# Responsible, Shared Use

A reprint of a guest opinion in the Idaho Statesman by Doug Tims, President of Idaho Outfitters and Guides Association

Does your vision of the future for America's public lands include continued use by industries who have historically operated on public lands? Mine does. The vision is embodied in the phrase "Responsible, Shared Use."

We are in the midst of our generation's version of the classic struggle over the use of public lands. Elements of the struggle are the same as they were when John Muir and Gifford Pinchot squared off a century ago. The unique nature of today's fight is the growing role of the public. Laws like NEPA (National Environmental Policy Act) have given the public more access to the planning process. This, coupled with the public's heightened environmental awareness, have created strong forces for change.

The multiple-use industries have resisted change. Radicalism and strident demands by some elements of the environmental community have left little room for flexibility. The struggle led to an unprecedented polarization in the public's position on public land use in the '80s. The result is a serious threat to the traditional multiple-use concept for public lands.

This threat has prompted Dale Robertson, Chief of the Forest Service, to host a Partnership/Multiple-Use Float trip on Idaho's Salmon River for each of the past two years. Participants were chosen from companies who work on the National Forest System and who demonstrated a desire to work for a better future for the system. Included were reps from timber, minerals, grazing and recreation.

On a raft and around the campfire, the group began to struggle with the question, "What are we going to do about the impasse? How can we redefine the middle ground?"

The answer is to change—change our practices, change our attitude, and change our terminology. Doing it the way we've always done it is just not good enough. This is the '90s. Like it or not, the public, who owns the land, is demanding a new way of doing business. Those who reject change are in for a difficult, contentious period, and eventual removal from the group that the public chooses to let use its land.

A change in attitude means recognizing who's the boss, who's the landlord. An attitude of ownership gets both industry and managers in trouble on public land. Have you ever heard the term outfitter camp, or outfitter launch date? On public land, there is no such thing. There are camps and launch dates reserved for the public who use outfitter services, but we don't own them. As long as we deliver quality service in a responsible manner, we will be allowed to continue to provide the service. How about BLM or Forest Service land? I often see this newspaper (Idaho Statesman) use the terms. There is no such thing. It is all public land. BLM and Forest Service don't own one acre of ground. The American people, through their representatives in Congress, hire people (agencies) to manage their land. Today, through the Congressional committees that oversee our public lands, they are hearing a new set of marching orders. Like a battleship that needs seven miles of ocean to turn, the land managing agencies are slow to change direction, but they are doing it.

Finally, a change in terminology. The term "multiple use" with its strong anchor in law, is worn after years of struggle. "Multiple use" is carrying a lot of unneeded baggage into the shifting sands of the '90s. It has an "I've get the right" element to it that complicates the adjustment in attitude that is necessary to deal with the public involvement processes driving public land management today.

The terminology we need represents not the middle ground, but the high ground. It is "Responsible, Shared Use." Responsible, shared use means industry will be there working on public lands in the future, but only if we conduct our business in a responsible, environmentally sound manner. It means that the public land system, as a whole, supports a variety of uses to benefit the American public, including conservation, renewable and extracted resources. It does not mean that every use occurs on every acre.

If we are able to achieve the high ground of responsible, shared use, it will mean that, although some users will not be there in 2001, all the uses will be.

Idaho is in a unique position to make this vision of our public lands reality. I saw it last year as I stood on the centennial scows, addressing a hometown, Salmon, Idaho crowd who had turned out to celebrate our centennial on the banks of the Salmon River. The farmers, ranchers, loggers, miners, fishermen and recreationists all had made this river a part of their life. They shared a common feeling of caring and appreciation for the resource.

After more than a century of use by people from all walks of life, the Salmon River is in great shape and will remain so for the next century if we demonstrate responsible, shared use.

Recreation and tourism in Idaho is on a roll in the '90s. Other industries might see that as a threat. That shouldn't be the case. The recreation industry, including outfitters and guides, must expand its role as educators, role models and interpreters. I was with a trip on the Payette last August and listened as the guide explained to the group that they were able to enjoy the river at that time of year because of multiple use. Water, stored in a system built by farmers and ranchers, provided the late season recreation opportunity. Later, the outfitter stopped the trip so the public could share the thrill of finding gold with a recreational dredge miner.

Rather than focus on the mistakes (we've had ours, too), we should seek out grazers, miners and loggers who share our use of the resource and have exhibited responsible streamside and land-use practices. We should include them in a picture, presented to the public, that shows our public lands for what they are—vibrant, productive system for the enduring benefit of the American people.

Let's reduce the bickering and focus on the value of the whole: food for our families, clothing for our backs, wood for our houses, fuel and metal for our cars, power for light, fun for the weekend, wilderness for the soul. American's public lands can continue to be a positive element in our lives if we work responsibly to use, share and cherish them—together.—**Doug Tims** 

# Learning and Memory in Grazing Livestock Application to Diet Selection

### Karen L. Launchbaugh and Fred D. Provenza

When you think of intelligent animals, a cow or sheep is probably not the first creature that comes to mind. With respect to grazing, however, livestock are smart. Researchers consistently report that livestock select diets more nutritious than if they foraged at random (Arnold and Dudzinski 1978). However, scientists disagree on how livestock know which foods are nutritious or toxic. Some traditional theories suggest that animals are born knowing what to eat and do not need specific learning experience. These theories suggest that diet selection is inflexible and stereotypic.

Range scientists have been reluctant to replace these traditional theories with concepts that depend upon animal learning and experience. However, many successful management practices which ranchers have been using for decades are based on the assumptions that livestock learn and remember the plants they eat. For example, many ranchers select replacement heifers from their own herd because they "know" the range better than heifers purchased from outside herds. Most managers realize that livestock deaths from poisonous plants generally increase when animals are not familiar with a particular plant, such as when livestock graze new pastures. A few savvy ranchers even wean animals on the same feed used for creep feeding because the calves seem to "recognize" the feed, eat more of it, and gain weight more quickly.

Many people may find it difficult to believe that livestock can remember the hundreds of plants necessary to survive on rangelands (Bailey and Rittenhouse 1989). Yet, recent research indicates that livestock can be trained to eat or avoid particular plants and they have substantial abilities to remember foods (Provenza and Balph 1988, 1990).

Although we don't know exactly how many plants a cow or sheep can remember, they probably can remember all the foods encountered while foraging on rangeland. Clark's nutcracker, a seed-caching bird, can remember the location of up to 9,000 food-storage sites (Balda 1980).

Livestock can also remember for years which foods are nutritious or toxic. Green et al. (1984) offered ewes and lambs wheat for one hour a day for as little as five days. Almost three years later, these lambs ate more wheat than lambs unfamiliar with wheat. The lambs apparently remembered wheat 34 months after first eating it. Food aversions are also remembered for many months. Lane et al. (1990) aversively conditioned heifers to avoid larkspur and they still avoided the plant a year later.

#### **Diet Selection Through Learning**

A diet selection system based on learning and memory would include the following elements: (1) mother as a social model, (2) cautious sampling of novel foods, and (3) the formation of food preferences and aversions based on gastrointestinal consequences.

### **Mother's Influence:**

Livestock have a reliable model to follow at birth—their mother. A mother that avoids poisonous plants, teaches her offspring to avoid the plants (Provenza et al. 1991). Lambs quickly learn to avoid a "harmful" novel food their mothers were trained to avoid, and to consume a novel

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