

# INTEGRATION

*The newsletter for Geo-spatial and Range Sciences*

*This newsletter is produced by the GIS Training and Research Center at Idaho State University, Campus Box 8130, Pocatello, Idaho 83209-8130*

## *What's in a name...*

I recently read an article about a grazing project where livestock were being used to restore rangelands. The author of the article stated that rest-rotation grazing was the key to the success they were witnessing and then went on to describe rest-rotation as a grazing system where a large number of livestock were allowed to graze a pasture for a brief time period... "sometimes only a day or two". This struck me as very interesting. The grazing system the author described sounded more like what I would call the high-intensity short-duration grazing method.

The author also stated that rest was the critical part of the whole recovery program. This struck me as very interesting as well. Rest --or rather recovery-- is a critical part of any grazing plan but no more important than the grazing itself. To believe otherwise would lead one to arrive at the conclusion that the way to improve rangelands is to rest it. If a little rest is good, a lot of rest must be great.

Within the above statements lies another area where we need to use words carefully as we generally think in words and communicate in words. The author described the rangelands being restored by rest-rotation used as a grazing system. However I mentioned that this sounded to me what I called the high-intensity short-duration grazing method. Is there a meaningful and vital difference between a management system and a management method or process?

To be fair, I realize that I have only presented three statements from the article for your consideration. Please understand that the point of all this is not to tear down another's work but to use it to illustrate a very important point. That is, when we communicate we must take great care to define what we are really talking about.

Let's start with grazing. We often hear that a certain allotment or pasture is being grazed. Unfortunately that really does not tell us anything we might not already know or surmise. Is it being grazed by one sheep or 100 head of cattle? Then, even more importantly, how long are the grasses within that pasture accessible to the livestock? If a grass plant is eaten once in its growing season that is ok. Problems arise when that same grass plant is eaten repeatedly over a single growing season and is not afforded the opportunity to replenish energy reserves in its crown, roots and/or stem bases, and to set seed.

Just like grazing, rest is another term that is just too vague to be helpful in our understanding of rangelands. Furthermore, just like the term grazing, rest must be described in a temporal sense. Then to fully understand the effectiveness of the rest period we need to know when it occurred within the context of the region's growing season and vegetation community. In other words, was the rest period sufficient to provide the plant recovery? Or was it so long that it interfered with biological decay of dead grass leaves and stems leading to gradual oxidation - a chemical breakdown?

Modern systems thinking acknowledges the complexity of the real or natural world. Rotational grazing systems, no matter how flexible, have always been developed so that ranchers did not have to heed complexity. The various developers of the many rotational grazing systems in the world today got their ideas originally from two people. However if we go back to the original works of those two people we find that they stressed that the principles would break down if applied in any rotational grazing system. Both original authors described a need to deal with complexity (or holism) through either "rational" grazing --meaning planned grazing-- or through a rigorous grazing planning process called holistic planned grazing. Is this semantics? Or is there a difference that matters between the words "system" and "process" when it comes to dealing with the complexity of ranges, plants, soils, micro-organisms, livestock, wildlife, etc.?

I will close by asking each of you to ponder these ideas. Perhaps somewhere within the paragraphs above we can find a good New Year's resolution.



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