

Improving Results on Farms & Ranches with Holistic Management®

Key Outcomes

You will learn:

- How Holistic Management* & Whole Farm Planning can enhance your success
- How to meet your management challenges effectively
- How to address key environmental issues effectively
- What Holistic Management adds to your management toolbox
- What to do next

Key Concepts

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Improving Resource Management

In recent years more and more resource managers are being challenged by a deteriorating or stagnant land base, increased pressures from a global market, governmental regulations, extreme weather, changes in societal attitudes about land use, and a host of other problems.

If you don't address your social and economic needs in the process, you will have trouble sustaining any progress you've made on the land. That's why Holistic Management helps people look at the environmental, economic, and social short and long-term consequences of their decisions and management. You just use

The Holistic Whole Farm Planning process you will learn in this course will help you assess your situation and manage it—including the decisions you make and the actions you take based on them—from a bigger picture, a holistic perspective. By understanding how Nature functions and managing your resources to create symbiotic relationships, everyone wins and there is more effective use of those resources.



You can enhance your ability to interact with and manage your land resources by looking carefully at the environment in which you live—at the soil cover, moisture, soil fertility, the variety of living organisms on the land around you, and how well they are capturing the sun's energy. All these and many other factors affect how productive your land will be, not only today, but if you do your job well and manage your resources carefully, far into the future. You aren't simply a land manager, but a steward of the resources put into your care.

this simple management tool in conjunction with all the other tools you already have in your toolbox, maximizing your effectiveness as a resource manager.

Healthy environments support a variety of different living things. From the tiniest soil organisms, to the plants that grow above the soil surface, to the animals that harvest them and cycle the nutrients back into the soil, this **biodiversity** brings strength and balance to an environment. If you do a good job managing your land resources, you build and sustain diverse populations of living things and enhance the environment that sustains us all.

Addressing Key Environmental Issues

Holistic Management, simply put, helps us make better, more informed decisions that balance social and environmental as well as financial considerations, while leading us in the direction we want our lives to take.

You use Holistic Management in conjunction with all the other tools you already have in your toolbox, maximizing your effectiveness as a resource manager.

Holistic Whole Farm Planning was created as a management process that would allow people to simultaneously consider and balance social, economic, and environmental concerns, both in the short and long term. The Holistic Management® Framework is based on 2 simple principles and 6 practices that when put into practice are highly effective.

- Drought
 - Flooding
 - Unproductive
 - Agricultural Land
 - Noxious Weeds
 - Erosion
-

Decision Case

Why Add Holistic Management to Your Toolbox?



In the following decision case written by Seth Wilner, a Cooperative Extension Educator from New Hampshire, you will see the type of situation many resource managers face. You will also see how this farmer was able to incorporate Holistic Management into his decision making to solve a complex problem he had been unable to address previously.

Andy Sulco grew up on the dairy farm he inherited from his parents and now manages. The farm is located in rural New Hampshire and comprises some 94 acres, of which 53 are tillable. Andy milks 53 Holsteins, produces all of his hay and corn silage, and does most of the chores himself, although he employs part-time labor, at least as long as they stay. Unable to pay high wages nor offer full-time work with benefits, turnover has plagued Andy's ability to keep good help.

Andy has a wife and son, both of whom are not especially supportive of Andy's farming venture. They share a common resentment that all of Andy's time and energy goes to the farm and little is left over to meet their needs. Additionally, the price of milk has dropped this past year, resulting in economic stress on the family. Andy's wife has an off-farm career and effectively is the financial supporter of the family. This too causes tension at home.

Andy is a rather private person, typical of most "Yankee" farmers. He rarely complains or talks about personal or emotional issues with anyone except his closest friends. As such he keeps most emotional issues bottled up inside. Recently, this has resulted in some bouts with depression and the start of an ulcer.

