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## HOW DOES A RANCHER UTILIZE IRM AND FIRM A Producer Viewpoint

Rob Ravenscroft  
Nebraska

### INTRODUCTION

Holistic Resource Management (FIRM) and Integrated Resource Management (IRM) have' become "buzzwords" in the range management community and the cattle industry. A certain amount of confusion exists as to what they are and what the similarities and differences are. Does one replace the other? Do they conflict or can both be used beneficially?

As a member of a family working to operate our ranch holistically, and as a member of Nebraska's IRM Coordinating Committee, it's my opinion that there are differences, each has strengths, and the use of both, concurrently, can be highly beneficial. To explain these opinions, an understanding of both is helpful.

### HOLISTIC RESOURCE MANAGEMENT

Holistic Management is a "process". I like to visualize it as a spiral; a series of "cycles" leading upward toward a definite end, or goal. The cycles making up the coils of the spiral are the Holistic Management thought process. Allan Savory and others at the Center for Holistic Resource Management in Albuquerque, have developed a model that outlines this decision making process. Figure 1 is an abbreviated form of the Model that shows the process.

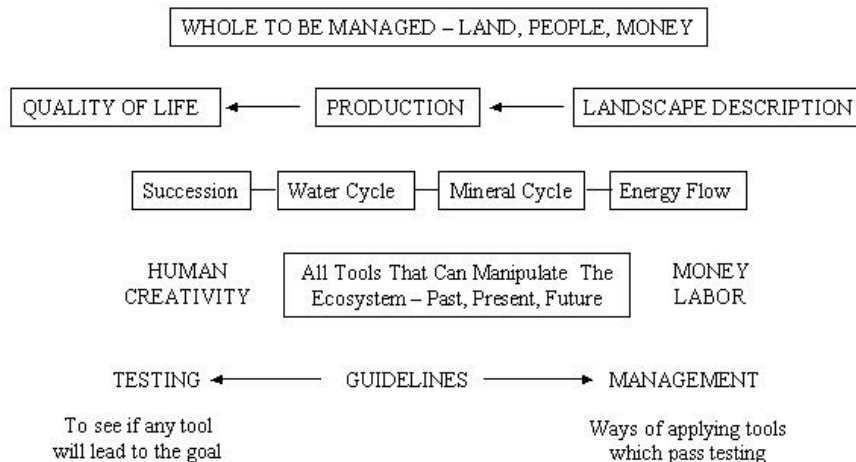


Figure 1. Abbreviated HRM Thought Model.

One of the basic tenets of Holistic Management is that Nature exists in "wholes", and only "wholes" can be successfully managed for the long term. Therefore, the process begins with identification or description of the Whole to be managed. This Whole includes all the people, land, animals, money and other resources which will be affected by the decisions made by management.

The fact that land is a part of this Whole, contributes to the mistaken belief that FIRM is a "grazing system". This is understandable, since most of the experience with Holistic Management in the world so far, has involved grazing lands. But the decision making process is beginning to be used in managing croplands, forests and wetlands, as well. The basic ecological, economic and social principles are the same, even though the resources are different.

When we're managing grazing land, grazing and animal impact are tools we can use. Consequently, there has been significant learning about these tools. We'll learn more about the effects of other tools in other land management situations as people evaluate and apply them using the Holistic Management thought process.

As I've said, this process begins with a definition of the Whole being managed. The people within that Whole then develop a goal describing 3 components. First, a Quality of Life statement (based on their values) outlining the conditions which are necessary for them to lead full and satisfying lives, and which will allow them to achieve their personal goals.

The Quality of Life statement deals with very basic human needs, like time for family and opportunities for growth and learning. It doesn't deal with specific tools, like grazing, fire or any of the many technologies available to managers. This statement is simply people agreeing that there are some things the Whole can and should provide that will make their lives fuller and richer, in addition to basic survival needs.

The second part of the 3-Part Goal describes the Production from the land that will support or provide the Quality of Life desired. Again, no tools are mentioned. Things that are mentioned are profit, aesthetics, recreation, etc.

