



PRODUCER

U.S. ROUNDTABLE FOR SUSTAINABLE BEEF FRAMEWORK OUTREACH | MODULE TOOLKIT

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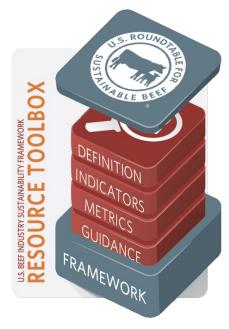
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U.S. ROUNDTABLE FOR SUSTAINABLE BEEF: INTRODUCTION

Welcome to the U.S. Roundtable for Sustainable Beef (USRSB) Online Module Toolkit. In this resource, you'll find a collection of external sources to support the material in the online training. Templates are available for in-the-moment application and active links will allow you to visit websites instantly, expanding your knowledge of each topic.



OUR FRAMEWORK

The U.S. Beef Industry Sustainability Framework is a voluntary resource developed to identify opportunities for continuous improvement in all types of operations and companies through the beef industry. The ability to establish benchmarks for current conditions and assess progress toward goals is critical to the U.S. beef industry's sustainability efforts. <u>Read the complete</u> Framework here.

This Toolkit addresses the following indicator areas:

- Profitability & Efficiencies
- Grazing Management
- Animal Health & Well-Being
- Employee Safety & Well-Being
- Succession & Transfer



Get started with the <u>Cow-Calf Self-Assessment Tool</u> from USRSB



SECTOR-LEVEL GOALS & TARGETS

The USRSB has set goals and sector-level targets for six high-priority indicators. This page shows the sector targets and metrics for the Cow-Calf sector.



EFFICIENCY & YIELD

SECTOR TARGET: Develop a cow-calf financial health index and set sector targets for improvement by 2025.

METRIC: Is there a strategy implemented to optimize animal productivity through improved nutrition, reproduction, genetics, technologies and practices?



WATER RESOURCES

SECTOR TARGET: 385 million acres covered by a written grazing management plan by 2050.

METRIC: Is a grazing management plan (or equivalent) being implemented that maintains or improves water resources?



LAND RESOURCES

SECTOR TARGET: 385 million acres covered by a written grazing management plan by 2050.

METRIC: Is a grazing management plan (or equivalent) being implemented to protect and/or improve the land resources, including succession/transition planning?



AIR & GREENHOUSE GAS EMISSIONS

SECTOR TARGET: 385 million acres covered by a written grazing management plan by 2050.

METRIC: Has a grazing management plan (or equivalent) been implemented that protects or improves soil and plant community health, including soil carbon sequestration?



ANIMAL HEALTH & WELL-BEING

SECTOR TARGET: Increase the number of individuals trained and certified in BQA or equivalent by 10% year-over-year.

METRIC: Has the operation adopted Beef Quality Assurance (BQA) or similar program principles into management of the farm or ranch?



EMPLOYEE HEALTH & WELL-BEING

SECTOR TARGET: 10% year-over-year increase in individuals trained for stockmanship and safety.

METRIC: Are all individuals who are involved in the operation trained in stockmanship and safety and are they implementing these practices on the farm or ranch?



PROFITABILITY & EFFICIENCIES

FINANCIAL MANAGEMENT: MEASURING PERFORMANCE



Financial benchmarks are calculations used to measure the financial health of your operation. These benchmarks can be used regardless of your type of operation and provide comparable, standardized measures to judge your efficiency. Benchmarks come in three forms:

- **Ratios:** Measures like the Debt-to-Equity Ratio, which compare the bank's ownership to your ownership in an operation
- **Percentages:** Rates such as Rate of Return on Farm Equity, which represents the return you are getting out of your investment in the farm
- **Dollar Amounts:** Dollar figures like the Net Farm Income, which is the farm's gross income less expenses, inventory changes, and depreciation

Using the **Balance Sheet**, **Income Statement**, **Cash Flow Statement**, and other financial documents, you can find your operation's:

- LIQUIDITY: Your ability to have cash readily available to meet financial obligations, such as living expenses, taxes, or debt payments
- SOLVENCY: Your ability to pay off all debts if they were to be called in today solvency is a
 measure of the borrowing risk and capacity of an operation
- PROFITABILITY: The difference between revenues earned on goods produced and the costs of production
- **REPAYMENT CAPACITY:** Your ability to repay debts on time using both on-farm and off-farm income as a measure of capacity
- FINANCIAL CAPACITY: How well your operation can generate income using your assets past performance can help indicate future potential

Adapted from Center for Farm Financial Management, University of Minnesota



FINANCIAL MANAGEMENT: BALANCE SHEET

The balance sheet financial statement is a snapshot of what your farm looks like TODAY. At this point in time, what do you own and what do you owe? Use today's date for the document and track your assets and liabilities in the template below. Remember, assets less liabilities is your net worth or owner equity. *This is a tool for personal use only. Learn more and view definitions at this link.*

Current Assets	Current Liabilities	
Cash	\$ Accounts Payable	\$
Accounts Receivable	\$ Operating Loan	\$
Market Livestock & Products	\$ Principal Proportion of Term Debt Due Within One Year	\$
Crops & Feed	\$ Interest on Non-Current Liabilities	\$
Cash Investments in Crops	\$ Taxes Due: Real Estate/Property	\$
Supplies	\$ Taxes Due: Employee Payroll Withholding	\$
Prepaid Expenses	\$ Deferred Tax Liability on Current Assets	\$
Other	\$ Other	\$
Total Current Assets	\$ Total Current Liabilities	\$
Long-Term Assets	Long-Term Liabilities	
Notes Receivable	\$ Machinery Loans	\$
Breeding Livestock	\$ Real Estate & Building Loans	\$
Machinery & Equipment	\$ Deferred Tax & Liabilities Loan	\$
Vehicles	\$ Other	\$
Farm Real Estate & Buildings	\$ Total Long-Term Liabilities	\$
Cropland	\$ Total Liabilities	\$
Pasture	\$	
Other	\$	ć
Total Long-Term Assets	\$ Owner's Equity/Net Worth	\$
Total Assets	\$	

