the contest. Contestants should be in the Hot Spring County 4-H Youth Center by 9:10 a.m. for announcements about the contest. The contest rotations will start promptly at 9:30 a.m. Lunch will be provided between the individual and team portions of the contest at the Youth Center.

Pursuant to 7 CFR § 15.3, the University of Arkansas System Division of Agriculture offers all its Extension and Research programs and services (including employment) without regard to race, color, sex, national origin, religion, age, disability, marital or veteran status, genetic information, sexual preference, pregnancy or any other legally protected status, and is an equal opportunity institution.

ELIGIBILITY

- The contest is open to Intermediate and Senior 4-H members only.
 - Intermediates must be 11-13 years old.
 - Intermediate members are youth aged 11-13 as of January 1.
 - In 2026, Junior members aged 10 as of January 1 will be permitted to compete in this division (grandfathered into this rule change)
 - Seniors must be 14-19 years old.
 - Senior members are youth who are 14 as of January 1 and who have NOT reached their 19th birthday by January 1 of the current year.
 - *Example: If a 4-H'er is 18 on January 1 and turns 19 on January 2, they are eligible to compete because they were 18 on January 1. If a 4-H'er turns 19 on December 31, they are ineligible to compete because they were 19 as of January 1*
- For a county to be eligible for team competition, it must have at least three entries. A county may enter four individuals, but only the top three scores will count toward the winning team.
 - A county may only enter one senior team.
 - A county may enter multiple intermediate teams.
 - A county may enter an unlimited number of individuals in either division.
- If individuals from counties where a team is not represented choose to compete, they may be assigned to a team upon arrival at the contest. They will not be eligible to compete for team awards or compete at national contests.
- Any senior 4-H members that have previously competed at the National 4-H Livestock Skill-a-thon Contest in Louisville, Kentucky are ineligible to participate as a part of a team in the state contest.

METHOD OF CONDUCT

1. The contest will be divided into two rounds: an individual round and a team round. Order of competition through both rounds will be randomly assigned.
2. During the individual competition round of the contest, contestants will be further divided into groups and will remain with that assigned group throughout the individual round of classes. While completing the individual competition classes, there will be no conferring between contestants or between a contestant and anyone else except as directed by contest officials. Contestants will be allowed 15 minutes to complete each individual competition class.
3. During the team competition round of the contest, team members will complete one official answer sheet for each team effort class representing the combined effort of all team members. After all individual participants have signed in for the competition and

are not on a team, contest officials will divide individuals into teams for this portion of the contest. Teams will be allowed 20 minutes to complete the group assignment for each class and turn in their answer sheet. During the team competition round of the contest, contestants will be allowed to confer only with team members during the time period allowed for each class.

4. Contestants are not to pick up or touch any item that is being identified or evaluated in the individual competition classes unless otherwise directed by contest officials.
5. Contestants should bring a clipboard and 2-3 pencils. Simple calculators will be provided at all stations requiring calculations. The contestants are not allowed to bring books, notes, pamphlets, or other reference material into the contest area. Contest officials reserve the right to check all contestants' clipboards to make sure they are blank just prior to the contest. Violators are subject to contest dismissal.
6. Contestants registered as individuals will not go through the team portions of the contest unless assigned to a team at check-in.
7. Coaches are invited to review contest materials at the conclusion of the contest. Scores will be sent to coaches within 48 hours of the end of the contest.

CONTEST SECTIONS

INDIVIDUAL SECTIONS

Intermediate Division

1. **Livestock Breed Identification:** (20 possible points) Identify from photographs 20 livestock (beef cattle, swine, sheep, and goat) breeds. (A list of breeds will be provided.)
2. **Livestock Equipment Identification:** (20 possible points) Identify the proper name for 20 pieces of equipment used in livestock production. (A list of equipment will be provided.)
3. **Retail Meat Cut Identification:** (20 possible points) Identify 10 beef, lamb, and/or pork retail cuts from the National 4-H Meat Judging Retail ID List. Contestants will identify the cut by species and retail cut name. One point will be awarded for correct species and one point will be awarded for correct retail cut. (A list of species and retail cut names will be provided.)
4. **Quality Assurance Exercise:** (30 points) Example tasks include: demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance. (Only one medicine label will be utilized.)

