

A properly administered holistic management plan can help ranchers envision and use the connections among natural resources for sustainability and profitability.



Holistic management is a ranch planning system that uses resources to reap sustainable environmental, economic and social benefits. Through properly administered holistic management, land can be returned to a healthy condition and productivity can be increased without large infusions of cash, equipment or technology. Relationships between land, grazing animals and water are managed in ways that mimic nature.

"The idea of holistic management began when Allan Savory, a wildlife biologist in Rhodesia, studied land degradation from desertification," says Peggy Sechrist, a certified educator with Holistic Management International (HMI).

"Charles Probandt, a rancher in the San Angelo area, heard about Savory's work and felt that implementation of his concepts were needed for range improvement in Texas. Probandt made it possible for Savory to immigrate to the U.S. After his arrival, Savory cofounded the Center for Holistic Management with his wife Jody Butterfield in 1984. He left the organization in 2009 to form the Savory Institute. The Center for Holistic Management became HMI, an Albuquerque-based international non-profit organization. Holistic management was established in Texas through Probandt's pioneering



Little bluestem on the Ford Ranch in November 2011.





Who Will Decide?

In May and June 2004, Ann Adams and Jody Butterfield developed the newsletter "The Essence of Holistic Management." Here is some information from that newsletter.

In developing a holistic management plan, you first determine the decision-makers, resource base and money. Decision-makers are family members and other stakeholders who will come to the planning table and write the holistic goal. Your resource base is the assets, including people, with which you have to work. The identified money is what you have available for management and what you can generate.

Once you determine the key players and resources, you write the holistic goal that is a reference point or guide for making decisions. The holistic goal contains quality of life, forms of production and future resource base. In the quality of life statements, write what you want your life to be. Examples might be "we want meaningful relationships" or "we want to take a 2-week cruise every year."

Forms of production are what you need to produce to create the quality of life you described. The future resource base describes what you must have many years from now to sustain what you must produce to create the quality of life you want. The 3 primary features are:

- A description of how the decision makers must be perceived by the people listed in your resource base. "We must be perceived by our clients, suppliers and neighbors as honest, ethical and creative."
- 2. A description of how you want the land in your resource base to look in the future. "Our land will have effective water and mineral cycles, maximized solar energy flow, a biologically active soil, and diverse plant and wildlife communities."
- A description of your community and the services available.
 "Our community will have good schools, libraries, and other social services available with a thriving economic base."

The 4 basic ecosystem processes are a very important part of the holistic management model because nature functions through them. They are the water cycle, community dynamics, mineral cycle and energy flow. A good holistic plan is written in a way to maximize water cycling through plants and soils, and to keep water within the management area. Community dynamics deal with plant and animal populations. The goal is to increase biodiversity that leads to increased plant and animal population stability. Holistic management also results in maximized nutrient cycling and solar fuel flow through plants and soils.

These ecosystem processes are our life support system, and all of our decisions must take them into account. Understanding the symptoms of effective or ineffective water and mineral cycles, impaired energy flow and succession in biological communities helps you read the land. The key to their effective functioning on land is the soil surface. If you managed to ensure the soil is covered, all 4 processes are enhanced. Bare ground is public enemy No. 1.

Holistic land planning is a process for developing the infrastructure such as fencing, water, and handling facilities on large tracts of land.

Complete implementation of the plan may take many years. Whether you have well-developed infrastructure or not, you need to plan its ideal layout and gradually work toward it, as time and money allow. This will ensure quicker movement toward the holistic goal while increasing management efficiency and reducing overall costs. efforts, along with the help of many others."

Management flexibility

You need to visit just a couple of ranches under proper holistic management to see how the system works. Forrest Armke, manager of the Ford Ranch near Brady, has used holistic management for 20 years. He explains the ranch is owned by a trust, and he is expected to turn a profit each year.

As a result of his appropriate use of holistic management techniques, in November 2011 some of his pastures were covered with knee-high little bluestem grass. The ranch had only received 4 inches of rainfall since Jan. 1, 2011. Their normal annual rainfall is 24 inches. Cattle body condition scores ranged from 4.5 to 5 in November.

"We have 34 800-acre pastures," says Armke. "The pastures are grazed in a 6- to 8-week rotation with 450 cows. We supplement protein only during fall and winter, when the grass is dormant and its protein content is low. No hay is fed, but minerals are offered free-choice year-round. Santa Cruz cows are bred to Red Angus bulls. Our calves graded 86 percent Choice last year."

