Holistic Management Gets Results in the Northern Rockies

Between 1991 and 1993 Charley Orchard surveyed a large group of ranchers in an attempt to document the changes they had experienced as a result of Holistic Management. What he learned served as the basis of his Master's thesis, completed under the direction of Cliff Montagne, a soil science professor at Montana State University (and Holistic ManagementTM Certified Educator). Cliff wanted to make the information in Charley's thesis more widely available and offered to help organize the material into more accessible form. This article is a result of that effort. –Editor

Forty-three ranch managers in the Northern Rockies (Montana, Wyoming, Idaho) who had received training and had been practicing Holistic Management for two or more years, agreed to participate in our study through telephone interviews and written surveys.

They were all male, aged 17 to 56 years, and had been managing their ranch from 1 to 44 years. Sixty percent said their ranches had been managed by a prior generation of their family. The size of the properties ranged from 400 to over 50,000 acres (160 to 20,000 hectares), and cattle was the principal enterprise on all of them. Annual gross income ranged from less than \$25,000 to more than \$500,000. Expenses varied across a wide range from less than \$25,000 to over \$1 million.

The reasons for adopting Holistic Management varied among the respondents, but were primarily:

1. *They had few other options.* Some were in such a financial bind that they were "willing to try anything." Holistic Management was a "what could they lose" alternative to giving up and losing the ranch.

2. *They were interested in a new grazing method.* Curiosity about application of holistic principles to grazing led to some ranchers taking a class in Holistic Management.

3. Holistic Management offered an alternative approach to conventional resource management. Some managers wanted an alternative option to try in place of conventional management practices.

What We Discovered

In essence, the majority of these ranchers feel they are attaining the quality of life described in their holistic goals. There has been a positive change in satisfaction levels for family and personal happiness, vacation time, job pleasure, and community involvement.

Almost all of the survey respondents report they are achieving the production goals they have set, are making more profit, and have increased economic satisfaction. Positive ecological changes are occurring with increases in seedling success, plant diversity, litter cover and water infiltration into the soil. There are decreases in soil erosion and soil surface crusting [capping]. Diversity and number of wildlife are increasing. Sixty percent of the respondents say they are spending less time, labor, and money on problem species, as a result of using the Holistic Management[™] testing guidelines; or as one respondent said:

It finally dawned on me that I've been spending money trying to fix the symptoms of "problems" instead of what was causing them.

Without exception, these managers all believe the land is evolving toward the holistic goal established for the ranch. Over half (56%) of them indicate they annually meet with team members and review their

by Cliff Montagne and Charley Orchard

holistic goals. Sixty percent of the managers indicate they are aware of their employees' own personal goals and the areas they are seeking to improve. Ninety-eight percent have encouraged and paid for employees to attend special training.

The survey indicates that *all* of these ranchers are motivated, and most of them are *highly* motivated to continue Holistic Management because the goals they have set are becoming reality.

In addition, we also learned that:

□ *Holistic managers bold planning meetings:* Eighty-five percent hold regular team meetings for planning that deals with grazing, wildlife, riparian areas, land monitoring, and financial planning *(see Table 1).* However, planning can be perceived as drudgery as evidenced by this respondent:

There is greater opportunity to make mistakes and much more time needed for planning and management.

But this rancher also saw the balance:

The disadvantage of Holistic Management is that it forces you to sit down, think, and plan things out. The advantage of Holistic Management is that it forces you to sit down, think, and plan things out.

Type of planning	Frequency of Occurrence
Annual Grazing Strategy	85%
Implemented wildlife management practices	65%
Increased care for riparian areas	83%
Implemented formal documented	
land monitoring	60%
Annual documented financial plan and budget	78%

Table 1. Most frequent types of planning occurring

Most survey ranchers use grazing as a tool, as they see *planned grazing maintaining bealth and vigor of land*. Eighty-five percent of the managers create and document a yearly grazing plan, and 87% have changed their grazing management strategy. The majority (86%) has increased stocking rate, 97% have increased stock density, 77% have grouped livestock together, and 95% have obtained positive results from trampling. These ranchers are increasing stock density and stocking rate by adding cross fencing and/or increasing herd size. Some have upped stocking rates 30% to 50%. Changes include:

We used to run calves, yearlings, 2's [two-year olds], and the brood herd separate, giving us four herds. They all run together now except calves for 6 months after weaning

□ *Livestock performance improves:* As a result of the grazing planning, better time control, and quicker moves, combined herds, smaller paddocks, and other factors, livestock management and performance improves, as shown in Table 2.

These changes are leading to lower sire : dam ratios and fewer insect problems for the cattle. There is increased production per acre and per animal.

