Melding your

Successful managers study nature and interaction of resources.

anaging agricultural operations is a complex and demanding task. Today's managers are challenged by changing weather, fluctuating markets and varying political conditions.

Understanding the nature and interaction of farm and ranch resources can

help make management more productive. Three categories of agricultural resources — land, labor and capital — generally cover all resources, whether owned or leased, shared or borrowed.

RESOURCES DEFINED

The land resource means the geographical location of the operation. The term implies certain soil types and fertility and includes characteristics like rainfall, solar radiation, wind, native vegetation, slope and general topography. Managers should ponder the type of control they

have over land use: Is it zoned, is it owned or is it leased?

The labor resource refers to both full- and part-time employees. Management and managerial skills may be partially provided by outside professionals to supplement those of the operator. In family operations, the labor resource often includes family members who contribute to the operation.

Capital includes everything in the business other than land and labor. It includes livestock, wildlife, buildings, improvements, water developments, housing and financial resources.

Managing resources requires that a manager understand what is available to work with and how to make those resources available when needed. A manager is responsible for making sure the correct quantities and qualities of the way resources perform in the future.

The financial resource in a ranch or farm is always dynamic, with future profitability affected by current risk-management decisions, markets and unpredictable external events. These factors, in turn, may influence the efficiency or level of production.

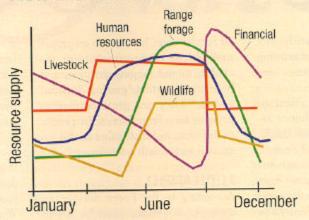
> For example, the current capital investment in crops and buildings will influence both the availability of credit and the choices of alternative enterprises in the future. In addition, the purchase of equipment today will tend to favor cropping enterprises that use the equipment now and in future years.

> Production is dynamic and depends on weather and the interaction of various enterprises and resources.

Because each operation is distinctive, there may be wide variation in how the operator manages production. For example, in an intensive confined animal operation, many production aspects can be controlled and manipulated — environment, nutrition, reproduction.

At the other end of the scale are the extensive Western rangelands. Often, the only controls that can be imposed are in stock type and numbers,

Flow and interaction of resources



resources are available when and where they are needed. Resources cannot be managed in isolation; managing the operation requires using many different resources simultaneously.

RESOURCE INTERACTION

A successful manager studies the nature and interaction of the resources available. All resources are dynamic and in a constant state of change and evolution. Events that occur today affect

resources

By Randy Weigel and John Hewlett

reproduction timing and, possibly, position of water supplies. In these operations, numerous interactions unfold among climate, range health, nutrient cycling and livestock.

A rancher or farmer's personal skills influence all resources in the operation and should be taken into account when plotting strategy. If a producer dislikes livestock or lacks handling skills, he or she is unlikely to be successful with livestock as a major enterprise, even if it was clearly the most profitable.

RESOURCE FLOW

Resource flows help to manage the interaction of operational resources. Using this concept, a manager maps the resource supply and demand for each month of the operating year (see chart). When overlaid, such resource-flow information can point out excess supplies or demands as well as times during the year when there may be conflicting needs.

While the analysis of resource flows will not guarantee success in the field, it will give the manager a clearer picture of resource flow for the operation. This technique can make successful resource management more likely.

RESOURCE CONTROL

Using resource flows successfully requires control over resource supply and demand. Social constraints, along with the financial, production and biological nature of the operation, must be taken into account

when deciding the best strategy for operational management.

A producer with many production controls, such as a poultry operator, is more likely to be satisfied with a single strategy, and, to this individual, market situations will be of major significance. Where there are complex natural and biological systems, like those found on rangelands, the producer would more likely seek a range of options. In rangeland agriculture, biological constraints, not market conditions, are the dominant factor.

In general, operational constraints are greater when the characteristics of the resources are more restrictive. When the number of external forces is greater and opportunities for intervention are fewer (such as fencing, crop variety, fertilizer), the operator has fewer management options. That's why resource managers should consider the interaction as well as the risks and returns of various resources.

For more information on integrated agricultural resources, visit the Web site: agecon.uwyo.edu/wire/.

—Weigel is human resources specialist and Hewlett is farm and ranch management specialist, University of Wyoming Cooperative Extension Service.