Adapted from Northwest Farm Credit Services and Noble Research Institute, LLC special thanks to Dan Childs



FINANCIAL MANAGEMENT: INCOME STATEMENT

The income statement shows the revenues and expenses of the operation over the course of a year. The difference in revenues and expenses is the net farm income. Use the template below to track these items for the year. *This is a tool for personal use only.*

Revenues	
Livestock	\$
Crops	\$
Government Payments	\$
Custom Work	\$
Total Revenues	\$
Expenses	
Chemicals	\$
Feed	\$
Fertilizer	\$
Gas, Fuel, Oil	\$
Insurance	\$
Hired Labor	\$
Rent	\$
Repairs and Maintenance	\$
Seed	\$
Property Taxes	\$
Vet and Medicine	\$
Machine Hire	\$
Depreciation	\$
Interest	\$
Other	\$
Total Expenses	\$
Net Farm Income (before taxes)	\$

FINANCIAL MANAGEMENT: CASH FLOW STATEMENT

A series of cash flow statements will allow you to see or project your ability to meet cash payment obligations, and when you might have excess cash available to pay ahead on existing liabilities. Cash flow statements can be completed on intervals tailored for the operation, such as monthly or quarterly. Use the template below to track beginning cash balance, cash inflows, and cash outflows. *This is a tool for personal use only.*

Category	Cash In (\$)	Cash Out (\$)		
Cash Farm Income and Expenses (Operating)				
Total cash income (net farm income statement)	\$	\$		
Total cash expenses (net farm Income statement + interest paid)	\$	\$		
Capital Assets (Investing)				
Sales of capital assets	\$	\$		
Cost of purchases and trades	\$	\$		
Loans (Financing)				
New loans received	\$	\$		
Principal repaid	\$	\$		
Discrepancy in loans received and paid vs. change in principal owed	\$	\$		
Non-Farm				
Non-farm income invested in the farm business	\$	\$		
Cash withdrawn from the farm from living, taxes, savings, etc.	\$	\$		
Cash on Hand (Balance in Farm, Checking, Savings Accounts)				
Beginning of year	\$	\$		
End of year	\$	\$		

Adapted from Iowa State Extension Ag Decision Maker 'Complete Financial Statements"



FINANCIAL MANAGEMENT: BEEF CATTLE BENCHMARKS

In addition to standard benchmarks measuring financial health, the indicators below offer more specific guidelines for beef cattle operations. These are only suggested target levels – use the resources in this toolkit to find what is best for your operation and your financial goals.

EXAMPLE BENCHMARK	EXAMPLE TARGET LEVEL
Nutrition Base Expense as a Percent of Total Expenses	Between 30%-45%
Labor and Management Expense as a Percent of Total Revenue	< 15%
Operating Expense as a Percent of Total Revenue	< 75%
Net Income Ratio	> 5%
Current Ratio	> 2%
Equity to Asset Ratio (Market Basis)	> 50%
Asset Turnover Ratio (Cost Basis)	> 15%
Rate of Return on Assets (Market Basis)	> 1.5%



FINANCIAL MANAGEMENT: YOUR OPERATION

How is your operation doing? Visit <u>this link</u> to see a list of ratios and KPIs (Key Performance Indicators) to measure your operation's financial health. Select two measures for each category, then calculate and determine if your measure indicates Strong, Moderate, or Vulnerable status.

LIQUIDITY			Strong	Moderate	Vulnerable
Measure:	Calculation:	Result:			
Measure:	Calculation:	Result:			
SOLVENCY					
Measure:	Calculation:	Result:			
Measure:	Calculation:	Result:			
PROFITABILITY					
Measure:	Calculation:	Result:			
Measure:	Calculation:	Result:			
REPAYMENT CAPACITY					
Measure:	Calculation:	Result:			
Measure:	Calculation:	Result:			
FINANCIAL CAPACITY					
Measure:	Calculation:	Result:			
Measure:	Calculation:	Result:			



MORE RESOURCES

This is not an exhaustive list. Continue exploring resources specific to your state or region.

The following websites provide tools, articles, and industry standards for beef cattle economics:

- Visit the <u>Center For Farm Financial Management</u> from the University of Minnesota to find links and resources for financial planning.
- Find the standardized guidelines for reporting farm finances from the <u>Farm Financial Standards</u> <u>Council</u>.
- Browse the resources at the <u>lowa Beef Center</u> for information on investment, production, ownership, and cattle markers.
- View <u>Financial Analysis Resources</u> from Purdue University Center for Commercial Agriculture and use their <u>Farm Finance Spreadsheets</u> as ready-to-use tools for inputting your data.
- Use the <u>CattleFax: Cow-Calf Cost Calculator</u> to input your financial information and estimate breakeven point, taxes, expenses, and more. Below is an example of this user-friendly tool:

Cattle Revenue						
Feeder Steer Weights (lbs.)						
Expected Steer Market Price (\$/lb)		2.00		1.70	1.40	
Feeder Heifer Weights						
Discount to Steers (\$/cwt)		15		18	20	
Expected Heifer Market Price (\$/lb)						
Weighted Average Price (\$/lb)						
Cull Cow Weight (lbs.)						
Expected Cull Cow Market Price (\$/lb)				0.85		
Marketing/Selling Costs (%)				2.0		
		Ranch Rev	venue and Cost			
				Lease Term (Days)		
Current Pasture/Residue Being Leased	By Acre 💲	0.12	75	150		
	Select Yes or N/A					
Forage Production (Hay, Other)	Yes 🛊	120	20			



CHECK IN: What technology or programs are you currently using to track your financial documents? Does the system meet your needs? If not, what needs to change?