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Results in the Northern Rockies

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	Frequency of Response			
Observation	Increased	No Change	Decreased	
Conception rates	41%	49%	10%	
Sire: Dam ratio	2%	36%	44%	
Use of insecticides	3%	42%	55%	
Fly problems	10%	9%	51%	
Medication use	3%	46%	51%	
Use of hormones	3%	58%	39%	
Production per animal	69%	24%	7%	
Production per acre	93%	7%	0%	
Time spent with animals	90%	10%	0%	

Table 2. Livestock Performance

The majority sees wildlife as an asset. Sixty percent of the respondents considered wildlife an asset. Nearly three-quarters (72%) have experienced an increase in numbers of wildlife, including predators (see Table 3).

I am now timing our grazing around nesting fawning, and calving Predators are a concern, but all predators are not automatically bad. We do need coyote control . . .but not elimination.

	Frequency of Response		
Indicator	Decreased	No Change	Increased
Number of wildlife		28%	72%
Diversity of wildlife		58%	42%
Diversity of birds		43%	57%
Breeding sites		68%	32%
Nesting sites	5%	32%	63%
Number of predators		25%	75%
Table 3 Wildlife changes			

Table 3. Wildlife changes

□ Most engage in Holistic Management[™] Financial Planning.

Although 77% of the respondents use the financial planning process, only half (51%) have completed estate planning for passing resources on to younger generations. Both these planning processes are resulting in new enterprises being added, including wildlife enterprises, guest businesses, organic production, and others.

On the other hand, 23% have eliminated enterprises, such as hay and grain production and registered cattle. Nearly two-thirds (62%) have decreased expenses such as labor, feed, chemicals and fertilizer. About the same number of ranchers spend increased amounts for items such as cross fencing, water developments, wages, education and consulting. Table 4 documents the percent of ranchers experiencing these changes.

□ *More profit is possible*. Eighty-two percent of the 25 managers who supplied financial information were making more profit using Holistic Management[™] Financial Planning. Most noteworthy is the 40% of this group with profit increases of 15% to 35%. These are increases one might expect when providing a value-added product. It appears there can be benefits from the hard work involved with financial planning. Five

	Expense	% Reporting Increase	% Reporting Decrease
	Labor		40%
ranchers (24%)	Fertilizers & Chemicals		29%
reported profit	Fuel		29%
increases ranging	Maintenance		15%
from 100% to	Trucking		7%
500%. Such	Custom work		3%
increases can be	Seed		3%
attributed to	Equipment purchase		3%
initiating and	Bulls		3%
following through with financial	Feed	10%	44%
planning.	Repairs	3%	26%
D Most are	Veterinary	6%	26%
monitoring the	Interest	3%	18%
land. Sixty percent	Pasture lease	6%	15%
of the respondents	Insurance	10%	7%
formally monitor	Fencing	50%	,,,,
and document the	Water Development	36%	
condition of their land. This is a	Wages	23%	
rather high rate.	Education & Consulting	20%	
Only one percent	Taxes	10%	
of the ranchers in	Business Travel	3%	
the whole state of	Phone	3%	
Montana routinely monitor and	Fuel	3%	
document what's	Table 4. Changes in exp	enses for 2	5 managers

Table 4. Changes in expenses for 25 managers

happening on their land. Table 5

shows increases in seedling success, plant diversity, litter, and water infiltration along with decreases in erosion and soil crusting. Spacing between plants both increased and decreased, depending on the respondent.

Quality of life is enhanced. Table 6 shows that most practitioners have increased economic satisfaction, greater personal and family happiness and job pleasure, more vacation time and community involvement. These numbers suggest a trend toward satisfaction and happiness in all aspects of the lives of these practitioners. These changes would be expected if they are truly making holistic changes in their lives. Holistic managers cannot leave their practice at the job site; they become practitioners in all aspects of their lives. Comments include:

Lower costs, clearer vision, better defined purpose and goals, and a real sense of satisfaction!

In this regard, there is increased time off for respondents and their employees along with increased production incentives such as:

Employees, through estate planning, are going to inherit the ranch. □ Holistic managers face a number of challenges. The four most commonly cited challenges are the biological monitoring (interpreting the results); the time requirement (much more time needs to be invested in management than before); watering facilities (getting adequate delivery for larger herds); and communication (especially with government agency officials who do not understand the process).

The method we use to monitor range is tedious, time-consuming, and really doesn't tell us a hell of a lot. But we have yet to see a method that is any better.

