By ROGER W. TACHA, **NRCS** Resource Conservationist OK, it DID rain some (finally!!) in most of northwest Kansas this spring and summer. Unlike the last four to five years, the GREEN in the grass almost hurts your eyes. Amazing!!

The warm-season grasses that are predominant on our range certainly are resilient. They appeared to be dead prior to this summer—but, nope, they ARE alive !! I didn't say totally healthy — I said "alive." These plants readily responded to moisture, but good recovery in our short and mid-grass country doesn't happen that quickly.

Blade widths of the grasses are not what they should be. Even though clipping/weighing projects that the Natural Resources Conservation Service (NRCS) is conducting in all counties are showing fairly good total production, it is primarily due to the grass plant's explosion of many fine-bladed leaves and seed stalks. This could be the plant's response to four to five year's drought suppression.

Another factor we CANNOT easily see is the root system beneath these plants. They would normally be several feet deep. However, after this drought, these structures have weakenedóthey are less dense and probably about half as long as they could be.

It will take at least THREE things to get the rangeland healthy: Moisture - Rest - Time

• MOISTURE — Yes, probably a nobrainer. If/when it rains, grass grows.

• REST — This is a big one because people

can control it. It's a direct management function. The range grasses in our part of the world can remain healthy with grazing. In fact they SHOULD be grazed. It's part of how they evolved.

However, they need at the very minimum, 30 percent rest during the growing season. Sixty to eighty percent is even more appropriate. It's all how the grass plants evolved and responded to grazing by early herbivores.

The rest is simply "reprieve from being bitten" more than once. And it can only happen if grazing animals are ABSENT after the initial grazing occurs — they are removed — possibly sold, lotted, or rotated to other pastures.

Even if stocking rates are severely reduced, individual animals will likely eat (bite) the same individual plants over and over. Thus, the plant doesn't get the rest required to recover and build root reserves. Instead, it's using up root reserves just to maintain and survive.

• TIME — Time is another factor to recognize and accept but cannot be controlled. The short- and mid-grass country simply doesn't get the 30-40 inches of annual moisture to recover from drought or severe grazing pressure in a year or two. In this 15-25 inch moisture zone, it could take many years to heal — maybe 10-15.

So, with the elements of moisture and time, we put up with them. But the rest/management factor is a TOOL that should be used to every advantage—not JUST in dry times, but ALL the time. It is relatively easy to apply to almost

any grazing scenario.

For more information about grasslands, go to your local U.S. Department of Agriculture's grams, visit the Kansas NRCS Web site at Service Center and talk to the NRCS or con-

servation district staff.

For more information about NRCS prowww.ks.nrcs.usda.gov.

11

## I here are keys to good windbreaks

## By MARK A. JANZEN, **NRCS Plant Materials Specialist**

Windbreaks are an important asset to our farmsteads and to the landscape. It takes many years of hard work to successfully establish and achieve the benefits of a windbreak. Benefits may include farmstead or livestock protection, wildlife cover, or add aesthetics to the landscape.

There are several key items that can help in the establishment of an effective windbreak. They include:

• Start the planning process for your windbreak early. The process can take up to a year or longer to properly plan and prepare a windbreak site. It is important to avoid areas that have buried or overhead utilities.

• Prepare the planting site at least 12 months prior to planting trees. This is especially true if the planting site is in sod. Initial tillage should be to a depth of at least 12 inches. Subsequent tillage can be completed at a shallower depth. Keep the site free of weeds. In erosion susceptible areas, a cover crop may need to be planted.

• Select tree and shrubs adapted to the plant-

ing site and for the intended purpose. Trees that need special care or that are susceptible to pests and disease should be avoided.

· Plant trees only under favorable conditions. Avoid hot, windy days for planting. Keep roots of plants damp during planting and donít plant into frozen soil. Root slurry is helpful in maintaining root moisture during planting.

• Plant trees at the proper depth into firm, moist soil conditions.

· Water trees after planting to help remove air pockets and maintain root zone moisture levels.

· Control weeds by using weed moisture barrier, mechanical, or chemical methods. Weed pressure reduces available moisture and limits tree growth. Remember to follow all chemical label requirements.

• Follow-up maintenance is very important. Dead or diseased trees need to be removed and replaced with healthy trees.

Although not guaranteed, the success of a properly planned and prepared tree planting site significantly increases the establishment success of your windbreak planting.