NUTRITION: FEED INGREDIENTS & ANALYSIS

NUTRIENT	UNIT
Moisture	%
Crude Protein	%
Total Digestible Nutrients	%
Neutral Detergent Fiber	%
Acid Detergent Fiber	%
Net Energy	Mcal/lb
Calcium	%
Phosphorus	%
Copper, Zinc	ppm
Vitamins	IU/lb

Utilizing these tools requires accurate data of animal characteristics (e.g., body weights and condition scores) and the nutrient compositions of feedstuffs. For more information, visit this <u>feed analysis article</u> from the University of Nebraska-Lincoln, Institute of Agriculture & Natural Resources, UNL Beef.

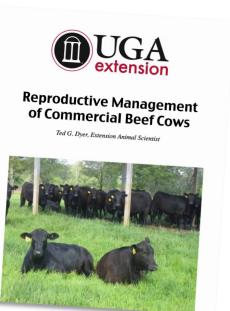
A feed analysis will provide information in these four key areas. Use the link	MOISTURE	PROTEIN
above to explore more about the measures in each.	ENERGY	FIBER

REPRODUCTION: BEEF COWS

Topics regarding the reproductive management of commercial beef cows include:

- Controlled Calving Season
- Checking for Pregnancy
- Strategic Supplementation
- Body Condition
- Heifer Development, Selection, and Breeding
- Herd Health
- Dystocia
- Breeding-Soundness Examination

Learn more about these topics from the University of Georgia Extension <u>Reproductive Management of Commercial Beef Cows</u>





GENETICS: BEEF HERDS

Who can help with navigating genetic selection decisions?



Beef Extension Specialists Land Grant University Personnel



Breed Associations



USDA Researchers Informational Sources



MORE **RESOURCES**

This is not an exhaustive list. Continue exploring resources specific to your state or region.

NUTRITION

- Download the "Nutrient Requirements of Beef Cattle" e-book.
- <u>The OSU Cowculator</u> is a Microsoft Excel spreadsheet designed to assist cattlemen in making informed decisions associated with beef cow nutrition.

REPRODUCTION

• Find charts and resources on cattle reproduction at the <u>Applied Reproductive Strategies in Beef</u> <u>Cattle (ARSBC)</u> at University of Nebraska-Lincoln, part of the <u>Beef Reproduction Task Force</u>.

GENETICS

- Visit the <u>Beef Improvement Federation</u>, whose aim is, "Improving the beef industry through performance evaluation." You can also find their <u>Guidelines for Uniform Beef Improvement</u> <u>Programs</u> online.
- Use the many resources available at <u>eBEEF</u> Beef Genetics and Genomics Community of Practice with eXtension from UC Davis.



BRINGING IT ALL TOGETHER: BUSINESS GOALS & OBJECTIVES

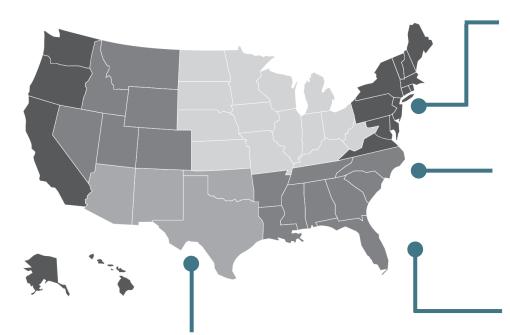
The information collected in this section on "Efficiency & Yield" will only benefit your operation if you have a destination in mind. How can this information help you? Are you making progress toward your goals? Consider your overall Mission, Objectives, and Goals & Checkpoints when using the template.

Category	What is this?	Your Plan
Mission	The mission of the operation summarizes why it exists; it is the "big picture" of your operation. This also provides the framework for creating objectives and goals. While it may seem obvious, writing it down will help you create specific and defined goals down the road.	
Objectives	Objectives are action statements that help you achieve your mission. What will it TAKE to get you where you want to be?	
Short-Term Goals & Checkpoints	Remember to use "SMART" guidelines when writing your goals: S - Specific M - Measurable A - Attainable R - Realistic T - Timely Also include "checkpoints," which are opportunities to stop and evaluate your progress on your goals (and make adjustments, if needed).	Adapted from Vern Pierce and the Parcell at University of Misso



GRAZING MANAGEMENT: REGIONAL NEEDS

Grazing management is about optimizing land and water resources and being an ethical steward of the environment. Region specific factors, like soil type, climate, vegetative cover, wildlife and wildlife habitat, soil function, cattle health and performance requirements, and invasive species, all play a role in making your grazing management plan a success. Many resources are available to understand factors like these in your region. The following are just a few examples.



The <u>Grassland Production Forecast</u> is an educational resource provided by University of Nebraska-Lincoln which uses Grassland Production Forecast to help producers in the Great Plains better guess the amount of grass that will be available for grazing. The <u>National Weather Service</u> <u>Climate Prediction Center</u> will provide weather outlooks, maps, and news about weather forecasts.

<u>Amazing Grazing</u> is a center for pasture-based livestock systems which helps midsouth producers implement improved grazing systems.

Archbold Biological Station is an organization which shares scientific knowledge needed to protect the life, lands, and waters of Florida and the United States.



GRAZING MANAGEMENT: RESOURCES

Who can help with developing a resource and grazing management plan?



RANCH MANAGEMENT CONSULTANTS can provide resources specific to an operation's needs and goals.



STATE CATTLEMEN'S ASSOCIATIONS are a resource to gain information about public policies related to grazing management and learn what practices other producers are implementing.



STATE EXTENSION SPECIALISTS and other university academics can provide an assessment of current operations and help producers create a plan for implementing new land resource practices.



WILDLIFE AND ENVIRONMENTAL EXPERTS, both state and federal agencies and non-governmental organization staff can assess operations and provide advice on opportunities to incorporate wildlife habitat inclusion on existing operations.

MORE **RESOURCES** This is not an exhaustive list. Continue exploring resources specific to your state or region.

