

# Enjoying & Listening to Nature While Managing

By Paul Ohlenbusch

Nature is a beautiful thing if we take the time to enjoy it. Nature provides beauty and mystery through the vegetation and animals as well as the changing seasons. However, there is much more Nature has to offer.

If you approach Nature as a way of understanding how and why vegetation and animals change, a fascinating world is opened. As with people, Nature changes as impacts such as weather, animals, insects, and disease change.

Drought usually is one of the most apparent. Vegetation slows and eventually stops growing, but animals continue to eat. If animals continually

defoliate the plants, the plants can die.

Back in the September/October 2006 issue, the discussion pointed out perennial plants can only make food in their leaves, but they store excess food for the start of vegetative growth and growth following stress. Figure 1 shows the general use and storage for total nonstructural carbohydrates (TNC), an indicator of stored foods. Both warm and cool season perennial plants use stored food stuffs to initiate vegetative growth. Use continues until enough leaf area is present to meet current vegetative growth needs. When excess food stuffs are available, they are transported to

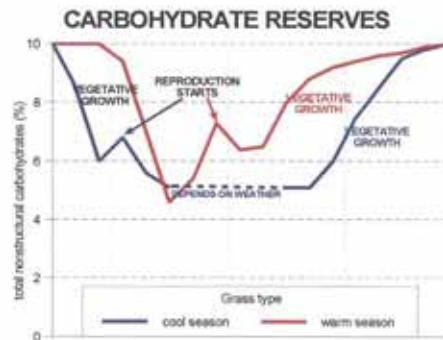


Figure 1. Food reserves stored in the lower stems, crown, and upper roots allow plants to begin growth each year and following excessive defoliation.

storage. Stored foods also are used to initiate reproductive stems. Once the reproductive stems are developed, storage resumes. If you want to kill a species, defoliate it from August to killing frost each year. There will be no storage and the plant literally starves and dies.


Observing what species and how much the animals are foraging is an important part of enjoying Nature. If a plant is defoliated to the extent it can't produce enough food stuffs, stored food is used to replace the leaves. Plants can die if they are defoliated repeatedly, either by grazing or weather damage. When the most desired plants are not available,

animals use poorer quality plants. Continued use of the poorer plants can reduce or damage them as well. Soon, only the poorest quality or undesirable plants are available for the animals, reducing animal performance (gain, body size, antler size, etc.). Also, erosion can increase.

One problem for many managers is to identify the subtle changes that occur on a day-by-day basis. When you are there every day (or every few days), changes are small and may be difficult to see. I worked with a ranch family where the brush problem was kept under control by the boys (kept them off the streets and out of the pool hall!). After the boys had been gone for some time, they came back and asked Dad where all the brush had come from. Dad hadn't noticed because he had been there every day, and the brush never seemed to change.

One way some managers have overcome this subtle change is by having a trusted and knowledgeable family member, neighbor, agency person or consultant visit occasionally to jointly evaluate what has changed since the last visit. The "outside" person will have a "picture" of what was present and

happening on the last visit and will usually be able to show the changes. When conducted in an open and positive manner, management adjustments can be suggested and made as needed. This evaluation should never be a negative or threatening situation.

I have done these visits for rancher friends and really enjoyed them. I always gained a better understanding of the natural processes they lived with as well as better understanding their management philosophies, styles and abilities. I think the visit with the manager usually helped me more than I helped them. There's nothing like learning from those who are living with, and managing, the land, vegetation and animals! 

**Next time** - looking back over the last two to three years and evaluating the management implications that may be coming.

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## Management Notes for July-August

Evaluate the status of desirable vegetation to insure overgrazing is not happening. July to killing frost is the most critical period for most perennial plants.

After the wet period much of the state has seen, many new broadleaf and woody plants may be growing. Determine if control is needed.

Evaluate rainfall history and current soil moisture status. If soil moisture is short, mid- to late-season plant growth may be limited. Limited or no soil moisture usually means little or no plant growth.

If plant growth has been excellent, avoid the urge to add animals to harvest the forage. This is the best time for plants to store food for next year, so stockpile forage for fall and winter, and look to the future.

Continue to monitor water sources for needed levels. Develop options if sources appear to be less than optimal.

Review and adjust grazing and economic management plans for 2007, adjust for current and past weather conditions, and changing economic factors to June 10, 2007 begin planning for 2008.