5. **Quiz:** (30 points) Complete a 15-question multiple choice quiz concerning the total livestock industry.

Senior Division

1. **Livestock Breed Identification:** (40 possible points) Identify from photographs 20 livestock (beef cattle, swine, sheep, and goat) breeds. Contestants must also match the breed with the most appropriate description supplied for each breed. (A list of breeds will be provided.)
2. **Livestock Equipment Identification:** (60 possible points) Identify the proper name for 30 pieces of equipment used in livestock production. (A list of equipment will be provided.)
3. **Retail Meat Cut Identification:** (60 possible points) Identify 15 beef, lamb, and/or pork retail cuts from the National 4-H Meat Judging Retail ID List. Contestants will identify the cut by species, primal cut name, and retail cut name. One point will be awarded for correct species, one point will be awarded for correct primal, and two points will be awarded for correct retail cut. (A list of species, retail cut names, and wholesale cut names will be provided.)
4. **Hay and Wool Judging:** (120 possible points) Rank a class of four hay (40 points) and four wool (40 points) samples with analysis information. Answer questions about the classes (40 points).
5. **Quality Assurance Exercise:** (60 points) Example tasks include: demonstrate how to read a medicine label, calculate withdrawal times, complete a treatment record, and make responsible management decisions regarding quality assurance.
6. **Quiz:** (60 points) Complete a 30-question multiple choice quiz concerning the total livestock industry.

TEAM SECTIONS

Intermediate Division

1. **Animal Breeding Scenario and Exercise:** (50 possible points) Team members will evaluate a breeding/marketing animal scenario and make animal selection/marketing decisions based upon phenotype and performance data to rank breeding animals or market them for use within the situation. Verbally defend reasons. (This will involve live animals. May be any livestock species.)
2. **Livestock Feeding:** (50 possible points) Identify the proper name for livestock feeds. Feed samples and lists of feed names will be provided. Utilizing feed tags provided, answer questions.

Senior Division

- 1. Quality Assurance Exercise:** (100 possible points) Demonstrate how to read an animal health product label, calculate dosage rates and withdrawal times, complete a treatment record, be familiar with administration routes, animal identification and restraint methods, and make responsible management decisions regarding quality assurance. (This will involve live animals. May be any livestock species.)
- 2. Meat & Carcass Evaluation:** (100 possible points) Rank one class of four similar retail cuts and answer questions about the class (50 points). Evaluate photos of a beef, pork, or lamb carcass, price carcasses using a grid, and answer a potential scenario for carcass evaluation and pricing (50 points).
- 3. Management, Performance & Marketing Problem:** (100 possible points) Determine best options for management and/or marketing of livestock (e.g., producer sells calves at weaning, retain ownership through feedlot, combination), when provided with information on markets and performance to evaluate.
- 4. Animal Breeding Scenario and Exercise:** (100 possible points) Team members will evaluate a breeding/marketing animal scenario and make animal selection/marketing decisions based upon phenotype and performance data to rank breeding animals or market them for use within the situation. Verbally defend reasons. (This will involve live animals. May be any livestock species.)
- 5. Livestock Feeding:** (100 possible points) Identify the proper name for livestock feeds and answer corresponding questions. Feed samples and lists of feed names will be provided. Utilizing feed ingredients given, formulate a ration for a group of livestock.
- 6. Reproduction:** (100 possible points) Identify reproductive anatomy and physiology and/or reproductive management equipment for livestock species. Demonstrate common reproductive management techniques such as artificial insemination, palpation, calving, etc.

SCORING

Junior Division:

Total Possible Individual Section Points: 120 points

Total Possible Team Section Points: 100 points

*Total Possible Team Score: 460 points

Senior Division:

Total Possible Individual Section Points: 400 points

Total Possible Team Section Points: 600 points

*Total Possible Team Score: 1800 points

*Total team scores will be determined by adding the highest three team members' individual totals with the total accumulated from the team sections.

