Curriculum Focus

Quality Assurance

Character Education
Objective 1

- Enhance Character Education for Texas 4-H and FFA Youth
Objective 2

- Ensure all 4-H and FFA livestock projects meet all food quality standards
Objective 3

- Promote a Positive Image of Youth Livestock Programs
Core Concept

Impact of Livestock Projects on Red Meat Industry
How many pounds of carcass are there?

- **Terms & Calculations**: (1) Live Weight, (2) Dressing Percent, and (3) Carcass Weight

\[(\text{LW} \times \text{DP}) = \text{Carcass Weight}\]

1250 lb Steer \(\times\) 63% Dress Percent

= 788 lb carcass weight
Refugio County
Total Entry Numbers

Market Swine: 77
Meat Goats: 23
Market Lamb: 17
Market Steers: 17
Rabbits: 32
Poultry: 29
TOTAL: 195
PORK

Ave Wt. – 250
D. P. - 73%
14,052.5 Lb
SHEEP

Ave Wt. – 130
D. P. - 53%
1171.3 Lb
GOATS

Ave Wt. – 95
D. P. - 55%
1201.75lb
BEEF

Ave Wt. – 1200
D. P. - 62%
12,648lb
Poultry and Rabbits

- Poultry – 890 lbs
- Rabbit - 288
Grand Total:

30,251.55

pounds of carcass!!!!!!!
What does this mean?

- Livestock projects can IMPACT thousands of people!!!
- Think about the CONSUMER!!!!
- You never know who they might be........
Core Concept

Six Pillars of Character

Quality Counts
Trustworthiness

- Be honest
- Don’t deceive, cheat or steal
- Be reliable
- Do what you say you will do
- Have the courage to do the right thing
- Build a good reputation
- Be loyal
- Stand by your family, friends and country
Respect

- Treat others with respect
- Follow the Golden Rule
- Be tolerant to differences
- Use good manners, not bad language
- Be considerate of the feelings of others
- Don't threaten, hit or hurt anyone
- Deal peacefully with anger, insults and disagreements
Responsibility

• Do what you are supposed to do
• Persevere: Keep trying!
• Always do your best
• Use self control: be disciplined
• Think before you act
• Consider the consequences
• Be accountable for your choices
Fairness

• Play by the rules
• Take turns and share
• Be open minded
• *Listen to others*
• Don't take advantage of others
• Don't blame others carelessly
Caring

#Be kind
#Be compassionate and show you care
#Express gratitude
#Forgive others
#Help people in need
Citizenship

• Do your share to make your school and community better
• Cooperate
• Stay informed; vote
• Be a good neighbor
• Obey laws and rules
• Respect authority
• Protect the environment
Core Concept

Purpose of 4-H/FFA
Understanding 4-H and FFA
Mission Statements

Prepare youth to meet the challenges of childhood, adolescence and adulthood, through a coordinated, long-term, progressive series of educational experiences that enhance life skills and develop social, emotional, physical, and cognitive competencies.
Mission Statements

FFA makes a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education.
4-H Pledge

To make the best better, I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living. For my club, my community, my country and my world
I believe in the future of agriculture, with a faith born not of words but of deeds—achievements won by the present and past generations of agriculturist; in the promise of better days through better ways, even as the better things we now enjoy have come to us from the struggles of former years.
I believe that to live and work on a good farm, or to be engaged in other agricultural pursuits, is pleasant as well as challenging; for I know the joys and discomforts of agricultural life and hold an inborn fondness for those associations which even in hours of discouragement, I cannot deny.
I believe in leadership from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skills as I can secure, and in the ability of progressive agriculturalists to serve our own public interest in producing and marketing the product of our toil.
I believe in less dependence on begging and more power in bargaining; in the life abundant and enough honest wealth to help make it so— for others as well as myself; in less need of charity and more of it when needed; in being happy myself and playing square with those whose happiness depends on me.
I believe that rural America can and will hold true to the best traditions of our national life and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task.
Motto

Learning to Do
Doing to Learn
Earning to Live
Living to Serve
The Real Purpose of Livestock Projects
Skills Gained by Exhibiting Livestock

- Problem Solving
- Knowledge of Livestock Industry
- Self-Confidence
- Team Work
- Self-Motivation
- Self-Discipline
- Organizational Skills
- Character
- Social Skills
- Competition
What Motivates Us to Have Livestock?
Core Concept

Responsibility of Producing a Safe Product
Lesson #1

The Food Supply Continuum
Understand role and responsibility in the food supply continuum

- Consumers have a right to expect a safe, wholesome product
- It is a producer’s responsibility to provide that safe product
- Producers are also consumers
Understand role and responsibility in the food supply continuum.

