

## Land Lines



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### Who Should Monitor Federal Rangelands?

"The fox guarding the henhouse" is the response Linda Price expects to a new rangeland monitoring program in Idaho. Linda manages the Bureau of Land Management's (BLM) office in Salmon, Idaho.

The new program was developed by the Idaho State Department of Agriculture (ISDA), to bridge the chasm of missing information on the condition of BLM rangelands in the state. Brooke Jacobson, ISDA's coordinator for the project, helps ranchers get started collecting vegetation data on their allotments. Meanwhile, the BLM's vegetation specialists are trapped at their desks by a barrage of time-sucking lawsuits.

Brooke shows ranchers how to take annual photos at BLM monitoring sites and send their data to the agency. In this pilot program, ranchers monitor only upland rangelands, not sensitive riparian areas. They don't measure or count vegetation; they collect only photographic data.

Even with Brooke training the permittees, some people might not think ranchers are up to the task. The skeptics must never have worked on a veg crew.

When I hired field crews at the US Geological Survey, I didn't ask if applicants knew how to count plants. I asked the hard question: "Can you handle a summer living out on the Sagebrush Sea?" Anyone who can tolerate boring, repetitive tasks can learn to collect data; only a few hardy souls can live in a tent all summer.

Nonscientists collecting data is nothing new. Amateur and professional scientists work together on the Breeding Bird Survey. They receive the same training and their data go into the same valuable dataset. Citizen scientists also record seasonal changes in plants and animals for the National Phenology Network. This information helps researchers identify patterns of global climate change, which helps planners address the resulting social and economic. (See [Photo 1](#).)

You might argue that ranchers might fudge the data when monitoring their grazing lands. If you did, I'd point out that anyone could be tempted to squint while reading a tape measure. Every BLM employee has an opinion on livestock. Researchers have their favorite hypotheses. Even universities listen to their supporters, legislators, and alumni, all of whom have biases.

Software developers are making data collection easier and more accurate for both citizen and career scientists. Before Amazon ever heard of drones, Terry Booth, at the USDA's Agricultural Research Service in Cheyenne, Wyoming, was photographing rangelands from light aircraft. The photos are clear enough to count plants and measure bare ground. In other words, they're detailed enough to monitor rangelands.

It's been years since I saw a rancher with a flip phone (7 months since I gave up mine). Smartphone cameras take excellent pictures and the GrassSnap app makes photographing the same spot every year ... a snap.

Ranchers and BLM employees might look through the same viewfinder, but they see different things. Most agency workers move several times during their career. Most ranchers stay put for decades; their families often stay rooted for generations. Ranchers experience many