- **Overall Individual Score** – Total of all individual competition class points.
 - Tie Breakers: 1. Quiz 2. Retail Meat Cut ID 3. QA Score
- **Overall Team Score** – Determined by adding the highest three team member individual competition class totals with the total accumulated from the team competition classes.
 - Tie Breakers: 1. Animal Breeding Score 2. Team Quiz Score 3. Livestock Feeding Score
- **Evaluation Individual Score (seniors only)** – Hay and Wool Judging Score
 - Tie Breakers: 1. Wool Questions 2. Hay Questions 3. Individual Overall Score
- **Evaluation Team Score (seniors)** – Top 3 individual evaluation scores + Team Meat + Team MPM + Team Feeding + Team Animal Breeding + Team Reproduction
 - Tie Breakers: 1. Team Hay and Wool Judging Score 2. Team Animal Breeding Score 3. Team Overall Score
- **Evaluation Team Score (intermediates)** – Team Animal Breeding + Team Feeding
 - Tie Breakers: 1. Team Animal Breeding Score 2. Team Feeding Score 3. Team Overall Score
- **Identification Individual Score** – Equipment ID + Breeding ID + Retail Meat Cut ID
 - Tie Breakers: 1. Retail Meat Cut ID Score 2. Breed ID Score 3. Equipment ID Score
- **Identification Team Score** – Top 3 scores from individual identification
 - Tie Breakers: 1. Team Retail Meat Cut ID Scores 2. Team Breed ID Scores 3. Team Overall Score
- **Quality Assurance Individual Score** – QA Score + Quiz
 - Tie Breakers: 1. Quiz Score 2. QA Score 3. Overall Individual Score
- **Quality Assurance Team Score (seniors)** – Top 3 Individual QA Scores + Team QA
 - Tie Breakers: 1. Team QA Score 2. Team Quiz Score 3. Team Overall Score
- **Quality Assurance Team Score (intermediates)** – Top 3 Individual QA Scores
 - Tie Breakers: 1. Team Quiz Score 2. Team QA Score (Top 3 individual QA scores) 3. Team Overall Score

AWARDS

The following awards will be given in both the Intermediate and Senior Divisions.

- 1st-5th Overall Team
- 1st-5th Overall High Point Individual

- 1st Place Quality Assurance Team
- 1st-3rd Place Quality Assurance Individual
- 1st Place Identification Team
- 1st-3rd Place Identification Individual
- 1st Place Evaluation Team
- 1st-3rd Place Evaluation Individual (NO intermediate awards in this category)

National contests:

- Overall 1st Place Team
 - National 4-H Livestock Skill-a-thon Contest in Louisville, Kentucky (**partial travel funding will be available**)
- Overall 2nd Place Team
 - Western National Round Up 4-H Livestock Skill-a-thon Contest in Denver, Colorado (travel funding will not be available)

CONTEST ADMINISTRATION

Allison Harman – Instructor, 4-H Youth Livestock



Livestock Breed Identification List

The list below includes **potential** breeds of livestock to be used in the contest.

Beef Cattle

- Angus
- Beefmaster
- Belgian Blue
- Braford
- Brahman
- Brangus
- Charolais
- Chianina
- Dexter
- Gelbvieh
- Hereford
- Limousin
- Maine Anjou
- Piedmontese
- Pinzgauer
- Red Angus
- Salers
- Santa Gertrudis
- Shorthorn
- Simmental
- Texas Longhorn
- Wagyu
- White Park

Goat Breeds

- Alpine
- Angora
- Cashmere
- Boer
- Kiko
- LaMancha
- Myotonic
- Nigerian Dwarf
- Nubian
- Pygmy
- Saanen
- Savanna
- Spanish
- Toggenburg

Sheep Breeds

- Barbados Blackbelly
- Border Leicester
- Cheviot
- Columbia
- Cotswold
- Dorper
- Dorset
- Finnsheep
- Hampshire
- Katahdin
- Lincoln
- Merino
- Montadale
- Oxford
- Rambouillet
- Romney
- Shropshire
- Southdown
- Suffolk
- Texel
- Tunis
- Valais Blacknose