One morning Andy left his house for the barn after a heated exchange with his wife. She was upset that Andy was not addressing any family issues, including their son's academic struggles. At the barn, Andy ran into his local county Extension agent, Steve, who randomly stopped by with the Extension dairy specialist, Jim, as they were making farm visits in the area. The two could see that Andy was upset and inquired about what was wrong.

Andy chose not to go into the personal issues and instead spoke about the hard financial times his farm was going through as a result of low milk prices. Jim looked around as Andy was milking and saw that there was space in the barn to add stalls and cows. Soon Andy and Jim were crunching numbers. They found that if Andy added 10 cows and did not hire any

Decision Case

additional labor that his farm could gross another \$5,200 per year at these low milk prices, and more when prices rose.

After Steve and Jim left, Andy thought about the idea of adding cows, but had an uneasy feeling in his gut. More cows meant more time in the barn which certainly would not help his family situation any, nor help him mentally or physically. Coincidentally, Steve too was uncomfortable with the idea and spoke with Jim about it in the car as they were leaving.

Steve expressed to Jim that before making recommendations about adding more cows or doing other things, they should discuss the full situation in more depth with Andy. Jim was not sure what Steve was talking about so Steve elaborated. Steve mentioned that there was no discussion about Andy's life, whether he was happy, how his family was doing, what the impact might be on the environment if he added more cows, or other such considerations.

Jim felt that the questions about the family and other personal issues were not their business unless Andy offered these on his own. Likewise, Jim felt that 10 cows would not degrade the environment; after all they had calculated that Andy's manure storage system could handle the output of these cows and that Andy had enough land on which to spread the additional manure and

any waste milk. Steve and Jim agreed to disagree and went on with their other farm visits.

A few days later Andy was speaking with close friend Dale, who also farmed down the road. Dale was a diversified organic grower and didn't know a lot about cows or livestock. Yet he had worked with Steve on a process called Holistic Management. He suggested that Andy call Steve and ask about it. Dale explained that his family and farm workers went through the process and it helped get everyone on the same page and also added a lot of creative ideas about alternative enterprises they might add to help make the farm more profitable.



Andy called Steve that afternoon and hesitantly asked about this thing called Holistic Management. Andy was not up for some "crunchy granola," hand-holding process in which everyone had to share their feelings or the like. Steve explained to Andy how it worked

in general and suggested that it may be just what Andy needed. Steve and Andy talked further, and Steve expressed his hesitation about the recommendation Jim gave to simply add more cows. Yes, it would help make the farm more profitable, but at what cost? Was economic profitability truly the answer to all of Andy's problems, or was there more needed?

Steve and Andy had a short conversation about what profitability meant to Andy and

Decision Case

what Andy wanted out of life. Steve challenged Andy to think about how his life might be if everything in his life remained the same with the exception that the farm made tons of cash. Would Andy be happy, healthy and content? If so, Steve suggested that Andy should simply add the cows, spend some more time milking and doing chores, and reap the additional profits.

Andy thought about his conversation with Steve over the next few days and concluded that money alone would not address all of his issues, certainly not in terms of his family situation, nor in terms of his own personal happiness and health. The ulcer was a reminder of that.

Reluctantly Andy called Steve and asked if he would help him do that Holistic Management thing. Steve told Andy he needed to approach his wife, son, and farm hand first and see if they were interested. Andy was able to get buy-in from all these folks in short order. His wife wanted to do anything that might improve their family life and their son went along hesitantly. The farm hand was not given a lot of choice, but didn't put up any resistance.

Steve came over the following week and walked them through the process. They defined their *management team* and drafted a *temporary holistic goal*. Steve also taught them some testing questions they could use to help them make better decisions.

After four sessions, the group advanced enough to be able to brainstorm a list of suggestions to garner more farm income. Having a holistic goal and the ability to

test potential options, Andy could filter these ideas using the testing questions to choose alternatives that would not only generate more income, but would also help him move closer towards the life he and his family desire.