Emry Birdwell and Deborah Clark run stocker cattle in their holistic management plan at their ranch near Henrietta. The ranch is divided into 45-acre pastures that are grazed for 1 day by approximately 2,000 steers. Once a pasture is grazed, cattle are not put back on it for a year. Birdwell and Clark pasture 2 herds of 2,000 steers, and add a third herd of the same size when additional grass is available from aboveaverage rainfall. Cured grass is supplemented with corn gluten meal during late fall, winter and early spring.

Mimics historic herd action

The holistic management concept imitates grazing habits of the vast buffalo herds that once roamed the western U.S. These animals grazed an area, moved to new grass and did not return to previously grazed ground until the grass fully recovered. In holistic management grazing, the time required for grass recovery is used in planning the length of grazing periods. Recovery periods dictate the average amount of time each paddock is grazed. If the system is executed properly, overgrazing is minimized. Recovery and grazing periods are linked. One cannot be changed without changing the other.

"Forage utilization is measured in animal days per acre (ADA)," says Sechrist. "One animal day per acre represents the amount of forage 1 animal consumes in 1 day, and is easily converted to the actual square yards required to feed 1 animal for 1 day. With practice, a land manager can learn to estimate the number of animal-grazing days on a pasture and use the estimate to adjust stocking rates or grazing periods.

"In holistic management livestock density is increased to match available forage to maximize animal impact," Sechrist continues. "Hooves of animals pastured at a high stock density pulverize the soil allowing more water penetration and nutrient cycling. Plants are grazed more evenly and there is better distribution of forage utilization, urine and manure.

"High stocking density also causes a more even distribution of litter as a soil cover. The layer of litter cools the soil, aids in water absorption and degrades into organic matter. Moving livestock to fresh manure-free ground results in improved animal nutrition and performance," Sechrist explains.

"Holistic management grazing increases plant diversity and returns rangeland to its condition prior to the overgrazing era of the 1800s," says Birdwell. "Our steers primarily graze little bluestem, indiangrass, switchgrass, blue grama and hooded windmill grass. Big bluestem is slowly re-establishing after years of absence and several previously overgrazed pastures on the ranch are showing recovery signs as a result of holistic management."

"I'm very excited to see the return of big bluestem and indiangrass to the Ford Ranch," says Armke. "A previous ranch manager visited the ranch and couldn't believe how range condition has improved with holistic management.

"Other advantages of holistic management grazing are parasite reduction and improved wildlife habitat," says Armke. "Pests such as stomach worms and some of the flies lay their eggs in fresh manure. With holistic management grazing, the cattle are moved to a different pasture before the eggs have time to hatch and infest the animals."

"Holistic management grazing promotes forbs that provide food for deer, turkey and quail," says Birdwell. "Bobwhites are numerous on the ranch and provide an additional revenue source through hunting. We lease the ranch to the same group of quail hunters year after year. A second lease is signed with a group of deer and turkey hunters who help control the age and number of white-tailed deer."

"Deer hunting is a good revenue stream for us, so we keep the animals in good condition," says Armke. "We monitor the recovery period of browse plants and balance the deer population to match available vegetation. We provide supplement only during hunting season. Due to holistic management, we also have a lot of quail and other types of birds."

One path to a strategic plan

Holistic management is more than a grazing plan. It is a process that helps people make decisions that are socially, economically and environmentally sound — and financially sensible.

Financial planning creates a roadmap to the holistic goal. It is done yearly before the fiscal year begins and is an essential cash flow tool. Holistic financial planning has some unique features:

- 1. The planning is done with the holistic goal in mind.
- 2. The issue of expenses rising to the level of one's income is addressed by planning profit first, then using what is left for expenses.
- 3. The plan helps the user determine which expenses are wealth generating, inescapable or maintenance expenses.
- 4. The planning produces more accountability for, and knowledge of, financial planning, because everyone is involved and knows the figures.

"As part of holistic management, detailed expense records are maintained, and we know on any given day how much money we have in each herd," says Birdwell. "When market prices are high enough to meet our profit goals, we hedge or contract for future delivery."

"Using holistic guidelines, we make management decisions as a team with input from each team member," says Armke. "We calculate projected costs and returns on all management options, then choose the one that will return the most profit or have the least negative effect on income.

"An example is about 2 weeks ago, it was decided that we had to destock to avoid longer recovery periods on some of the pastures. We calculated the costs of selling and having to replace the breeding stock at a later date versus leasing and hauling cattle to pastures in other states. The figures showed that hauling cattle to leased pastures would result in the least negative impact on the bottom line. So that's what we did."

"The holistic management model helps to develop the strategic plan," says Sechrist.

More information on this type of resource management is available at holisticmanagement.org.