- The <u>USDA Natural Resource Conservation Service (NRCS)</u> provides financial assistance, technical assistance tools, and resources for producers looking to incorporate conservation practice within an operation.
- The <u>Noble Research Institute</u> is a collaboration of scientists, consultants, plant breeders, greenhouse emissions researchers, agricultural economists, forage agronomists, beef producers, crop specialists, wildlife biologists, biochemists, and teachers who focus on research, producer relations, and education to find solutions to problems faced by farmers and ranchers.





MORE RESOURCES

This is not an exhaustive list. Continue exploring resources specific to your state or region.

NON-GOVERNMENT ORGANIZATIONS (NGOS)



• <u>Ducks Unlimited</u> provides resources for conservation, including waterfowl research and conservation techniques. They partner with farmers and ranchers for grassland and wetland management and protection.



The Nature Conservancy is a global environmental non-profit organization that works to conserve the land and waters on which all life depends by tackling climate change, protecting land and water, providing food and water sustainability and building healthy cities. They work with farmers, ranchers, and other partners to meet the growing demand for food, while protecting lands and waters for people and nature.





- <u>Pheasants Forever</u> is dedicated to the conservation of pheasants, quail, and other wildlife through habitat improvements, public awareness, education, and land management policies and programs. They believe there's room for wildlife habitat on every farm and ranch to better protect our natural resources and to leave uplands and wetlands for future generations to enjoy.
- <u>The World Wildlife Fund</u> is a leading conservation organization that combines global reach with a foundation in science to conserve forests, oceans, fresh water, wildlife, food, and climate. They advocate for programs which help farmers and ranchers improve conservation outcomes on working lands.

PUBLICATIONS

- The National Climate Assessment's <u>2014 Agriculture</u> <u>Guide</u> provides an in-depth look into how agricultural production impacts our world.
- The <u>Sustainable Rangelands Roundtable</u> focuses efforts to better serve social, ecological, and economic indicators of rangeland sustainability.
- The <u>Sustainable Ranch Management Assessment</u> <u>Guidebook</u> is an in-depth look into social, ecological, and economic sustainability on rangelands as part of the Sustainable Rangelands Roundtable organization.
- <u>State and region-specific grazing resources</u> are regularly updated online from USRSB.





ENVIRONMENTAL STRATEGIES: TOOLS & PRACTICES

Tools and practices to improve outcomes for high-priority indicator areas include:

AIR & GREENHOUSE GAS EMISSIONS



- Ecological restoration (e.g., range planting, condition improvement, riparian/wetland restoration)
- Avoiding conversion/maintaining extent of grazing lands
- Animal health and well-being/performance improvements (e.g., preconditioning, reproduction, genetics, other management)
- Feed additives/implants/supplemental nutrition to reduce enteric methane production and improve feed conversion efficiency
- Vaccines to maintain healthy cattle as well as alter rumen microbial community and reduce enteric methane production*
- Development and implementation of genetic selection for cattle with lower methane emissions (e.g., methane production becomes an economically relevant trait and is incorporated into selection indices)*

*Resources in development for future use

LAND RESOURCES

Ecosystem service markets

- Ranch management and assessment tools
- Succession plans
- **Conservation easements**

Progress can be made to improve land resources under the care of the U.S. beef supply chain in a variety of ways. Land resources can be improved in terms of land extent and land conditions.

- Land Extent: Maintain current quality land management
- Land Condition: Improve the grazing land condition of acres managed



- WATER RESOURCES Riparian Zone Management
 - Water infrastructure upgrades and maintenance
 - On-ranch irrigation efficiency for hay/forage crops (where deemed appropriate within the basin context)

NOTE: This is not a comprehensive list of all potential practices that may be relevant for every operation within the U.S. beef supply chain. For example, improvements in crop production to lower GHG emissions will greatly benefit the overall climate impact of the U.S. beef industry but are not included here. Instead, this list represents major opportunities that are consistently identified by industry experts and stakeholders.



GRAZING MANAGEMENT: LEARNING MODULE

As cattle producers, you know your land, herd, and natural resources better than anyone else. Use this <u>Grazing Management Plan Development module</u> to see how you can continue to excel in your operations.

Why take the module?

- Grazing management plans serve to strengthen and increase farm and ranch resilience and are customizable for your operation.
 - The module contains a <u>Grazing Management Plan</u>
 <u>Template</u> to help you get started. The content of the module will guide you through each element of the template.

By the end of the module, you will have a written GMP customized to your operation that will support your goals and serve as a roadmap for the years ahead.

GET STARTED TODAY!

Visit learning.usrsb.org







DISEASE PREVENTION: VCPR

A Veterinary-Client-Patient-Relationship (VCPR) agreement should be in place in order to specify the responsibilities of the producer and veterinarian, as well as to meet legal obligations for some antibiotics and medications.

A Valid VCPR requires the following:

The livestock owner consents to entering into this VCPR

- The Veterinarian of Record (VOR) has sufficient knowledge of the farm and animals
- The VOR takes **responsibility for making medical judgments** regarding the health and welfare of cattle on the farm
- The farm owner, farm management, and farm workers agree to follow the VOR's instructions
 - The VOR is available for follow-up and agrees on a schedule for timely visits

If farm owners, managers, or workers use or administer drugs contrary to the VOR's instructions, it is a violation of the VCPR, making this agreement null and void.

When you require a Veterinary Feed Directive (VFD), check if the state or federal definition of the VCPR applies in your state. Visit the <u>FDA VCPR Jurisdiction</u> document to find your state.