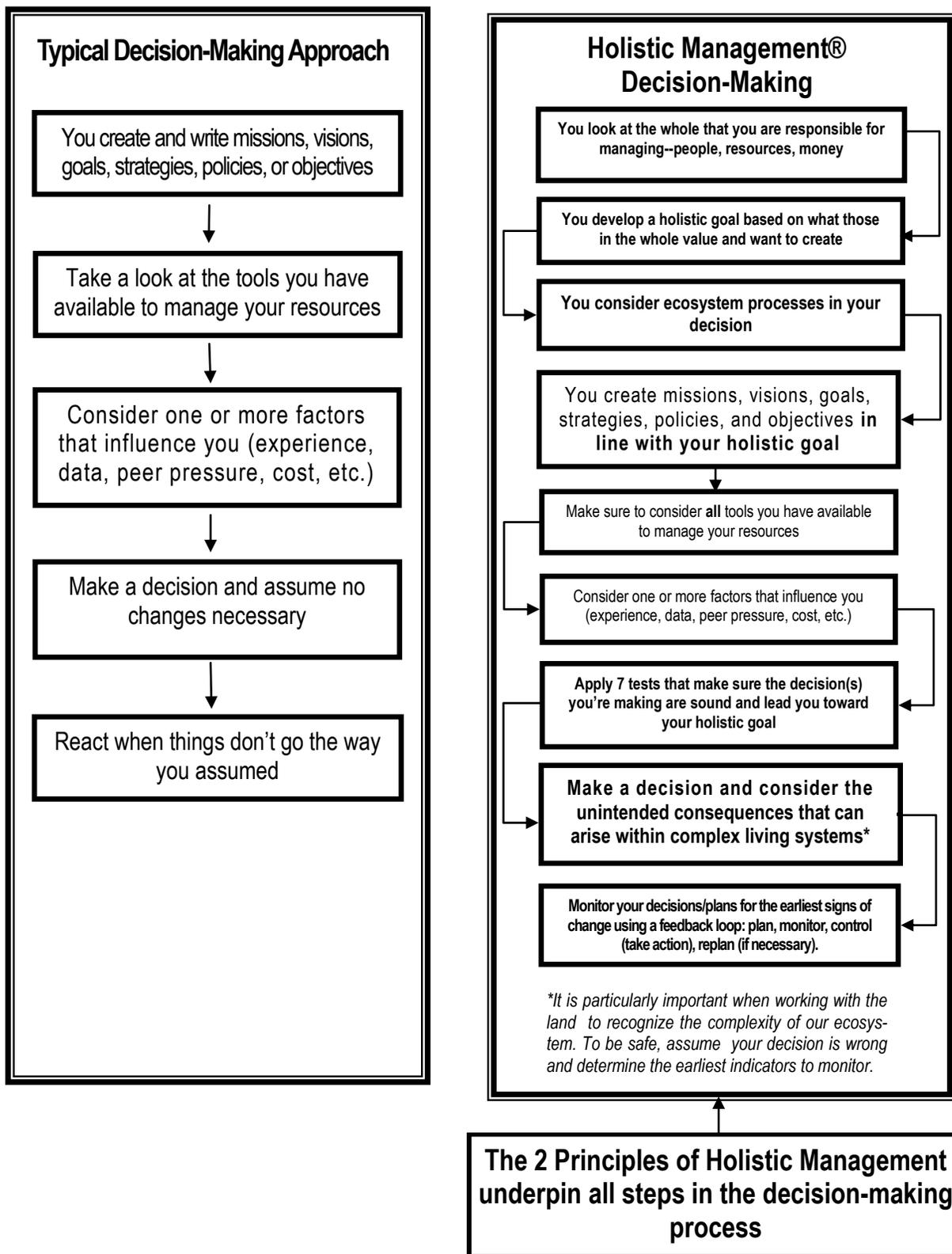
Andy and his family found that by just going through the process they understood each other so much better. "It was helpful to have you referee," he said to Steve after one meeting. Yet, he greatly appreciated having his say and getting other folks to understand where he was coming from. And, he had to admit, finally understanding what his wife was talking about. After all, he did love her and all.

