

800-346-9140



BEEF FARM SUSTAINABILITY CHECKSHEET (EZ)

ATTRA is the national sustainable agriculture information center funded by the USDA's Rural Business – Cooperative Service.

This very abbreviated form of the checksheet is designed to stimulate critical thinking in planning a farm on which the primary land use is production of beef cattle. The sustainability of a farm relates to many factors revolving around farm management, use of resources and quality of life. The series of questions is intended to serve as an assessment of awareness rather than rating of management practices. Carefully think about how decisions made in one area impact the results in other areas of your farm or management. After reviewing the preliminary information here, you may want to consider using the longer version of the checksheet for a more complete assessment of your farm.

INVENTORY OF FARM RESOURCES AND MANAGEMENT

Size of farm _____ Number of: Mature cows _____ Replacement heifers _____ Stockers _____

Other types of animal enterprises _____

Breeds of cattle _____

Number of pastures on farm _____ Number of ponds and water sources _____

Livestock market and months you market in _____

Months you calve in _____

How many acres of the following do you have?

_____ predominantly cool season perennial grasses _____

_____ predominantly warm season perennial grasses _____

_____ mixture of warm and cool season grasses _____ pastures with legumes _____

_____ cool season annuals _____ warm season annuals _____

_____ pastures that can be stockpiled for late fall/winter grazing _____

Which practices are part of your grazing system? short duration, slow rotation, continuous

Give major soil types and productivity indexes for the farm _____

When and with what do you fertilize? _____

What are the top five strengths of your operation? _____

What are the top five problems? _____

Do you have written goals for your operation? _____ If yes, briefly give an overview.

✓ This document was developed by Ron Morrow (PhD) and Ann Wells (DVM), technical specialists with NCAT/ATTRA. The project is funded by a Southern SARE-PDP grant. Contributors to the process are ATTRA technical specialists Alice Beetz, Anne Fanatico, Lance Gegner, and Preston Sullivan; cattle producers Lisa Cone Reeves and John Spain; representatives of USDA-NRCS Travis James, Sheri Herron, and Claire Whiteside; University of Arkansas Cooperative Extension agents Merle Gross and Robert Seay; and from the University of Arkansas Experiment Station, Ken Coffey and Chuck West.

INSTRUCTIONS: In the margin for each question on the following pages, place a checkmark if it needs further thought or leave blank if it is not important.

I. CATTLE AND FORAGE PROGRAM

A. Herd health and reproductive management

_____ What is the overall appearance of your whole cattle herd? _____
_____ Do your cattle appear to be thrifty, contented, and performing to your satisfaction? _____

Do you

_____ pregnancy check cows? _____ fertility test bulls? _____
_____ have a defined breeding/calving season? _____
_____ calve the majority of your cows the first 21 days of calving season? _____
_____ routinely condition score cows? _____ before breeding? _____ in fall? _____
_____ have a clean area for calving? _____ move pairs to clean area after calving? _____
_____ feed and water in clean areas? _____
_____ have handling facilities which minimize stress to livestock and handler? _____
_____ use handling techniques that minimize stress? _____
_____ What vaccinations do you give? _____
_____ When, how often and on what basis do you deworm? _____

Do you have problems with

_____ open cows (> 10%) or late calving cows? _____ calving difficulty (pull >10% of the calves)? _____
_____ calf scours and/or pneumonia? _____ internal/external parasites? _____
_____ grass tetany? _____ fescue toxicoses (or heat stress)? _____
_____ other health problems? _____

Are animals stressed

_____ when worked? _____ during weather extremes? _____
_____ at weaning time? _____ do you have wind breaks in winter? _____
_____ do you use low-stress weaning techniques? _____

B. Breeding, genetics and selection program

_____ What are the goals of your breeding program? _____
_____ What traits do you select for or cull against when choosing sires or replacements? _____
_____ On what basis do you sell surplus animals? _____
_____ On what basis do you choose herd sires and where do you purchase sires? _____
_____ Why did you choose the breeds you have? _____
_____ Do you raise or purchase replacement heifers? _____

C. Nutrition management

_____ Does your forage base match your animals' needs--can you meet those needs with pasture? _____
_____ Does your forage management program ensure adequate forage availability? _____
_____ Could changing calving season allow you to more adequately meet nutrition requirements of cows with forages you have rather than changing the forage base? _____
_____ Do you cut hay at the proper time to insure good quality? _____
_____ Do your animals spot graze pastures to the point that some areas are severely overgrazed and some areas undergrazed and then have to be clipped? _____
_____ Do your cattle have access to all your pastures in late winter when cool season forages first start to break dormancy and keeps the forage from growing rapidly? _____
_____ Does your haying program include cutting pastures which are not needed for grazing rather than