DISEASE PREVENTION: VCPR

Use this VCPR template adapted from the second s	the Professional	Animal Auditor	Certification (Organization
---	------------------	-----------------------	-----------------	--------------

Owner Name:		Date:	
Mailing Address:	City:		_ State:
Farm Name:			
Farm Address (if different	from above):		
Primary Phone:	Fax:	Email:	
Animal Groups Covered ir	this VCPR:		
Lactating Cows	Breeding Age Heifers 🗌 Milk-Fed Calves	Dry Cows	
judgments on the farm reg providing appropriate over maintaining a VCPR. This c	formation: The veterinarian of reco garding the health and welfare of a rsight of drug use on the farm. Suc oversight should include establishr ment records, and monitoring use o puted.	nimals and is the respo h oversight is critical in ment of treatment prote	nsible party for establishing and ocols, training of
Name:	Clinic Name:		
Mailing Address:	City:		_ State:
Primary Phone:	Email:		
State Licensed in:	Other:		
Before s	signing this agreement, the following	ng must be completed:	
Develop an Approved D	rug List, noting condition to be tre	ated, proper dose, rout	e, and withdrawal times
Develop and commit to	maintaining a Treatment Record S	System (written or comp	outer based)
VOR provides/approves	treatment records		
	alid VCPR is established for the abo ntil cancelled by either party, or one		
Farmer/Owner Signature:		Date:	
Veterinarian of Record Sig	anature:	Date:	



DISEASE MANAGEMENT: JUDICIOUS USE OF ANTIBIOTICS

The Beef Quality Assurance Program (BQA) provides 14 Guidelines for the Judicious Use of Antibiotics, which are outlined below. You can find more information on these guidelines in the <u>BQA</u> <u>Antibiotics Stewardship for Beef Producers Guidebook</u>.



Prevent problems:

Emphasize appropriate husbandry and hygiene, routine health examinations and vaccinations.



Adhere to FDA guidance:

Follow label instructions and FDA guidance for the use of all antibiotics. The use of antibiotics medically important in human medicine should only be used after careful consideration. If medically important feed grade antibiotics are used, they must be under the guidance of a Veterinary Feed Directive (VFD).



Select and use antibiotics carefully:

Consult with your veterinarian on the selection and use of antibiotics, under the premise of a valid Veterinarian-Client-Patient-Relationship (VCPR). Have a valid reason to use an antibiotic. Appropriate therapeutic alternatives should be considered prior to using antimicrobial therapy.

Use the laboratory to help you select antibiotics:

Cultures and sensitivity test results should be used to aid in the selection of antibiotics, whenever possible.



4

Combination antibiotic therapy is discouraged unless there is clear evidence the specific practice is beneficial:

Select and dose an antibiotic to affect a cure.



Avoid inappropriate antibiotic use:

Confine therapeutic antibiotic use to proven clinical indications. Avoid inappropriate uses, such as for viral infections without bacterial complication.

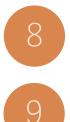
Treatment programs should reflect best use principles:

Regimens for therapeutic antimicrobial use should be optimized using current pharmacological information and principles.



DISEASE MANAGEMENT: JUDICIOUS USE OF ANTIBIOTICS

The Beef Quality Assurance Program (BQA) provides 14 Guidelines for the Judicious Use of Antibiotics, which are outlined below. You can find more information on these guidelines in the <u>BQA</u> <u>Antibiotics Stewardship for Beef Producers Guidebook</u>.



Treat the fewest number of animals possible:

Limit antibiotic use to sick or at-risk animals.

Treat for the recommended time period:

To minimize the potential for bacteria to become resistant to antimicrobials.



Avoid environmental contamination with antibiotics:

Steps should be taken to minimize antimicrobials reaching the environment through spillage, contaminated ground runoff or aerosolization.



Keep records of antibiotic use:

Accurate records of treatment and outcome should be used to evaluate therapeutic regimens and always follow proper meat and milk withdrawal times. Keep records for a minimum of two (2) years or longer based on state and local regulations.



Follow label directions:

Follow label instructions and never use antibiotics other than as labeled without a valid veterinary prescription.



Medically important antibiotic use should be limited to the control and treatment of disease:

Medically important antibiotics should not be used if the principal intent is to improve performance. Antibiotics that are medically important to human medicine may not be used for performance. Guidelines developed from AVMA, AABP, and AVC provide guidance on appropriate veterinary antibiotic use.



Extra label antibiotic use must follow FDA regulations:

Prescriptions, including extra label use of medications, must meet the Animal Medicinal Drug Use Clarification Act (AMDUCA) amendments to the Food, Drug, and Cosmetic Act and its regulations. This includes having a valid VCPR.





- The <u>Center for Disease Control (CDC)</u> provides information about antibiotic resistance in humans with their Common Questions and Answers page.
- The American Association of Bovine Practitioners (AABP) <u>Antibiotics Position Statement</u> sets context on proper and judicious antibiotic use in cattle production.
- The AABP also provides <u>Judicious Therapeutic Use guidelines</u> and <u>Key Elements for</u> <u>Implementing Antimicrobial Stewardship guidelines</u>.



SAFE & HUMANE HANDLING: FACILITIES

Low-stress cattle handling is aided by facility design and maintenance and a handler's choice of equipment. Use these resources to evaluate your current facility and learn more about low-stress handling.

- Mississippi State University Extension provides an in-depth look of components of <u>Beef Cattle</u> <u>Handling Facilities</u>, including crowding pens, alleys, slider gates, and loading ramps.
- Drovers Livestock Publication will often provide current information about facility design.
- Dr. Temple Grandin's research and communications often define and describe proper animal handling and facility design. See her <u>Ranch and Property Cattle Corral Designs</u> for diagrams and suggestions or read more about why these systems are recommended in this <u>research</u> <u>publication</u>.
- The National BQA YouTube Channel provides <u>Facility Design videos</u> for large and small operations.

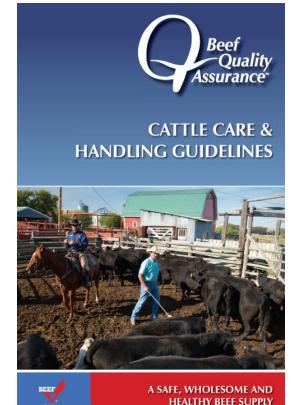


TRAINED PERSONNEL: STOCKMANSHIP

Review the resources below to refresh your knowledge or see what opportunities are available to continue developing your stockmanship skills.