What Andy discovered in this process was that his decision-making was more effective when he added a few more concepts and principles to his management toolbox. The typical decision-making as outlined on the left on the next page can yield mixed results, especially when dealing with the complexity inherent in living systems. On the right hand side of Page 7, you will see the Holistic Management® Decision-Making Framework with the additional principles and practices included in the typical decision-making process. These are the additional steps Andy used to get the results he wanted.

Principles & Practices Explained

The following two principles and six practices are the essence of Holistic Management. If you understand these principles and practices and put them into

New Principles & Steps for Handling Complex Decisions



Principles & Practices Explained

Principles & Practices for Effective Resource Management

- 1) Nature Functions in Wholes
- 2) Understand The Environment You Manage
- 3) Define What You Are Managing
- 4) State What You Want
- 5) Aim for Healthy Soil
- 6) Consider All Tools
- 7) Test Your Decisions
- 8) Monitor Your Results

practice, you can achieve the results you want for your land, family, community, or business.

The two principles are based on two key insights which underpin the Holistic Management® Framework you saw diagrammed on the previous page. Once you understand these first two principles you will be better able to understand and perform the six practices. Once incorporated in your daily management, these key practices within the decision-making framework, will lead you to consistently greater success.

Principle One

Nature Functions in Wholes

The first insight:

A holistic perspective is essential in management

Many of us have heard the cliché the whole is greater than the sum of its parts as a way to describe holism. A better description of holism is that Nature (including humans) functions in wholes. In other words, what we view as “parts” of a whole are merely different aspects of that whole. To view it as a part suggests we can remove it or

“Individual parts do not exist in nature, only wholes, and these form and shape each other.”

Allan Savory

Holistic Management

replace it and the whole will remain the same—like a machine. In taking a holistic perspective, we recognize we must pay attention to the relationships that exist between these different aspects of the whole. In this way we can build or make use of the symbiotic relationships necessary for effective resource management.

If you want to effectively manage your land resources, build biodiversity, improve production, etc., it's important to understand that you can't change or control one thing in one area without having an impact on something else in another. In this way, each whole is unique because of the different variables and relationships at play.

Principles & Practices Explained

Principle Two

Understand The Environment You Manage

The Second Insight:

The Brittleness Scale

Not all environments are the same nor do they react the same way to the same influences. This might seem obvious. Of course, all environments are different. What might be less obvious is the idea that taking exactly the same action in one type of environment will have dramatically different results in another type of environment.

Exercise

Think of a simple ecosystem (like the seashore, a woodland, a pasture). Make a list (or a map) of the many living things that exist in that system. Describe or diagram what would happen if one or two of those things were removed.