Swine Breeds

- Berkshire
- Chester White
- Duroc
- Hampshire
- Hereford
- Landrace
- Mangalita
- Meishan
- Mulefoot
- Pietrain
- Poland China
- Red Wattle
- Spot
- Tamworth
- Yorkshire

Additional Resources:

Oklahoma State University Livestock Breed Pictures and Descriptions:

<https://breeds.okstate.edu/>

Livestock Equipment Identification List

The list below includes **potential** pieces of equipment to be used in the contest.

- Cattle Clippers
- Balling Gun
- Branding Iron
- Buhner Needle
- Implant Gun
- OB Chain & Handle
- OB Snare
- AI Gun
- Barnes Dehorner
- Electric Dehorner/Disbudder
- Tube Dehorner
- Scrotal Circumference Tape
- Ear Notcher
- Nose Lead
- Electric Fence Tester
- Drench Gun
- Hoof Trimmers
- Elastrator
- Elastrator Ring/Band
- Burdizzo
- California Castration Bander
- Ear Tag Pliers
- Ear Tags
- Electronic ID Tag
- Hog Snare
- Marking Harness
- Pig Tooth Nippers
- Hog Ring Pliers
- Nipple Waterer
- Scotch Comb
- Sorting Paddle
- Sorting Boards
- Tattoo Pliers & Tattoo Numbers
- Multi-Dose Syringe
- Ewe Prolapse Retainer/Ewe Spoon
- Disposable Syringes
- Emasculator
- Lamb Feeding Tube
- Wool Card
- Heat Detection Patch
- Beef Cattle Frame Stick
- Show Stick
- Straw Cutter
- Hoof Block
- Teat Canula
- Electronic Identification Reader
- CIDR (Cattle & Sheep)
- CIDR Applicator
- Ear Tag Remover
- AI Sheath
- Semen Straw
- Semen Bottle
- Weigh Tape
- Pelvimeter
- Rectal Ring
- Rope Halter
- Scalpel
- Hay Probe
- Vacutainer Blood Tube
- Hanging Vaccine Holder
- Meat Hook
- Node Hook
- Calf Weaning Nose Clip
- Trocar
- Chin-Ball Marker
- Goat Blanket
- Livestock Chalk
- Vet Wrap
- Rice Root Brush
- Ink Tag Marker
- Hand Shears
- Soil Probe
- Rumen Magnet
- Transfer Needle

Additional Resources:

University of Kentucky Equipment Identification Pictures

<http://afs.ca.uky.edu/livestock/feedstuff-equipment/livestock-equipment-identification>

Feed Identification List

The list below includes **potential** feeds to be used in the contest.

- Rice Bran
- Distillers Dried Grains
- Cottonseed Meal
- Cracked/Chopped Corn
- Limestone
- Gin Trash
- Cottonseed Hulls
- Soybean Meal
- Soybeans
- Trace Mineralized Salt
- Wheat
- White Salt
- Whole Corn
- Molasses
- Grain Sorghum (Milo)
- Hominy
- Wheat Midds (Middlings)
- Oats (Crimped)
- Oats
- Rice (Rough Rice)
- Cottonseed
- Alfalfa Pellets
- Dicalcium Phosphate
- Fish Meal
- Corn Gluten Meal
- Ground Corn
- Dried Brewer's Grains
- Poultry Litter
- Beet Pulp
- Crimped Barley
- Blood Meal
- Bone Meal
- Soybean Hulls
- Urea

Additional Resources:

UADA Feed Kit

University of Kentucky Livestock Discovery - Feedstuffs

<https://afs.ca.uky.edu/livestock/test/feedstuffs>

Name _____ County _____ Contestant Number _____

**Arkansas 4-H State Livestock Skill-a-thon
Senior Retail Meat ID**

Primal Cuts

- A. Breast
- B. Brisket
- C. Chuck
- D. Flank

- E. Ham or Leg
- F. Loin
- G. Plate
- H. Rib or Rack
- I. Round
- J. Shoulder

- K. Side (Belly)
- L. Spareribs
- M. Variety Meats
- N. Various Meats

Retail Cuts

Roasts/Pot Roasts

- 1. American Style
- 2. Arm Picnic
- 3. Arm Roast
- 4. Arm Roast (Bnls)
- 5. Back Ribs
- 6. Blade Roast
- 7. Blade Boston
- 8. Bottom Round Roast (Bnls)
- 9. Bottom Round Rump Roast (Bnls)
- 10. Brisket, Whole (Bnls)
- 11. Center Loin Roast
- 12. Center Rib Roast
- 13. Eye Roast
- 14. Eye Round Roast
- 15. Flat Half (Bnls)
- 16. Frenched Style
- 17. Fresh Side
- 18. Leg Roast (Bnls)
- 19. Loin Roast
- 20. Mock Tender Roast
- 21. Petite Tender
- 22. Rib Roast
- 23. Rib Roast (Frenched)
- 24. Ribs (Denver Style)
- 25. Rump Portion
- 26. Seven (7) Bone Roast
- 27. Shank Portion
- 28. Short Ribs
- 29. Shoulder Roast (Bnls)
- 30. Sirloin Roast
- 31. Sirloin Half
- 32. Spareribs
- 33. Square Cut (Whole)
- 34. Tenderloin (Whole)
- 35. Tip Roast (Bnls)
- 36. Tip, Cap Off Roast
- 37. Top Loin Roast (Bnls)
- 38. Top Roast (Bnls)
- 39. Top Round Roast
- 40. Tri-Tip Roast

Steaks

- 41. Arm Steak
- 42. Blade Steak
- 43. Bottom Round Steak
- 44. Center Slice
- 45. Eye Steak (Bnls)
- 46. Eye Round Steak
- 47. Flank Steak
- 48. Mock Tender Steak
- 49. Porterhouse Steak

- 50. Ribeye, Lip-On Steak
- 51. Round Steak
- 52. Round Steak (Bnls)
- 53. Sirloin Cutlets
- 54. Skirt Steak
- 55. T-Bone Steak
- 56. Tenderloin Steak
- 57. Tip, Cap Off Steak
- 58. Top Blade (Bnls) Flat Iron Steak
- 59. Top Loin Steak
- 60. Top Loin (Bnls) Steak
- 61. Top Round Steak
- 62. Top Sirloin Steak (Bnls)
- 63. Top Sirloin Cap Off Steak (Bnls)
- 64. Top Sirloin Cap Steak (Bnls)

- 94. Picnic (Whole)
- 95. Rib Chop
- 96. Rump Portion
- 97. Shank Portion
- 98. Slab Bacon
- 99. Sliced Bacon

Species:

B - Beef P - Pork L - Lamb

Chops

- 65. Arm Chop
- 66. Blade Chop
- 67. Blade Chop (Bnls)
- 68. Butterflied Chop (Bnls)
- 69. Country Style Ribs
- 70. Loin Chop
- 71. Rib Chop
- 72. Rib Chop (Frenched)
- 73. Sirloin Chop
- 74. Top Loin Chop
- 75. Top Loin Chop (Bnls)

Variety Meats

- 76. Heart
- 77. Kidney
- 78. Liver
- 79. Oxtail
- 80. Tongue
- 81. Tripe

Various Meats

- 82. Beef for Stew
- 83. Cubed Steak
- 84. Ground Beef
- 85. Ground Pork
- 86. Hocks
- 87. Sausage Link/Pattie
- 88. Shank

Smoked/Cured

- 89. Brisket, Corned
- 90. Center Slice
- 91. Ham (Bnls)
- 92. Hocks
- 93. Loin Chop

	1 pt	1 pt	1 pt	3 pts
ID#	Specie	Primal	Retail	Score
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
			Total Score	

Score: _____/60

Additional Resources:

Texas A&M University Meat Identification Pictures <http://aggiemeat.tamu.edu/meat-identification-pictures/>