From: NPPC, Youth PQA; 2000
Understand role and responsibility in the food supply continuum

- **ALL** producers are affected by negative publicity concerning our food supply
- Product safety can be compromised at any time in the food supply continuum
Lesson #2

Understanding Food Safety
Understand basic elements of food safety

- Past failures in food safety process
  - Recalls, scares, contamination
- Hazard Analysis and Critical Control Points (HACCP) plans and monitoring now required by every packing plant, regardless of size - PREVENTION

Responsibility    Citizenship    Trustworthiness
Identifying Hazards

- Hazards can be one of three types:
  - Microbial
    - Bacteria, Fungi and Viruses
  - Chemical
    - Drug Residue
  - Physical
    - Needles, Glass and others
What type of Hazard?

- Salmonella Bacteria
- Broken Needle
- Liquid Pesticide Residue
- Piece of Glass
- *E. Coli* Bacteria
- Wood Chips
- Drug Residue
- Oil and Grease Residue
- Listeria Virus
- Razor Blade
- Piece of Plastic
- Finger
What type of Hazard?

- Salmonella Bacteria (M)
- Broken Needle (P)
- Liquid Pesticide Residue (C)
- Piece of Glass (P)
- *E. Coli* Bacteria (M)
- Wood Chips (P)
- Drug Residue (C)

- Oil and Grease Residue (C)
- Listeria Virus (M)
- Razor Blade (P)
- Piece of Plastic (P)
- Finger (P)
Understand basic elements of food safety

- Role of producer in providing packer with safe product
  - “On-farm HACCP”
  - Certain hazards occur before product reaches packer
  - Notify packer of potential hazards
- Importance of record keeping
  - Medication use and storage
Identify potential hazards in meat products and appropriate preventative measures

- What could potentially happen if a person extremely allergic to penicillin (or ibuprofen) ate meat with such a residue?

- What would happen if a consumer bit into a portion of a broken needle?
Core Concept

Medication Use/Reading and Following Labels
Exhibit knowledge of medication and feed labels and their meaning

Read the Labels!!!

- Expiration date
- Lot number
- Dosage
- Warnings
- Cautions
- Application Method
- Precautions
- Active Ingredient
- Trade Name

From: NPPC; PQA for Youth; 2000
Exhibit knowledge of medication and feed labels and their meaning

- **Prescription** drugs must be used according to label instructions
- **Over-the-Counter** drugs can cause residues and may not be appropriate for animal use
  - Human sunburn remedies
  - Human dietary supplements
  - Etc.!
Exhibit knowledge of medication and feed labels and their meaning

Types of drug use

- **Labeled Use**: Using the drug **EXACTLY** as it is specified on the label. Legal and the type of practice most producers use.

- **Off Label Use**: The PRODUCER uses drugs on their own in a manner other than what is stated on the label without veterinarian guidance. **ILLEGAL!**

- **Extra Label Use**: The VETERINARIAN prescribes a drug to be used in a manner other than what is on the label. **LEGAL** and used when a good veterinarian-client-patient relationship exists

From: NPPC; PQA for Youth; 2000
**Extra-Label Drug Use: Prescribed Only By a Veterinarian**

- Veterinarian increases dosage beyond label
- Veterinarian changes frequency of administration beyond label
- Veterinarian changes duration of treatment
- Veterinarian changes disease to be treated
- Veterinarian changes species to be treated
- Veterinarian prescribes any other non-label use of OTC or Rx drug

**Off-Label Drug Use: Producer uses without veterinarian approval.**
THIS IS ILLEGAL!

Label each situation as extra-label, off-label, or okay.

1) ___________ The label says to give 10 cc of the drug; your vet says to give 20 cc.

2) ___________ Your animal is diagnosed with foot rot and you treat it with an OTC medication approved for foot rot.

3) ___________ You decide to use a drug for pneumonia to treat your animal’s ringworms without consulting a veterinarian.

4) ___________ You use a drug approved for chickens on your sheep without checking with the veterinarian prescribing it.

5) ___________ The label says treat the animal twice a day and you treat it once at 8 a.m. and once at 8 p.m.

6) ___________ The label says “treat once daily” and your vet tells you to treat the animal at 6 a.m., noon, and 6 p.m.

7) ___________ The label says “administer only to lactating females” and your veterinarian says to give the medicine to your 3-week-old calf, piglet or lamb.