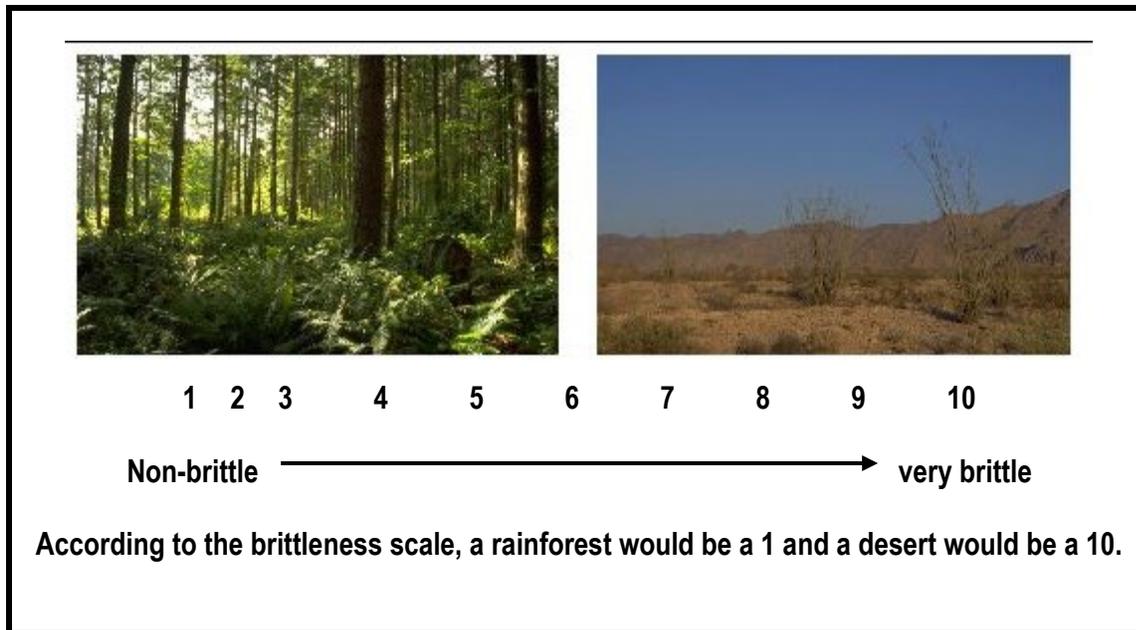
A Tale of Two Seashores

Sometimes, tinkering with individual parts of a whole system can have dramatic and often disastrous results. An American biologist, Robert Paine, was studying seashores. He wondered what would happen if he removed **one** species of aquatic life—a starfish—from that environment. This species of starfish was a predator in that community, preying on some 15 or so smaller fish and organisms.

After one year, only half (8) of the original prey species remained. With no predator to control the populations, some of the remaining species grew quickly in number, using up available space and food. Other species were crowded out and either forced to move or died out.

During that same year, in another part of the seashore where the starfish were still present, all 15 species continued to thrive. The **relationship** between the predator (starfish) and prey species was maintained.

Principles & Practices Explained



Environments exist on different ends of a scale depending on how well humidity is distributed throughout the year and how quickly dead vegetation breaks down. At one end of this scale are **brittle** environments—where rainfall and humidity are scattered erratically throughout the year. Dead vegetation breaks down very slowly in **brittle** environments unless adequately disturbed as the next insight explains. At the other end of the scale **non-brittle** environments exist. In these environments rainfall and humidity are perennial and dead vegetation breaks down rapidly, whether or not it is disturbed. **Brittleness** is measured on a scale from 1 to 10, with a 1 being **non-brittle** and a 10 being **very brittle**.

Why is this important? Land responds to various practices differently in **brittle** and **non-brittle** environments. For those who manage land for enhanced biodiversity and increased production, it is very important to understand how that land will react to the various practices (or tools) used on it. For

example, resting land in **non-brittle** environments restores it to a higher level of succession, but in **brittle** environments, resting land tends to damage and degrade it.

Practice One

Define What You Are Managing

One key to understanding holistic decision making is remembering the first insight: the world functions in wholes. Each of us is responsible for managing a whole—beginning with ourselves as individuals. And beyond that first whole, there is a larger whole, a farm, a family or a business.

Whether the whole you are concerned with managing is your individual whole or a larger whole, there are often other people involved in either making or influencing the decisions, there are resources that exist and that you have built over time (land, equipment, clients, etc.), and money to which you have access. Knowing who and

Principles & Practices Explained

Something to Ask Yourself

Think about where you live—the amount of rainfall you get, the level of humidity in the air, and how it is distributed throughout the year. Think about how long it takes vegetation to break down. For example, when you look around, do you see moss growing on brick buildings, recently fallen logs already partially decayed, or living organisms moving about on the soil surface? All of these are signs of a *non-brittle* environment.

On the other hand, perhaps you see tall stands of dead gray-colored grass, logs that have been lying in the same place for years but have not changed significantly in appearance, only two or three types of plants with large areas of bare ground, etc. These observations indicate a *brittle* environment.