- _____ allocating areas of the farm just for hay production? _____
- _____ Do you have enough pastures to set up a rotational grazing program, i.e. move cattle at least once a week? _____ If not, can pastures be divided easily? _____
- _____ Do your sources of water for livestock prevent dividing pastures? _____
- _____ Are special grazing techniques such as forward grazing used to meet the needs of animals with _ higher nutrition requirement than others and also utilize available forage? _____
- _____ Do you prepare your cattle for winter by adding condition in the fall? _____
- _____ Are some of the mature cows too thin? _____
- _____ If spring calving, have calves been weaned to decrease nutrition requirements of cows, and allow cows to regain weight by putting them on good quality pastures? _____
- _____ If fall calving, are cows in condition to rebreed on schedule? _____
- _____ Have pastures been conditioned for putting weight gain on cows by stockpiling high quality forage? (over 2500 lbs of dry matter per acre of vegetative forage)? _____

II. FARM MANAGEMENT

A. Records

- _____ Do you make good use of a record-keeping system? _____
- _____ Do you know your actual cost of production per acre? _____ per animal? _____
- _____ Do you know what it costs to produce, harvest, and feed a bale of hay? _____
- _____ graze an acre of pasture? _____ graze one cow for one day? _____

B. Farm planning

- _____ Would diversification with other animal species add some benefit or add extra income? _____
- _____ Are you testing soils in each pasture or field at least every three years? _____
- _____ Are you making effective use of your fertilizer expenditures? _____
- _____ Could you decrease N fertilizer through more effective use of legumes? _____
- _____ Are you using chicken litter/animal manures/municipal sludge products? _____
- _____ Would using those products be more cost-effective than using commercial fertilizer? _____
- _____ Would using components of fertilizer , i.e. K or N, be more effective? _____
- _____ Would using lime allow a decrease in fertilizer expenditures? _____
- _____ Do you own more equipment than you need? _____
- _____ Could you decrease the equipment you need if you relied more on grazing? _____
- _____ Do you buy equipment for tax reasons, even though you don't need the equipment? _____
- _____ Does that equipment expenditure for tax reasons really increase your net income? _____
- _____ What are your primary purchased feed expenditures? protein, energy, minerals, hay _____
- _____ How do you know which of the purchased feeds you actually need? _____

C. Marketing

- _____ Do you market your animals when the price is best? _____
- _____ Could you change your management (forage, calving season, etc.) to allow you to sell cattle ___ on a more timely basis? _____
- _____ Would it be cost effective to retain ownership of your cattle through another growth phase? _____
- _____ Could you produce a more marketable product with a change in your breeding program? _____
- _____ Are you in an area where niche marketing could be established? _____

III. ASSESSMENT OF PASTURES, SOILS AND WATERSHED

A. Pasture assessment

- _____ What are your pasture management goals? _____
- _____ Do you need better quality forage available? _____

- _____ Do you know how individual pastures rank in productivity? _____
- _____ Are there spots of bare ground within pastures? _____
- _____ Do you have any erosion problems? _____
- _____ Is the pasture grazed fairly uniformly or are there areas of spot grazing? _____
- _____ Is there adequate but not excessive residue in the pasture? _____
- _____ Are the animals doing a good job of controlling the edible weeds? _____
- _____ Could changes in water/mineral location or the pasture shape impact the grazing pattern? _____
- _____ Is water runoff excessive, especially on slopes? _____
- _____ Are pastures resting long enough to allow plant regrowth and maintain root reserves? _____

B. Soil assessment

- _____ Do you have soil maps of your farm and understand the productivity index of each soil type? _____
- _____ Do you have specific problems to address, such as fragipans, poor drainage, compaction? _____
- _____ What is the microbial activity in your soil? _____ What does soil smell like? _____
- _____ When was your last soil test? _____ Do you routinely use lime? _____
- _____ What is the organic matter level in your pastures/fields? _____
- _____ How many days does it take grass or crops to exhibit drought stress? _____
- _____ Do you have any soil nutrient deficiencies or imbalances that impair production? _____
- _____ Are soil fertility levels adequate to meet forage production targets? _____
- _____ Would a change in fencing allow better use of pastures according to productivity of soil? _____

C. Watershed assessment

- _____ What are the water drainage patterns into and from your farm? _____
- _____ Do you have an understanding of the nutrient flow on your farm? _____
- _____ Do you have major riparian areas, with flowing water in them most of the time? _____
- _____ Do you allow livestock frequent limited access to manage the vegetation of riparian areas? _____
- _____ Do you time your fertilizing or spreading of litter/manure to prevent runoff of nutrients? _____
- _____ Are farm ponds full of algae? _____ Does your soil absorb and retain rainfall? _____

IV. FARM GOALS

- _____ As you consider the goals of your farming operation, are you
 examining your livestock production program to become more cost effective? _____
 assessing the soil, plant, and water resources? _____
 analyzing your marketing program and the diversity of products available to market? _____
 evaluating your quality of life from a family and community perspective? _____

V. SUMMARY

Now that you have completed the assessment of your farm, go back through the questions you indicated as high priority items to increase economic or environmental sustainability. Then use the sustainability manual to explore potential changes in your management program or planning. Spend time reviewing the areas which could be emphasized to allow you to meet your goals.

- _____ Have your perceptions of your weaknesses and strengths changed? _____
- _____ What are the highest priority areas for you to emphasize? _____
- _____ Have you put on paper your goals for your family and your operation? _____