Finally, the third part of the Goal is a Description of the land that can produce the Product needed to sustain the Quality of Life. Whether it's grasslands, badlands, forest or croplands, the things that support the needs of the people, now and for future generations, are described.

This 3-Part Goal is essential to managing holistically. People who live, work or otherwise depend on or use land and the Whole it's a part of, are an integral part of that Whole. They are the ones most interested in its long term sustainability. The 3-Part goal, if agreed upon and "owned" by the people, is what allows them to discover, agree on and "own" the practices and tools that lead to their goals.

The next step of the holistic process, in my opinion, is what sets it apart from other management schemes. It stems from the belief that all real wealth originates from sunlight and

its interaction with green, growing plants on the earth's surface. Banks and corporations may fail and mineral supplies eventually run out. But sunlight is always there.

The wealth derived from sunlight depends, ultimately, on the condition of four ecological processes, which could be called the foundation or "building blocks" of any ecosystem. These four ecological processes are so inter-related that a change in one will change the other three. These processes, namely, Energy Flow, Water Cycle, Mineral Cycle and Succession, function in all situations. They're at work on grasslands, forests, deserts and cropland. The effectiveness of these four ecological processes determines whether the 3-Part goal can be accomplished.

The next step in the Holistic Management process is to evaluate the effectiveness of each against the land Description in the 3-Part Goal. The question becomes, "Is the Water Cycle (and each of the other processes) functioning the way it must to provide the kind of landscape we believe will sustain the Production we need to provide our desired Quality of Life?". Every situation is unique, but following are some basic measures of "effectiveness" of the processes.

An effective Energy Flow "captures" the maximum amount of sunlight through green plants. The "flow" is completed when the plants are converted to a product, whether directly, or through other steps in the "food chain".

A common measure of Water Cycle effectiveness is soil erosion. However, getting the precipitation into the ground is only the first step. Growing plants, with roots of varying depths, "cycle" the water, through transpiration. Plant cover also prevents evaporation from the soil surface.

Mineral cycling begins with plants pulling minerals from the soil. The cycle continues when those plants are consumed by animals or by decay organisms, which in turn are consumed or decayed.

Common to the three "processes" discussed so far is the need for green, growing plants, covering the soil surface and having strong, vigorous root systems. Perhaps not so obvious is the need for complementary animal communities, supporting and supported by the plant communities. The ever-changing relationships between plant and animal communities is the fourth process, Succession.

Succession is basically the process of changes in total communities. These communities can range from very simple monocultures, to highly complex combinations of countless populations. Unless "helped" one way or the other, Succession naturally tends to move from simplicity toward complexity. Changes in the other three ecological processes cause populations to increase or decrease, resulting in a change in complexity, and thus a change in the level of Succession.

Human activities can directly affect populations. This may cause a change in the level of succession, which will affect the other three processes. For example, any activity which causes bare ground will reduce the effectiveness of the water cycle. Poor water cycle means poorer

growing conditions, less vigorous root Systems and less effective use of sunlight. That means less effective mineral cycle and energy flow, too.

Whether this is "bad" or not depends on the 3-Part Goal for the particular Whole. Generally, if the goal calls for profit from Agriculture, we'll have to be managing resources so that profit is sustainable over the long-term. Sustainability requires stability. In Nature, stability comes with complexity (higher levels of Succession).

The rest of the Holistic Management thought process deals with tools that cause change in these four ecological processes, and guidelines for choosing and using these tools in ways that lead to the level of succession that supports the 3-Part Goal. The tools or practices which may be applied to land will all fall under the headings of Technology, Grazing, Rest from Grazing, Fire, Living Organisms and Animal Impact. If selected and used, these tools are applied using the maximum amount of Human Creativity possible. It also takes Capital and Labor to apply or use tools.

The Guidelines help us select the right tools to achieve our 3-Part Goal, and apply those tools in ways that are economically, ecologically and socially sound.

Figure 2 illustrates the Holistic Management process as a cycle or loop. Use of this cycle causes a spiral toward the 3-Part Goal, which begins each loop in the spiral. The loop never really "closes", because changes occur, and the Whole (ecosystem) that's analyzed each time is never quite the same. Hopefully, the tools used and the planning will have moved the ecosystem (Whole) closer to the goal.