Based on the brittleness scale, would you say you live in a non-brittle(2-3), moderately brittle (4-6) or very brittle (7-9) environment?

Remember, the extremes are 1-rainforest and 10—true desert.

what your "whole" includes helps you determine who makes decisions, who merely influences the decisions made, and it helps put boundaries around what you can and cannot manage through your planning and decision making.

To create a management inventory you must consider:

- **The management team (decision makers)**
- **Assets (including land, livestock, buildings, clients, vendors, money, etc.)**

Practice Two

State What You Want

Creating a Holistic Goal

Keeping the whole you've now defined in mind, the decision-makers set about the

process of creating a **holistic goal**—describing the life they want to live based on what they value most deeply.

The three aspects of the holistic goal require the decision makers to:

- 1) describe the quality of life they want to live
- 2) describe what they must create or produce to live that life
- 3) describe what must exist to sustain such a life far into the future.

The holistic goal is the "magnetic north" toward which all decisions and actions are made. It ties what you value most to your resource base (including land, humans, and money) which helps you prioritize and focus in on which objectives will help you best create the results you want with the least risk of unintended consequences.

Principles & Practices Explained

After you define the whole you are managing and create your **holistic goal**, you are better prepared to create mission and vision statements, and identify necessary goals, objectives, strategies, or policies. These two initial steps help to ensure these missions, goals, objectives, strategies, and policies will move you in the direction you want and need to go. Then, to make sure your decision is socially, economically, and *environmentally* sustainable (the triple bottom line), you'll need to consider how your decision will impact the health of the ecosystem processes. You will also need to assess what tools you have available to manage your resources within the context of that decision. Understanding nature and how it functions will help you in these steps before you test your decision and monitor it.

Practice Three

Aim for Healthy Soil

Consider the Health of the Ecosystem Processes

With your knowledge of the first four practices and principles, you are beginning to understand the ways in which Nature functions. This principle looks at the four fundamental processes at work in Nature—water cycle, mineral cycle, energy flow, and biological community—so you can begin to assess the health of the land.

As you learn more about these four ecosystem processes, you will quickly discover that the earliest indicator of ecosystem health is soil cover and soil health. If there is 100% soil cover made up of living and decaying plants and a great diversity of

species, you are likely looking at a healthy environment. But, if some of the land is bare and there are only one or two plant species and little sign of other life, then you are looking at a poorly functioning environment.

Many people will focus on a certain species of plant or animal as an indicator of ecosystem health, wanting a noxious weed gone or a certain animal species to dominate the landscape. With Holistic Management, our first focus is to improve soil health.

The holistic goal is the "magnetic north" toward which all decisions and actions are made.

Practice Four

Consider All Tools

Understand & Use All the Tools Available To You

When people think of tools they usually think of all the technologies available to us such as farm equipment, irrigation, computers, etc. But with Holistic Management when we refer to tools we mean the six categories of tools at our disposal. When managing the environment you will use the tools of Human Creativity and Money/Labor through one of the other tools to modify the ecosystem processes.

For many years, people have not recognized animals and living organisms as tools that significantly influence the health of the

Principles & Practices Explained

ecosystem or have only seen those tools in a negative light. Holistic Management encourages you to consider all these tools as you work to move toward the life you want as you have described it in your holistic goal.

The Four Ecosystem Processes

- Water Cycle
 - Mineral Cycle
 - Energy Flow
 - Biological Community
-

Practice Five

Test Your Decisions

Using The Seven Testing Questions

The next step added in the Holistic Management® framework enhances our decision making by providing a filter or a sieve to weed out extraneous information so you can focus on key information—a particularly helpful tool when situations are complex.

Once you have considered a decision or action thoroughly and are ready to move forward with it, you ask **seven testing questions** as they apply to the action(s) you're considering. These **seven testing questions**, by relating the action to the holistic goal, hone in on key concerns and help ensure that your decision/action is simultaneously socially, environmentally and financially sound and that it moves you toward your holistic goal.