- The <u>BQA Cattle Care and Handling Guidelines</u> provides detailed information about proper cattle care and handling techniques which should be followed by all personnel.
- <u>BQA Self-Assessment Guides</u> can be utilized to gauge effects of current handling and care protocols and identify areas of improvement.
- The Farmers Assuring Responsible Management (FARM) from the National Milk Producers Federation and the BQA program partnered to create this <u>Stockmanship Video</u>.





Consider attending the <u>Stockmanship and Stewardship</u> unique two-day training with hands-on
practice for low-stress cattle handling, or visit the website for instructional cattle handling videos.

STATE LEVEL RESOURCES

State Cattlemen's Associations and **State Extension Service Specialists** can provide resources on a variety of animal care and handling topics.

Do you have a contact at these two state-level associations? List their information here. If not, consider a friend or fellow producer who could connect you with their staff.

State Cattlemen's Association Contact Name:	 lumber:	

Email: _____

State Extension Service Contact Name: ______Number:_____

Email: _____



EMPLOYEE SAFETY & WELL-BEING

SAFETY MATTERS: CREATING A SAFETY PROGRAM

USRSB recommends producers utilize outside expertise and consultants who can develop or aid in the development of an employee safety and well-being training program. Public and private agencies and institutions who can help producers develop or evaluate a safety and health program include:

- <u>Agricultural Safety and Health eXtension</u> find resources, live and online training events, and expert advice.
- <u>American Farm Bureau Safety & Health Network</u> provides leadership and assistance to local and state Farm Bureaus promoting safety and health in agricultural and rural communities.
- <u>University of Minnesota Extension Farm Safety</u> find a collection of resources on risk management and farm safety.
- <u>USDA National Institute of Food and Agriculture Farm</u> <u>Safety</u> – browse resources and external links in partnership with USDA NIFA on farm safety and employee well-being.
- <u>Ohio State University Extension Ag Safety & Health</u> <u>Program</u> – browse Employee Safety Resources, including videos and print materials.
- <u>USDA Preparedness Fact Sheet</u> do you have a plan should disaster strike? Use this guide from the USDA to develop a plan in case of an emergency.
- <u>Department of Homeland Security</u> visit Ready.gov to see what you can do to prepare for disasters if you have livestock or other animals.
- <u>North Carolina State University Agricultural Safety for</u> <u>Farmers and Workers</u> – find a collection of resources from pesticide safety to OSHA trainings.

TRAININGS

- The <u>Animal Care Training (ACT</u>) is an online training for producers, transportation, and livestock marketers to gain information from the American Association of Bovine Practitioners (AABP).
- The <u>Beef Cattle Institute</u> at Kansas State University provides innovative solutions to veterinarian and beef producers for success in the beef industry.
- The <u>Southwest Center for</u> <u>Agricultural Health, Injury</u> <u>Prevention, and Education</u> is a part of the National Institute for Occupational Safety and Health (NIOSH) and conducts programs designed to reduce occupational injuries and diseases among agricultural workers and their families.



SAFETY MATTERS: PERSONAL PROTECTIVE EQUIPMENT

Personal Protective Equipment (PPE) includes a variety of clothing and external wear to keep cattle handlers and operational employees safe. Learn more at the National Ag Safety Database.

- Steel-toed or hard-toed shoes can help prevent injury from being stepped on by cattle.
- Dust masks should be worn in areas with inadequate or improper ventilation when working in • dusty environments such as moving and handling feed.
- **Rubber gloves** and **splash goggles** should be worn when mixing and spraying chemicals such as • pesticides and insecticides.
- **Eve protection** and **gloves** should be worn when working with a sick animal or giving a shot, as • some livestock diseases can be introduced to humans through open wounds.

Note: loose, ripped, or baggy clothing should never be worn around machinery as it can easily be caught in equipment with moving parts.

EYE AND FACE PROTECTION

When is eye and face protection needed? When there is a reasonable probability of injury from hazardous chemicals or flying particles, such as:

• Pipetting

- Titrations
- Opening centrifuge tubes
 Pouring
- Using syringes
- Mixing/vortexing
- Preparing solutions

- Operating a saw
- Grinding/cutting
- Trimming grass or shrubs
- Spraying
- Vehicle/equipment maintenance
- Plowing
- Cutting/mowing brush

NOISE EXPOSURE

Workplace noise can cause hearing loss, create physical and psychological stress and contribute to accidents by making it difficult to communicate. All employees working in high exposure areas or jobs should be trained before initial assignment and at least annually on the following topics:

- Effects of noise on hearing
- **Purpose of hearing protectors**
- Advantage and disadvantages of various types of hearing protectors
- Proper use, selection, fit and care of hearing protectors



SAFETY MATTERS: EMPLOYEE TRAINING

Use the checklist below to help develop your safety and well-being training. As you read through each section, consider if you are currently meeting these in your training, or if you could improve.

Safety Training Components

- □ Identifying hazards and implementing control measures.
- Learning the proper safe work practices.
- Learning when and how to use personal protective equipment.
- Learning to perform basic first aid, CPR and emergency training.

Training Tips

- Be specific
- Give examples
- Provide feedback
- Schedule regular practice, interactive components and hands-on activities
- Provide feedback to participants
- Give positive reinforcement
- Keep it short
- Encourage employee involvement
- Mix it up

Advice for the Trainer

- \checkmark The trainer should know the job well and should be prepared ahead of time for training.
- ✓ Explain the purpose of the training.
- ✓ Treat the worker as an equal or a friend.
- ✓ Demonstrate the process step by step.
- \checkmark Instruct the worker to perform the job one step at a time and repeat the process, as needed.
- ✓ Monitor performance and evaluate the training.

Adapted from Noble Research Institute, LLC special thanks to Megan Kelley and Sharon Bard and the Beef Quality Assurance (BQA) and the Integrity Beef Alliance.