8) ___________ The label says treat for 5 days. Your first treatment is Monday and you give the last shot on Friday.

Exhibit knowledge of medication and feed labels and their meaning

- Labels must be followed when using feed and feed additives
- Only a veterinarian can change the label of medications, including route of administration, dosage, duration, etc. (Extra label drug use)
- **NO ONE**, not even a veterinarian, can legally change the label on feed or feed additives
Reading a Medication Insert
Medication Insert

1 Omnibiotic (Hydrocillin in Aqueous Suspension) 2

Directions for use: See package insert
For use in beef cattle, lactating and non-lactating dairy cattle, swine and sheep 3

Read entire brochure carefully before using this product
For Intramuscular Use Only

Active Ingredients: Omnibiotic is an effective antimicrobial preparation containing hydrocillin hydrochloride. Each ml of this suspension contains 200,000 units of hydrocillin hydrochloride in aqueous base.

Indications: Cattle — bronchitis, foot rot, leptospirosis, mastitis, metritis, pneumonia, wound infections. Swine — erysipelas, pneumonia. Sheep — foot rot, pneumonia, mastitis. And other infections in these species caused by or associated with hydrocillin-susceptible organisms.

Recommended Daily Dosage
The usual dose is 2 ml per 100 lbs. of body weight given once daily.
Maximum dose is 15 ml/day.

<table>
<thead>
<tr>
<th>Body Weight</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 lbs.</td>
<td>2 ml</td>
</tr>
<tr>
<td>300 lbs.</td>
<td>6 ml</td>
</tr>
<tr>
<td>500 lbs.</td>
<td>10 ml</td>
</tr>
<tr>
<td>750 lbs. or more</td>
<td>15 ml</td>
</tr>
</tbody>
</table>

Continue treatment for 1 or 2 days after symptoms disappear.

Caution: 1. Omnibiotic should be injected deep within the fleshy muscle of the neck. Do not inject this material in the hip or rump, subcutaneously, into a blood vessel, or near a major nerve because it may cause tissue damage. 2. If improvement does not occur within 48 hours, the diagnosis should be reconsidered and appropriate treatment initiated. 3. Treated animal should be closely observed for at least 30 minutes. Should a reaction occur, discontinue treatment and immediately administer epinephrine and antihistamines. 4. Omnibiotic must be stored between 2° and 8° C (36° and 46° F). Warm to room temperature and shake well before using. Keep refrigerated when not in use.

Warning: Milk that has been taken from animals during treatment and for 48 hours (four milkings) after the last treatment must not be used for food. The use of this drug must be discontinued 30 days before treated animals are slaughtered for food.

10 How supplied: Omnibiotic is available in vials of 100 ml.

Identify the parts of the medication insert by filling in the corresponding blank with the correct name of the part.

1 2 3 4 5 6 7 8 9 10

Reading a Feed Tag
**Pig & Cattle Grower**

**Medicated**

for horses, rabbits, cattle, goats, poultry and swine

Administer Calf-Manna as a nutritional supplement for better growth and performance. Calf-Manna's four main ingredients—high quality proteins, digestible carbohydrates, anise and brewer's dried yeast—meet the needs of many animals by providing for more growth, energy, palatability, and better digestion.

**Guaranteed Analysis**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Min. 25.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude Protein</td>
<td></td>
</tr>
<tr>
<td>Lysine</td>
<td>min. 1.4%</td>
</tr>
<tr>
<td>Methionine</td>
<td>min. 0.3%</td>
</tr>
<tr>
<td>Crude Fat</td>
<td>min. 3.0%</td>
</tr>
<tr>
<td>Crude Fiber</td>
<td>min. 3.0%</td>
</tr>
<tr>
<td>Acid Detergent Fiber</td>
<td>max. 6.0%</td>
</tr>
<tr>
<td>Calcium</td>
<td>max. 10.0%</td>
</tr>
<tr>
<td>Calcium</td>
<td>min. 0.7%</td>
</tr>
<tr>
<td>Phosphorus</td>
<td>min. 0.6%</td>
</tr>
<tr>
<td>Salt</td>
<td>max. 1.0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>min. 0.2%</td>
</tr>
<tr>
<td>Copper</td>
<td>max. 0.4%</td>
</tr>
<tr>
<td>Copper</td>
<td>min. 0.1 ppm</td>
</tr>
<tr>
<td>Selenium</td>
<td>min. 165 ppm</td>
</tr>
<tr>
<td>Zinc</td>
<td>min. 20,000 IU/lb</td>
</tr>
<tr>
<td>Vitamin A</td>
<td></td>
</tr>
</tbody>
</table>