Practice Six

Monitor for Results

Keeping on the Right Track With the Feedback Loop

After gathering all the information, considering a number of factors, and testing each action toward your holistic goal, you can make an even better decision by creating some monitoring criteria that will give you the earliest indicator of your plan going off track. You do this by considering any unintended consequences that may arise from your actions, recognizing the complexity of all living systems.

If you are deciding on which action to take on a piece of land (for example addressing a problem species), it is even more critical to develop monitoring criteria because of nature's complexity. In fact, some people suggest it is best to just assume you're wrong and **monitor** those criteria closely for the first signs that your plan is off track.

If you find you're headed someplace you didn't want to go, you can either adjust your plan or re-plan entirely. You're not

Tools For Managing Your Resources

- Money/Labor
 - Human Creativity
 - Animals and Living Organisms
 - Fire
 - Rest
 - Technology
-

From Principles to Practice

monitoring to see what happens; you are monitoring to make happen what you want to happen: to bring about changes in line with your holistic goal. In this regard, the word plan is actually a 26-letter word: ***plan-implement-control-monitor***, with positive action following each step.

From Principles To Practice:

Next Steps

One of the important things to do at this point is to digest the information you've just learned. Some of the concepts are familiar, and perhaps others are radically different from what you've learned or thought about before. With this brief overview of Holistic Management, you can now begin to put what you've learned into practice by continuing your learning.

Once you define your management team and create your holistic goal, you can begin testing decisions and monitoring them. You'll learn how to do this in the next section of this study guide. As you learn more about the four ecosystem processes and how the use of the tools available to you affect those ecosystem processes, you will have greater confidence and success in managing your land.

“The word plan is actually a 26-letter word:

plan-implement-monitor-control

The principles and practices you've just learned have enabled thousands of land managers to more effectively manage their resources. Where those managers were once frustrated by their situation, blaming the government or weather or the markets for their predicament and the land's degradation, they now have hope and a sense of optimism about the future. They have learned they can manage holistically and they can make a positive difference on the land and in their families and communities for generations to come.

Quiz

Quick Quiz

Answers to these questions are at the end of the section.

1. A Holistic Management perspective refers to the importance of acknowledging _____ within the different aspects of the whole.
2. At the extreme end of the brittleness scale, a _____ would typify a very brittle environment, (10) and a _____ would typify a completely non-brittle environment (1).
3. True or false: The easiest way to determine the level of ecosystem functioning is to determine an indicator species and see how healthy it is.
4. The holistic goal is the _____ toward which all decisions are tested.
5. What are the two key principles of Holistic Management?
6. Consider All Tools means to _____

7. Three Holistic Management practices are Define what you manage, State what you want, and aim for healthy soil. Name the other three.
 - A. _____
 - B. _____
 - C. _____

Exercises

Questions for Deeper Thought

1. What are some decisions I need to make in the coming year?

2. Draw a "map" that describes how a simple system (soil, family, etc.) you are familiar with operates. Then, draw out what might happen when a single part in the system is changed/removed.

3. Think of a piece of land you are familiar with and consider important to you. It should be a site you have known over an extended length of time. Describe the biological diversity and ground cover present when you first saw it. Remember to consider the different plants that were on the land, and their various ages from a seedling to dead and decaying. Also include animals from the smallest of rodents, to grazing or browsing creatures, to predators, to birds. You should even consider insects that you know were present. Now answer the following questions.

Exercises

How has that land changed in its biological diversity from when you first saw it to today?

What do you think caused the changes in biological diversity?

