Range and Ranch Planning—Importance and Use

Building a successful range beef business can be compared to building a bridge or a large building—a design or blueprint is developed and the structure takes the form the blueprint calls for. The same occurs with the beef cattle enterprise. In this discussion, the emphasis is on range management and its relation to the total beef operation.

Range Management planning can be just for the range (and perhaps specifically the range-livestock resource) or it can be for all of the uses for the resource. The latter is called coordinated resource management planning. It refers to planning for all uses by various resource disciplines on lands that often are in both private and public ownership, although they do not necessarily have to be. Technical assistance from the Soil Conservation Service may be desirable or even necessary but you may want to tackle the problems and master the planning process yourself.

Five parts to the process exist. These are:

1. Detailed inventory of all physical facilities. Include economic value.
2. Detailed inventory of the resource base—range-land, cropland, livestock.
3. Problem analysis for the entire operation.
4. Activity plans for necessary changes.
5. Timetable for activities.

Inventory of physical facilities
- Both a listing and description of all improvements—buildings, sheds, fences, corrals, scales and working chutes, watering facilities in conjunction with improvements, all general equipment used in the ranch operation.
- Locate on an up-to-date aerial photograph.
- Value of facilities including depreciation schedules of capital equipment.

Inventory of the resource base
- Land resource. Acres of rangeland, cultivated land (leased or rented), including general information such as geographical location, boundaries, elevations, topography, soils, general erosion conditions, current production of both range and cultivated land. Locate all range sites with associated soils on aerial photographs.
- Forage resource. Inventory range condition for each range site. Attempt to determine range trend. Estimate or measure herbage production by range site. Estimate grazing capacity in AUM's, appropriate season of use, etc.
- Animal resource. Inventory numbers and kinds of livestock. Include production records when possible. Also include estimates of numbers and kinds of wildlife.
- Water resources. Identify and characterize all permanent and temporary watering facilities as well as potential sources of water. Locate on aerial photo.

Problem analysis
- Problems are isolated and identified on a unit-by-unit basis. Analysis will help answer the following questions:
  - What is the condition of the important range sites? Are they near potential or will they have to be managed for improved range condition?
  - Are facilities adequate throughout the ranch and range operation to adequately manage livestock? If not, where are the weak points?
  - What are forage utilization patterns? Are pastures too large to obtain good forage use? Does additional fencing become necessary?
  - What range improvement opportunities are there on a unit-by-unit basis? What is the relative cost for each and the relative expected return?

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• Existence of poisonous plant problems, location and season of use.
• Predator, rodent, or insect problems.
• What are interrelated demands on the land such as hunting, recreation, logging, and farming?
• What is the forage balance on the ranch both currently and with expected improvements?
• Keep complete analysis of current livestock management operations and make comparisons with several alternatives, such as spring calving versus fall calving versus grazing yearlings, etc.

Implementing changes and improvement
• After improvement opportunities have been identified on a unit-by-unit basis and the problem analysis made for each unit, set up time table to determine when improvements will be made.
• In general, make those improvements on the better condition, high potential sites first, since these will respond the quickest. Save lower potential, very brushy and/or less desirable sites for later in the program.

• Consider all opportunities (brush control, range seeding, modern grazing management plans, etc.) before decisions are made.
• Consider what adjustments in livestock numbers, classes, and seasons of use may need to be made in relation to the kinds of improvements and the expected returns in forage. Consider low enough stocking rates so that each individual animal will produce near its genetic potential.
• Consider all of the related management practices which will optimize income from the ranch including the supplemental feeding, animal health practices, etc.

Realization of management goals
• Make complete economic analysis of each range and ranch improvement.
• Keep production records for the ranch output and equate as closely as possible to real economics.
• Identify relative returns for improvement in relation to costs.
• Do not become too impatient with regard to payoff. These things take time.