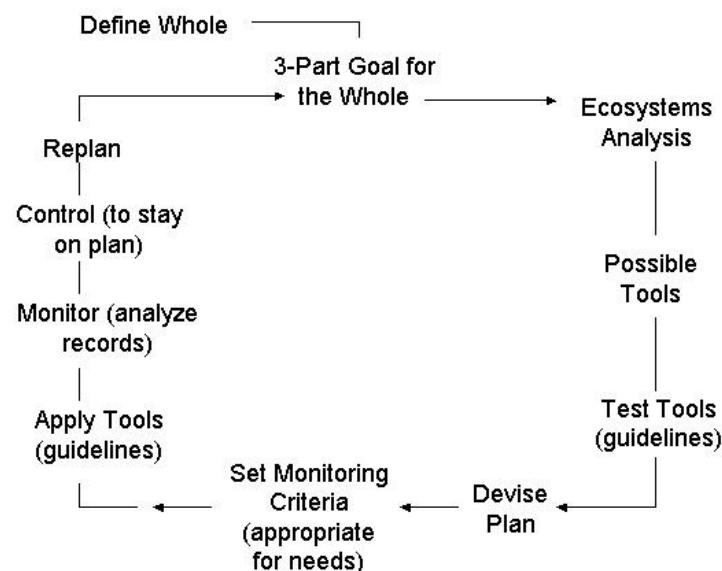


Figure 2. Holistic Management Decision-making Process.

When a plan is devised, it not only includes which practices (tools) will be used and how,

but what will be monitored and how aggressively. Mistakes are likely, so the things that will show the first signs of a mistake are monitored. Quick action can then be taken to correct any mistakes by replanning.

## INTEGRATED RESOURCE MANAGEMENT

It's difficult to discuss IRM except from my own perspective as an individual producer and member of Nebraska's IRM Coordinating Committee. There is no definitive authority on IRM, because each state and each IRM group is unique in its make-up and purpose.

It seems that there are at least three things common to IRM programs, no matter where they are. (1) IRM helps gather and process information, getting appropriate information to those who need it and want it. (2) IRM provides participants with analysis of the present situation and ideas for the future. (3) The IRM team can provide support and encouragement for individual members.

Our Nebraska IRM Coordinating Committee, made up of Extension people and Nebraska Cattlemen members, is encouraging producers to form IRM teams which will look to all sources for information of interest to team members.

Team members identify things they want to learn more about, then take steps to obtain information. The group may take field trips, meet at different members' ranches or have speakers. Whatever the source of information, the discussion that follows is probably as beneficial as the initial exposure. Just as a group of people brainstorming generates more ideas than one person pondering a problem, several discussing and questioning will reveal a subject more completely. All will benefit.

Another kind of information IRM can process is information generated by individual operations. In other words, records. A major effort by the National IRM Committee is aimed at identifying and promoting the use of basic financial and production measurements that will be standard throughout the industry.

Members of IRM groups can get help in developing their record-keeping systems. Just as for any activity or practice, the challenge for IRM team members is to help each other determine what's appropriate and necessary for each operation and family.

Records are required for legal, income tax' borrowing, and monitoring purposes. Record-keeping systems should be as simple and flexible as possible, and meet the needs of the individual operation.

Appropriate records are an excellent tool for making better decisions about the future, but they're not a road map. They're more comparable to a rear view mirror in an automobile. A driver is much more effective if he keeps his eyes on the road ahead, with occasional glances in the rear view mirror. The frequency of those glances (as with the detail and review of records) depends on the risk or chance of danger from that direction.

The second and third benefits of IRM teams (analysis and support), come from team members understanding and trusting each other enough to share and honestly try to help each other. When people understand each other's personal and family values, they're better able to analyze operations in light of those values, be creative in ideas for improvement and be supportive of efforts to reach goals.

These benefits don't come overnight. They result from a group of people working for their mutual benefit, overtime. It will happen in varying degrees in different groups, but the potential for that benefit makes it worth working for. Extension Specialists and Agents are very helpful in getting groups started and, of course, are excellent sources of information and knowledge. We're grateful they're willing to fit IRM into their already heavy work load.