SAFETY MATTERS: EMPLOYEE TRAINING

Use the information below to help develop your safety and well-being training. As you read through each section, consider if you are currently meeting these in your training, or if you could improve.

TAILGATE TRAINING: Tailgate training is an effective, informal way to communicate safety information to workers. It is usually conducted in 15- to 20-minute time periods, covering a specific safety topic to a small group of workers. Given by managers, the tailgate sessions usually happen at the beginning of the week, in the morning before work has begun. They are usually conducted weekly and directly related to the work assigned for that timeframe.

Near misses are a good topic to cover. This is a good, proactive approach to help reduce injuries and incidents. Make sure the training is directed at learning and understanding rather than alienating the people involved in the near miss.

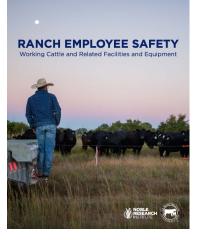
EVALUATION: Evaluation is a key part of training. You can use informal evaluation to find out what the worker learned from the training experience. You can ask questions and have them perform the job while you are observing to make sure the job is done correctly and in the safest manner possible. You can use formal evaluation to get a more thorough, objective understanding of the training process. Training pre-tests and post-tests can be used to measure whether the training was effective. You can also use follow-up assessments to measure whether the information learned was retained. Document all trainings, including attendance.

YOUTH REGULATIONS: The federal child labor provisions were enacted to ensure that young workers are protected from unsafe and hazardous jobs. The federal child labor provisions, authorized by the Fair Labor Standards Act (FLSA) of 1938, were enacted to ensure that when young people work, the work is safe and does not jeopardize their health, well-being or educational opportunities. By knowing minimum wage, overtime, discrimination protections and ages, and conditions guidelines, and complying with these provisions, agricultural employers, parents, and teachers can help working teens enjoy those safe and positive early work experiences that can be so important to their development.

Adapted from Noble Research Institute, LLC. Special thanks to Megan Kelley, Sharon Bard, the Beef Quality Assurance (BQA), and the Integrity Beef Alliance.

RANCH EMPLOYEE SAFETY GUIDE

Noble Research Institute and the U.S. Roundtable for Sustainable Beef created and published a new guide to help improve ranch safety. <u>Ranch Employee Safety: Working Cattle</u> <u>and Related Facilities and Equipment</u> takes ranchers through four stages of improved safety. Additionally, the guide provides 30 pages of resources and tools, ready to use on any operation.





SAFETY MATTERS: SAFETY & HEALTH POLICY

Use the sample Safety & Health Policy below as a starting point for your own policy. Adapt as needed for your operation and remember to include authorizing signatures. Fill in the name of your farm or ranch in the blanks below.

____ Safety and Health Policy

The safety and health of workers and cattle is very important. Our feedyard will comply with all applicable workplace safety and health regulations and support and enforce occupational safety and health regulations. Everyone, including management, will be involved with the safety program.

Based on everyone's involvement, our safety and health goals are:

- 1. Strive to achieve a "zero incidents" goal.
- 2. Train staff to perform all work tasks safely.
- 3. Provide personal protective equipment (PPE) appropriate for all job activities.
- 4. Improve and maintain equipment and environmental conditions on the premises.
- 5. Perform regularly scheduled work inspections, document and remediate all hazards.
- 6. Prepare and train all employees to react appropriately under emergency conditions.
- 7. Establish a continual reporting system for "close call" and "near miss" incidents.
- 8. Reward workers appropriately for their safety and health workplace achievements.

Owners and managers are responsible for training workers in specific safe work practices. Owners and managers must enforce company policies and make sure everyone is following proper safety procedures. Everyone working at ________ is responsible for safety and everyone is required to participate in reporting of accidents, recognizing hazards and unsafe acts and wearing proper personal protective equipment.

The following workplace safety rules apply to everyone employed at this feedyard:

- 1. No employee is required to do a job that they consider to be unsafe.
- 2. No horseplay will be tolerated.
- 3. No illicit drug or alcohol use is permitted.
- 4. Injuries and/or unsafe work practices should be reported to management immediately.
- 5. Employees are not permitted to operate machines for which they have not received training.
- 6. Failure to follow these safety rules can result in verbal or written warnings, job re-assignment or retraining or employment termination.

As a worker of ______, I have read, understand, and will abide by the safety and health policies stated above.

Signature of Employee

Signature of Owner or Manager

Adapted from Noble Research Institute, LLC. Special thanks to Megan Kelley, Sharon Bard, the Beef Quality Assurance (BQA), and the Integrity Beef Alliance.



SAFETY MATTERS: EMERGENCY ACTION INFORMATION

Use the template below to capture information needed in the event of an emergency on the farm. Fill in the name of your farm or operation in the blanks below.

	S	Safety and Health Policy		
Site Name:		Premises ID Number (PIN):		
Owner/Operator Nam	e:			
Phone:	Site Phone:	Cell Phone:		
Other Emergency Con	itact (Name & Phone):			
Site Physical Address:				
Directions to Site:				

Important Telephone Numbers

Write organization/person name, number and any relevant notes. People on this list should include:

Emergency & Medical:

- Rescue/Ambulance
- Fire Department
- Sheriff
- Highway Patrol
- Police
- Hospital/Clinic
- County Emergency
 Management Coordinator
- Local Poison Control Center
- Herd Veterinarian
- State Veterinarian

Agricultural Contacts:

- Center for Agricultural Security
- Extension Personnel
- DNR

Operation Contacts:

- Manure Applicator
- Equipment Dealer
- Agrichemical Dealer

Utilities:

- Electric Company
- Water Company
- Natural Gas/Propane Supplier

Community Contacts:

School(s) County road department Other county/township offices



PEOPLE FIRST: MENTAL HEALTH PROGRAMS

Research shows farmers experience higher levels of psychological distress and depression than the general population. You can feel empowered to use and teach the **BRAIN** method to help manage stress in the moment.

