

## ■ Monitoring

There are very good reasons to monitor. Monitoring helps you make decisions, provides trends so a manager can plan for the future, confirms good management practices, reveals potential problems early, and teaches about relationships in nature.

**We need to monitor to help us make better decisions in managing our natural resources for the future.**

At the most basic level, monitoring is just watching what is happening, then adjusting your management to make sure you will meet your goals. The only problem is, you have to watch those things that will help you decide what your management has done, or will do, to your resources in meeting those goals.

Before you implement a monitoring program, you should set your goals and objectives. Your goals and objectives will help you determine the level of detail you need in your monitoring program.

Vegetation can be monitored using structure, species composition, frequency, density, production, cover and various combinations. Each method provides unique types of information that can be used to describe a plant community and each has different limitations.

**Tip: Many people wonder whether it is necessary to monitor the land when they are already monitoring livestock weights. Although tracking animal performance is definitely worthwhile, these records do not tell much about the health of the land. The principal reason is that a time lag exists between when the land deteriorates and when the degradation is reflected in animal performance. The land deteriorates first and may degrade appreciably before the animals show any effect. This is because the animals can initially compensate by feeding on less preferred forage plants and by using energy and nutrients stored in their bodies. By the time animal performance declines, the land may have been degraded to the point where it will require decades to recover.**

Many techniques have been developed by various agencies and universities to help ranchers and land managers monitor their resources. Select a monitoring program that fits your objectives, resources, labor and time. Because each operation varies by resources and goals, we can not recommend one monitoring technique over another. Potential sources of information on monitoring include:

“Monitoring Montana Rangeland.” Montana State University Extension Service Bulletin 369. 1994.

“Monitoring for Success.” Montana State University Extension Service. 1999.

“The Monitoring Tool Box” Land Stewardship Project. 2000. <http://landstewardshipproject.org>

For assistance in developing a monitoring program that fits you and your operation, see the “Technical Assistance” section.