Figure 3 illustrates a loop or cycle for the IRM process. Members identify areas they want to learn more about, then utilize as many sources of information as they want. As they "process" the new knowledge, they add to it and individuals get new ideas and support of their efforts as well as the information they wanted. As the team observes and analyzes individual operations, needs can be identified for continued learning opportunities.

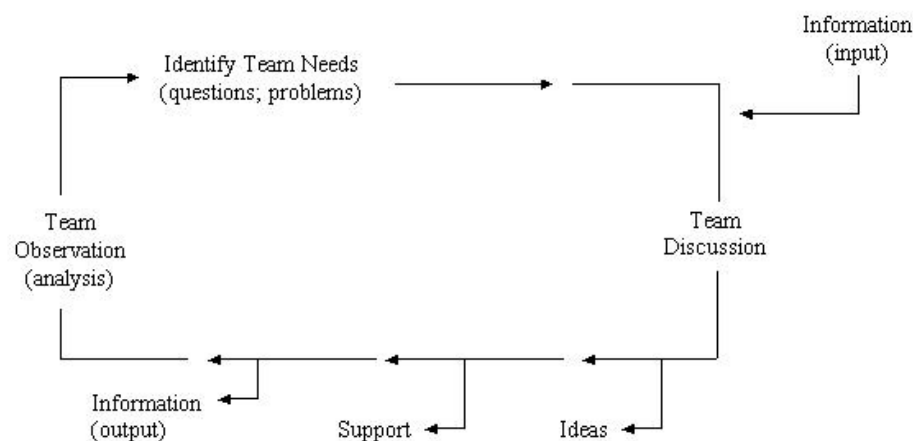


Figure 3. Integrated Resource Management process.

## HOW DO HRM AND IRM COMPLEMENT EACH OTHER?

IRM could be helpful to anyone practicing Holistic Management at nearly every step in the HRM loop (Figure 2). An IRM team can't replace a management team made up of all people included in the specific Whole being managed Holistically. But all managers need the three products of an IRM team (Support, Ideas, and Information).

When managing Holistically, Human Creativity is possibly the greatest resource available. IRM teams can be a way to tap into the pool of creativity in the larger Whole. Often, the best ideas come from someone who isn't familiar enough with an operation to know what "can't be done."

New ideas and information aren't worth much if they're not put to use. Many times good ideas are started, then die. Managers begin to doubt themselves and the idea, often because it's different than what's considered "normal". An idea that appears to lead to the 3-Part Goal, and is applied with a good plan, including monitoring criteria to show the first signs of faults and mistakes, deserves a chance. An IRM team can provide the support needed by the people trying to apply a new idea or practice.

Holistic Managers may be able to get more out of their involvement in IRM than others. Holistic Management goals culminate in the results of profit (Quality of Life), not in profit itself. All the information and ideas resulting from IRM are evaluated according to their effect (both short and long-term) on the unique People, Land and Capital resources making up the Whole they manage. They're able to select those ideas and practices that will lead them to their 3-Part Goal.

People can benefit from IRM without being "Holistic". The information is there for all. The support and creativity is there. Tremendous potential for improvement in production exists. However, Holistic Management provides the best means for making "appropriate" decisions. Everybody knows that every situation and operation is unique. The same practices don't work for everyone. But even if a practice "works" (increases production; better profit) it could be wrong for a particular Whole. It may conflict with the values of the people involved or it may be damaging to the ecosystem. Both could destroy the long-term sustainability of the Whole. This ability to focus on the future (as well as the present), and make the "right" decisions for both, is what Holistic Management brings to anyone, whether involved in IRM or not.

In summary, both HRM and IRM are processes. Holistic Managers manage a specific whole toward a definite goal. IRM gathers and enhances information and knowledge through the efforts and creativity of team members.

Both can be utilized separately, but each provides something of value to the other. The Holistic Manager needs information and all the Human Creativity he can get. The IRM team member needs a way to make good decisions about all the information available to him through IRM. HRM and IRM. Two "buzzwords" whose time has come!