- BREATH: Breathe deeply five times. Release air slowly.
- RELAX: Tell yourself to relax, whether in your head or our loud. Notice areas of tension in your body and try to release that tension.
- ASK: Ask yourself what you need or want to feel. We usually ask why external things are the way they are. Instead, ask yourself what you need to feel: calm, in control, at peace and other comforting feelings.
- IMAGINE: Imagine feeling that way.
- NOW: After doing those four things ask yourself, "How do I feel now?"



You can always reach out for help

MORE **RESOURCES**

This is not an exhaustive list. Continue exploring resources specific to your state or region.

- **Farm Credit**, **American Farm Bureau Federation** and the **National Farmers Union** have partnered to provide a training program for farmers and ranchers to recognize signs of stress and provide help to those in need. Read this <u>press release on the new mental health initiative</u> to learn more.
- The <u>Farm and Ranch Stress Assistance Network (FRSAN)</u> establishes a network to connect farmers, ranchers, and other agriculturalists to stress assistance programs.
- The <u>Upper Midwest Agricultural Safety and Health Center (UMASH)</u> is a collaboration of research and health care institutions which provide resources for emerging occupational health and safety issues in agriculture.
- The <u>Employee and Family Assistance Program (EFAP)</u> provides immediate and confidential support to resolve work, health, and life challenges.
- <u>Make It OK</u> is a campaign to reduce the stigma of mental illnesses and includes resources for rural crisis prevention.
- <u>National Alliance on Mental Illness (NAMI)</u> is the United States' largest grassroots mental health organization providing advocacy, education, support and public awareness to individuals and families affected by mental illness.
- <u>Michigan State University Extension</u> has excellent resources regarding managing farm stress.
- Find health service providers and hotlines from the <u>Minnesota Farm and Rural Helpline</u>.
- The <u>988 Suicide & Crisis Lifeline</u> offers call and text support 24/7 with trained crisis counsellors. Chat support is also available at <u>988lifeline.org/chat</u>.



SUCCESSION & TRANSFER



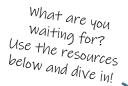
PASSING IT ON: TRUSTS & ESTATE PLANNING

Succession and transfer plans are the roadmap for the next generation to maintain management of an operation. Establishing these plans requires an investment of time but will positively impact your family, future, and your bottom line.

WHAT'S NEXT?

Based on what you learned in the online training, which of the following areas are you most likely to pursue next in your succession planning?

- □ A discussion of values, goals, objectives, roles and responsibilities
- □ Identification of issues and creation of an advisory team
- **D** Evaluation of the most effective business structure for your operation
- A conservation easement
- A trust



MORE RESOURCES

This is not an exhaustive list. Continue exploring resources specific to your state or region.

As you continue developing your transition plans, use these resources for guidance, templates and inspirational stories of success:

- Find a collection of transition topics, worksheets, and service providers at <u>American Farmland</u> <u>Trust</u>.
- Published by the University of Wyoming, the guide <u>"Passing It On: An Estate Planning Resource</u> <u>Guide for Wyoming's Farmers and Ranchers</u>" is an all-encompassing overview of what you need in transition planning. Scroll the webpage to find the "Passing It On" guide.
- Hear from an attorney on the importance of estate planning in this opinion piece in the <u>California</u> <u>Rangeland Trust News</u>.
- The <u>Land Trust Alliance</u> provides an extensive list of resources specific to accredited national land trusts.



PASSING IT ON: WHAT COULD TRANSITION LOOK LIKE?

When you begin discussions on what transition will look like for you and your family, consider answering each of these questions. This can help shape your planning decisions and what the future of your operation will look like.



- ✓ What is the most important non-financial outcome you would like to achieve with an estate plan?
- ✓ How likely would your current lender be to continue to lend money if the current owners pass away?
- ✓ How have you (or will you) pass knowledge on to the next generation?
- ✓ What do you see as your involvement in 5, 10, 20 years?



- ✓ Where do you see yourself in 5, 10, 20 years?
- ✓ Where do you see the farm/ranch in 5, 10, 20 years?
- ✓ How do you want to be involved?
- \checkmark What is your comfort level of having to personally guarantee the debt of the ranch?
- \checkmark If you had to share the ranch with a non-operating sibling, how would you feel?
- ✓ What does it mean to be a member of this family?





BEEF QUALITY ASSURANCE: BQA MANUALS & GUIDES

Beef Quality Assurance (BQA) is a national program funded by the Beef Checkoff that raises consumer confidence by offering proper management techniques and a commitment to quality within every segment of the beef industry. You can find online trainings, manuals, and resources at the National Cattlemen's Beef Association website: <u>BQA.org</u>





MORE **RESOURCES**

This is not an exhaustive list. Continue exploring resources specific to your state or region.

- The <u>National BQA Manual</u> provides an in-depth look into all aspects of proper animal care and handling topics. This link also provides the manuals for *Antibiotic Stewardship* for Beef Producers and the Cattle Industry Guidelines for the Care and Handling of Cattle.
- You can find the <u>BQA Cow-Calf Assessment</u> designed to help all cow-calf producers benchmark their operations in areas, such as animal welfare, cattle handling, recordkeeping, etc.
- For interviews, producer profiles, and demonstrations on BQA practices, visit the <u>BQA YouTube</u> Channel.

BQA EQUIVALENT PROGRAMS

Check out these BQA equivalent programs for various producers and related audiences:



- Transporters: <u>BQA Transportation Quality Assurance Program</u>
- Young Producers: Youth for the Quality Care of Animals (YQCA)
- Dairy Cattle: <u>National Milk Producers Dairy Farmers Assuring Responsible</u> <u>Management (FARM)</u>
- Calf Raisers: Calf Care and Quality Assurance (CCQA)
- Canada Equivalent: Verified Beef Production Plus (VBP+) in Canada