Texas Tech University Retail Identification <http://www.depts.ttu.edu/meatscience/retailid.php>

University of Nebraska Meat Identification <https://food.unl.edu/meat-cuts-identification>

Additional Skill-a-thon Resources

National 4-H Skill-a-thon Resources and Examples

<https://youthlivestockcontests.org/4-h-livestock-skillathon>

University of Illinois Livestock eQuiz

<http://web.extension.illinois.edu/equiz/>

Iowa State University “Animal U”

<https://www.extension.iastate.edu/animalu/>

Cornell Cooperative Extension General Livestock Sample Questions

<http://ulster.cce.cornell.edu/resources/livestock-skillathon-quiz-bowl-questions>

Ohio 4-H Livestock Activity Guide

https://ohio4h.org/sites/ohio4h/files/d6/files/publications/documents/4H_959_Chapter_2.pdf

National Swine Registry Skillathon Quiz Resources

<https://nationalswine.com/resources/resources-main.php>

YouTube video on sheep handling

<https://www.youtube.com/watch?v=LKSUQapM7po>

You Tube video on pig handling

<https://www.youtube.com/watch?v=YeKNWf4QPqw>

USDA AMS Method for Grid Assessment of Beef Carcass Ribeye Area

https://www.ams.usda.gov/sites/default/files/media/Method_for_Grid_Assessment_of_Beef_Carcass_Ribeye_Area%5B1%5D.pdf

How to Calculate Yield Grade - Dr. Janeal Yancey YouTube Video

<https://www.youtube.com/watch?v=oaP0xeBS8vQ&feature=youtu.be>

University of Georgia Extension Understanding Beef Carcass Reports

<http://extension.uga.edu/publications/detail.cfm?number=B1326>

U.S. Premium Beef USDA Quality Grades and Yield Grades

<http://www.uspremiumbeef.com/DocumentItem.aspx?ID=21>

USDA Food Safety and Inspection Service Meat and Poultry Labeling Terms

<https://www.fsis.usda.gov/food-safety/safe-food-handling-and-preparation/food-safety-basics/meat-and-poultry-labeling-terms>

Understanding Expected Progeny Differences (EPDs) – Cattle

<https://www.uaex.uada.edu/publications/pdf/FSA-3068.pdf>

EPD and \$Value Definitions – American Angus Association

<https://www.angus.org/Nce/Definitions>

Swine EPD Terminology

<https://nationalswine.com/genetics/stages-glossary.php>

National Sheep Improvement Program – Estimated Breeding Values (EBVs)

<http://nsip.org/nsip-resources-2/estimated-breeding-values/>

Goat Reproduction Selection Genetic Animal Evaluation EPDs – Extension

<https://goats.extension.org/goat-reproduction-selection-genetic-animal-evaluation-epds/>

Texas A&M Wool Judging Guide

<https://texas4-h.tamu.edu/wp-content/uploads/Judging-Wool-and-Mohair.pdf>

University of Maryland Hay Judging Example

https://extension.umd.edu/sites/extension.umd.edu/files/2021-03/Hay_Judging_Example_Class.pdf

Oklahoma State University Hay Judging publication

https://afs.ca.uky.edu/files/oklahoma_cooperative_hay_judging_pub_pss-2588.pdf

University of Kentucky publication on using forage quality reports for hay judging

https://afs.ca.uky.edu/sites/afs.ca.uky.edu/files/interpreting_forage_quality_reports_id-101.pdf

University of Kentucky publication on judging performance classes

https://afs.ca.uky.edu/files/judging_performance_classes_asc-167.pdf

University of Kentucky publication on common calculations needed in Skill-a-thon contests

<https://afs.ca.uky.edu/files/livestockcalculationspublication.pdf>

Pork Checkoff Skill-a-thon and Quiz Bowl materials

<https://lms.pork.org/Tools/View/skillathon-quiz-bowl>

UADA Sheep and Goat Production Resources

<https://www.uaex.uada.edu/farm-ranch/animals-forages/sheep-goats/>

Beef Quality Assurance training manuals

<https://www.bqa.org/resources/manuals>