The Holistic Management process can be hard to understand and

	Frequency Of Response			
Indicator	Process	Decreased	No Change	Increased
New seedling success	succession	3%	12%	85%
Plant diversity	succession		15%	85%
Litter cover on the soil	mineral cycle		13%	87%
Water infiltration				
into soil	water cycle		18%	82%
Soil erosion	water cycle	68%	15%	17%
Amount of soil crusting	water cycle	69%	21%	10%
Spacing between plants	energy flow	37%	23%	40%
Table 5 Land monitoring results				

Table 5. Land monitoring results

implement. Eighty-five percent of the respondents indicated their support from neighbors remained the same or improved since changing to Holistic Management. But some still struggle to gain support from their neighbors and community:

Sharing the information can be tough. We are forging a new path without a whole lot of leaders out there.

□ *Motivation to continue Holistic Management is very high:* Ninety-five percent indicated that they are very motivated to continue managing holistically. Sixteen of 42 respondents have the "highest possible motivation" to continue. One manager wrote:

I have learned more in the last 3 years than in the past 31. Holistic Management should be taught to everyone at an early age. I now see only two management strategies: bolistic and crisis.

The question then becomes, why was the respondents' motivation level so high? Their response became clear when they answered questions concerning goals. Each respondent was asked:

1) Are you achieving your quality of life goals? Eighty-five percent said yes.

 Are you achieving your production goals? Eighty percent said yes.
 Is your land evolving toward your goals? One hundred percent answered yes.

Results from the survey group indicate they not only know where they want to go, they are heading in the right direction, as indicated by the following comments:

Holistic Management is not a system or method, but is an attitude and planning procedure. We have greatly changed the way we approach the management of this ranch. This has created a much more proactive approach to our planning and working toward long-range goals.

□ A number of paradigm shifts are required. This is one of the biggest obstacles for farmers/ranchers who want to manage holistically. Much of their past management philosophy may be challenged or reversed. Some of the ranchers in this group, for instance, are championing Allan Savory's concept of solar dollars: production on their ranch is based on solar energy, which is converted to product and money. One Wyoming ranch owner summed up this new paradigm as follows:

Sunlight is captured by plants and converted into additional plant matter; our livestock in turn graze that plant matter and convert it into additional meat. We convert the additional meat into dollars at the sales ring...All I really am is a used sunlight salesman.

Traditional ranchers are now being asked to manage for the long term, to plan their grazing, to look at cause and effect, to question why they calve in January and February, to think about ecosystem processes, and to plan finances rigorously. Because of the great deal of education required to understand and actually practice Holistic Management, it is an incredible shift to move from the traditional to the holistic paradigm.

Our Conclusions

Holistic Management has experienced a seemingly slow rate of adoption. In *The Diffusion of Innovations* Everett Rogers says that the adoption rate of an innovation such as Holistic Management depends on the perceived degree of relative advantage, compatibility with existing values and needs, observability of results, and simplicity and ease of use. The innovation, he says, must also be able to be verified through trials that produce credible results.

This survey shows that the innovation of Holistic Management exhibits a high degree of relative advantage and observable change. It further demonstrates a high degree of compatibility with the existing values and needs of the rancher survey population. However, the complex nature of the Holistic Management concepts, coupled with the required management intensity, make the adoption process more difficult.

Because of its holistic nature, Holistic Management requires an "all or nothing" paradigm shift commitment. For those considering Holistic Management, there is a paucity of "hard evidence" substantiating its claims of success. This necessitates a great deal of trust in the paradigm itself, which may increase the amount of risk perceived by a new practitioner. Our hope is that this survey will provide evidence that Holistic Management is, indeed, successful in actual use by ranchers.

It appears that Holistic Management is strongest in the areas of relative advantage, compatibility, and observability, while it is weaker in simplicity and ease of use, and trialability. The marginal reaction test suggests that greatest progress can be made in adoption of Holistic Management by developing methods to make it more easily understood and easier to use.

Holistic Management requires a high level of commitment. Practitioners of Holistic Management make a commitment to establish goals for themselves and the land. Holistic managers must be committed to achieving these goals, and, based on this study's results, they are.

For these respondents, ranching is no longer viewed as simply "a way of life," it has become a *business*, centered on "a way of life." The Holistic Management process has helped them plan to achieve future desires; it has improved their happiness, finances and land. Many of these ranchers appear to have the attitude that their business cannot fail—one way or another, it will work. This commitment, probably more than anything, has contributed to the success of their ranches. The Holistic Management process may not be the final answer, but it is a harbinger to a new awareness and approach for agriculture and resource management.

	Change in Satisfaction Level			
Indicator	Increased	No Change	Decreased	
Economic satisfaction	90%	10%		
Personal happiness	86%	14%		
Family happiness	76%	18%	4%	
Job pleasure	86%	10%	4%	
Vacation time	60%	30%	10%	
Community involvement	60%	33%	7%	
Children returning to ranch	20%	80%		
Employee turnover	12%	66%	22%	

 Table 6. Changes in satisfaction levels for 43 Holistic
 Management practitioners