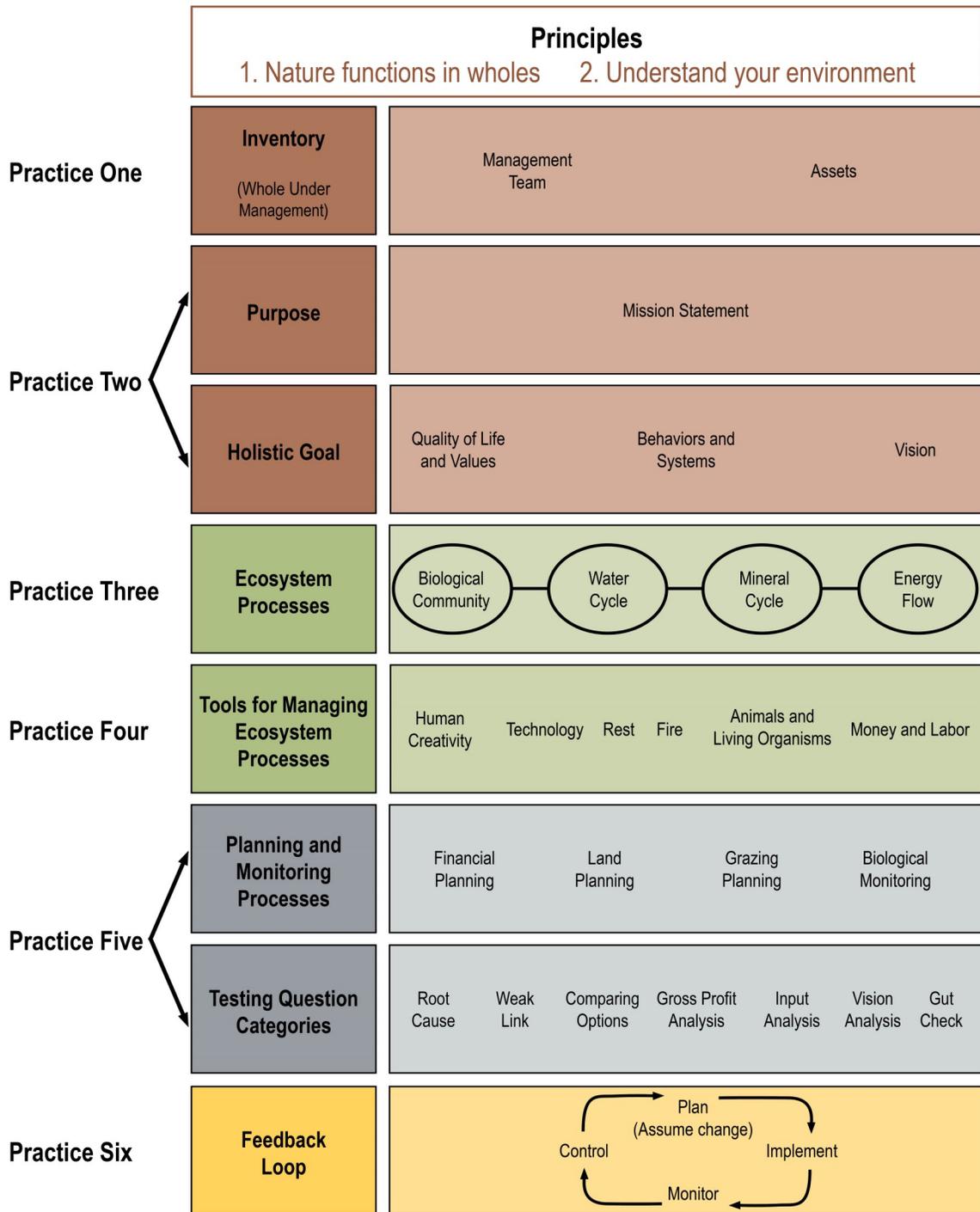
4. How could Holistic Management help you achieve your goals and objectives?

5. What are the next steps you can take to better understand the Holistic Management principles and put them into practice.

Answers to Exercises

Answers to Quiz: 1) symbiotic relationships; 2) True Desert/Rainforest; 3) F; 4) magnetic north 5) nature functions in wholes and understand your environment; 6) understand and use the tools available to you; 7) consider all tools,

Holistic Management® Framework



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