

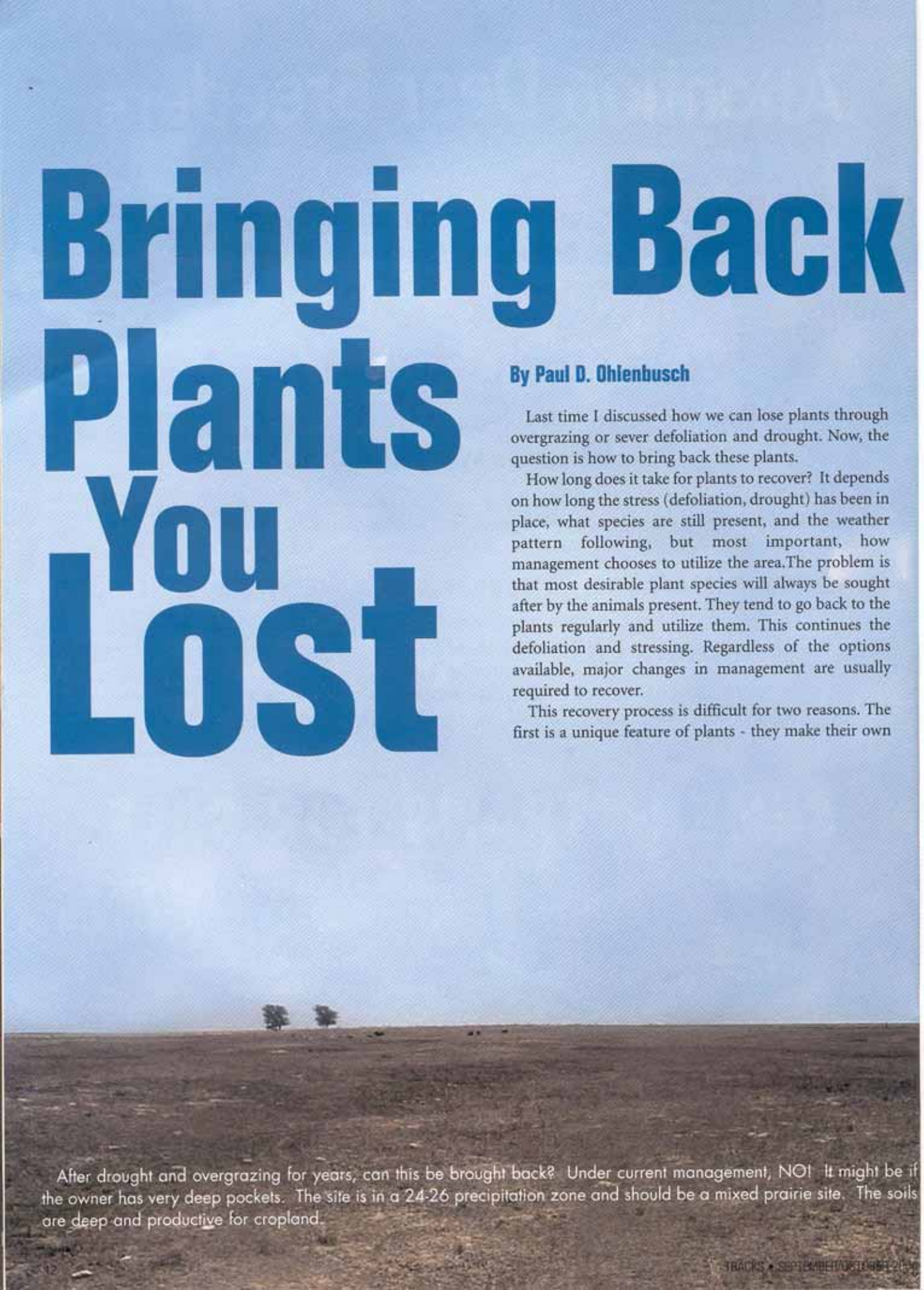
Bringing Back Plants You Lost

By Paul D. Ohlenbusch

Last time I discussed how we can lose plants through overgrazing or severe defoliation and drought. Now, the question is how to bring back these plants.

How long does it take for plants to recover? It depends on how long the stress (defoliation, drought) has been in place, what species are still present, and the weather pattern following, but most important, how management chooses to utilize the area. The problem is that most desirable plant species will always be sought after by the animals present. They tend to go back to the plants regularly and utilize them. This continues the defoliation and stressing. Regardless of the options available, major changes in management are usually required to recover.

This recovery process is difficult for two reasons. The first is a unique feature of plants - they make their own



After drought and overgrazing for years, can this be brought back? Under current management, NO! It might be if the owner has very deep pockets. The site is in a 24-26 precipitation zone and should be a mixed prairie site. The soils are deep and productive for cropland.

food! In the process of making their food, they produce oxygen. This occurs through photosynthesis. Photosynthesis takes carbon dioxide from the air plus water and nutrients from the soil and in the presence of sunshine and produces carbohydrates and oxygen. The carbohydrates and other minerals are used to produce the foodstuffs plants need for growth, reproduction, and storage.

A second reason recovery is difficult is competition. Competition between plants as well as between species. The competition is for space. That is space above ground for light and space below ground for root development. Of these, space for root development is probably the more important. As a general rule, if the soil is filled with living roots, it is difficult for new roots to penetrate and expand, particularly if a plant is weak. Without a good root system to supply water and nutrients, a plant will have a lot of difficulty recovering. Add in drought and it could be nearly impossible for recovery.


Another form of competition is between species or plant types. As an example, deer prefer browse first followed by forbs then grass (this varies by season). If only deer are present, grasses can dominate through a canopy that restricts sunlight reaching the ground. This can limit new plants growth and the growth of later emerging species. If one class of plants dominates, others will be suppressed.

For situations where desirable plants are still present but heavily utilized, reducing the utilization is required. This can be done through options such as reducing animal numbers (often

not the first choice) or using some form of rotational utilization. The goal of either approach is to allow the desirable plants to recover and build food reserves.

When the plants that are desired are rare or extremely stressed, recovery often requires extreme management changes. These changes are often difficult or financially impossible to implement. They include measures such as total deferment and greatly reduced utilization pressure. The latter is not the best chose from the plants view. With year-round, free ranging animals present, neither may be possible.

What makes recovery difficult is the animal's desire for a quality diet. They will visit the most desirable, high quality, plants regularly and continue the defoliation. The bottom line is, the animals that have stressed the plants will continue applying the stress. Once plants have been extremely stressed, its is difficult and probably impossible to bring them back without extreme management changes. As mentioned last time, it's better to prevent the problem than try to recover!

Want more information on grazing and browsing? Get *Grazing and Browsing: How Plants are Affected at Texas A&M* (Extension Publication B-6114) at your Extension office or on the internet at <http://tcebookstore.org/>. 

Next time: What's your management philosophy?

– Paul D. Ohlenbusch, Formerly Extension Grazingland Management Specialist, Kansas State University, now a Grazingland and Vegetation Management consultant.