**Ingredients**

Soybean Meal, Corn, Hominy Feed, Feeding Oatmeal, Dried Whey, Dehydrated Alfalfa Meal, Linseed Meal, Brewer's Dried Yeast, Vegetable Oil, Fenugreek Seed, Anise Oil, Calcium Carbonate, Monocalcium Phosphate, Dicalcium Phosphate, Salt, Sulfur, Iron Oxide, Ferrous Carbonate, Ferric Sulfate, Copper Oxide, Copper Sulfate, Manganese Oxide, Zinc Oxide, Sodium Selenite, Cobalt Carbonate, Calcium Toclate, Vitamin A Supplement, Vitamin D3 Supplement, Vitamin E Supplement, Choline Chloride, Thiamine Mononitrate, Niacin Supplement, Riboflavin Supplement, Calcium Pantothenate, Pyridoxine Hydrochloride, Vitamin B12 Supplement, Folic Acid, Biotin, Calcium Propionate (a preservative).

**Feeding Instructions**

<table>
<thead>
<tr>
<th>Animal</th>
<th>Feeding Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef calves</td>
<td>10% of creep ration</td>
</tr>
<tr>
<td>Show cattle</td>
<td>1 - 2 lbs/day</td>
</tr>
<tr>
<td>Broad cows &amp; bulls</td>
<td>1 lb/day</td>
</tr>
<tr>
<td>Baby pigs</td>
<td>1/3 - 1/4 lb/day</td>
</tr>
<tr>
<td>Show hogs</td>
<td>1/3 - 1/4 lb/day</td>
</tr>
<tr>
<td>Gestating sows</td>
<td>1/3 - 1/4 lb/day</td>
</tr>
<tr>
<td>Lactating sows</td>
<td>1/2 - 3/4 lb/day</td>
</tr>
<tr>
<td>Boars</td>
<td>1/4 - 1/2 lb/day</td>
</tr>
</tbody>
</table>

**Manufactured by:**

Manna Pro Corporation

Net Weight 50 pounds (22.7 kilograms)

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**Reading a Feed Tag**

1. What is the main ingredient in this feed?

2. What is the crude protein level?

3. What is the minimum crude fat level of this diet?

4. Is ground milo included in the ingredients of this diet?

5. How much supplement should be fed to show cattle?
   - Show hogs?

6. What is one of the four main ingredients found in this supplement?

7. What are the minimum and maximum calcium levels of this diet?

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Withdrawal Times

**Drug Withdrawal Time:** the amount of time required for the medication to be metabolized, or broken down, by the animals’ body to levels safe for human consumption.

Withdrawal times are determined by research and regulated by the federal government.
Sample Medicine Label

Omnibiotic
(Hydrocillin)

Directions for use: See package insert.

WARNING:
The use of this drug must be discontinued for 30 days before treated animals are slaughtered for food. Exceeding the highest recommended dosage may result in antibiotic residues in meat or milk beyond the withdrawal period.

Store between 2 °C and 8 °C (36 °F and 46 °F)

Net contents: 100 ml
Distributed by: USA Animal Health, Inc.

Destroy after: August 13, 2002

Quality Counts
Withdrawal Time Water Activity
Core Concept

Animal Care and Well-Being
Lesson #3

Administering Medicines
Banana Injection Activity
Knowledge of proper medication administration

- Proper routes of administration
  - Differences in routes of administration
  - Differences between species
  - ALWAYS avoid major meat cuts (loin, leg, ham)!!!

From: SDSU Animal Science website

From: NPPC; PQA for Youth; 2000
Injection Site
Knowledge of proper medication administration

- Animals should NEVER be injected into the loin (back) or rump (ham or leg).
  - Intramuscular injections (IM) should be given in the neck muscle
  - Subcutaneous injections (Subcu) should be given in the fore or rear flank, under the skin
Carcass Damage Activity
Injection Abscess
Knowledge of proper medication administration

- Choose size and gauge of needle carefully
  - Route of administration (I.M. vs. subcu)
  - Size of animal
  - Species
- If needle shaft is damaged (bent, burr) do not use!
- Proper disposal of needles
  - Puncture-proof container
Lesson #6

Animal Facilities
Demonstrate knowledge of appropriate animal facilities - **HOUSING**

- Impact of decisions on the general welfare of the animal

- **Shade**
- **Bedding**
- **Ventilation**

- **Caring**
- **Respect**
Housing Activity
Demonstrate knowledge of appropriate animal facilities - **HANDLING**

- Handle animals while temperatures are optimum
- **HOT**
  - Wet shavings
  - Keep trailer moving to provide air flow
- **COLD**
  - Straw bedding
  - Prevent drafts

_Caring_ _Respect_
Demonstrate knowledge of appropriate animal facilities - **HANDLING**

- Always handle animals calmly and gently
- Provide water immediately after transport (and during if possible)
- Provide shade while transporting
Demonstrate knowledge of appropriate animal facilities - HANDLING

- Never use electric prods, buzzers or slappers to handle animals
- Use proper equipment (i.e. sorting panels for hogs) when handling, loading and transporting animals
Lesson #7

Caring for Your Animal’s Health
Demonstrate an understanding of animal well-being - HANDLING

- Proper handling, including during loading and transport, should be exhibited at all times

  - Avoid distractions, such as shadows
  - Always move animals in a calm, slow manner
  - Keep your temper!

From: Dr. Temple Grandin, CSU
Demonstrate an understanding of animal well-being

- Nutrition and feeding
  - Meeting animal’s requirements
  - Management to reach optimum weight, not “feed and then withhold right before show”

- Importance of a clean, fresh water supply at all times

Responsibility  Caring  Citizenship
Demonstrate an understanding of animal well-being

- Water should NEVER be withheld from the animal for more than a few hours, especially as a means of shedding weight
- Feed additives, including Paylean® for swine, alter the metabolism of the animal
- Feed additives may also affect the way that an animal handles stresses, including handling, loading, showing and weight management

Responsibility  Caring  Citizenship
Evaluate herd health

- Animals should be observed daily for signs of illness.
- If an illness or injury occurs, animal should be treated promptly and correctly, following label directions and may need the care or advice of a veterinarian.
Evaluate herd health

- Many producers have strict biosecurity practices on their operations
  - Prevent spread of potential disease
  - Be aware of, and observe these practices when visiting farms
- Youth may want to consider adopting some simple biosecurity measures on their operation

Responsibility  Caring  Citizenship
In closing
Ch. 1, Lesson 5, Activity 3
It’s A Question of Ethics
It’s A Question of Ethics

You should:

(a) Take the medicated feed. The show doesn’t do drug tests anyway.

(b) Turn down the offer of medicated feed, thinking that you can find a neighbor who can let you borrow enough feed to last through the holidays.

(c) Decline the feed and politely inform the store clerk that it’s important to follow the rules about using medicines and drugs.

(d) What the clerk is suggesting is illegal. Notify your Ag Teacher of County Agent about the clerk’s suggestion.
It’s A Question of Ethics

You should:

(a) Get your brother and leave
(b) Point out to your little brother what you see and tell him that it is wrong and why
(c) Tell your dad what you saw and have him call the Ag Teacher or County Agent
(d) Call Bob and ask him what the deal is
It’s A Question of Ethics

You should:

(a) Call Bob and ask him what is going on

(b) Tell your dad and ask him to call your County Agent or Ag Teacher

(c) Tell all your friends what you saw in Bob’s barn and let them know that he is cheating and using illegal drugs to make his show pigs better

(d) Unload the feed back into Bob’s barn and leave as soon as possible to try to erase all evidence that you were there
It’s A Question of Ethics

You should:

(a) Politely decline the pig
(b) Take the pig. You should get first choice anyway because your dad is the one who went and purchased the pigs for everyone
(c) Take the pig. If you don’t, someone else will and you will have to show against a better pig
(d) Take the good pig back and draw for the pig with the other members. You may get lucky and draw this one anyway
It’s a Question of Ethics

You should:

(a) Take the help. You have spent a great deal of time with your pig and really want to show

(b) Take the help. The practice is sort-of-legal. It hasn’t been identified as illegal. Besides, others are sure to be cheating and this practice isn't considered cheating yet

(c) Decline the help and look for an alternative that is sort-of-more-legal

(d) Decline the help. Try to naturally and legally get the weight off and hope that your pig can lose the weight for the show. Learn from this mistake and do better with your next swine project
Sportsmanship vs. Gamesmanship
What is Sportsmanship?

Sportsmanship is exhibiting livestock with honor.
What is Gamesmanship?

All about winning for gain or glory
“4-H and FFA start at home and so does Quality Counts!”
The Future of the Youth Livestock Show Program Depends on Us!
Thank You!