

## Timing the Last Alfalfa Cutting

### AGRI-VIEWS

by Chuck Otte, Geary County Extension Agent

Growing perennial crops is a challenge. With annual crops you plant it, nurture it, it dies and you harvest it. End of story. But a perennial crop has to be nurtured and nurtured and nurtured because you need to keep it around for several years and perhaps a lifetime. Farmers that grow tree fruit or nut crops, or vineyards, even hops production have a special challenge. How do you manage the crop this year to make sure it is healthy and productive next year? Well, we don't have many of those tree and vine crops around here, but we do have perennial forage crops like brome grass, native hay and alfalfa. How you manage these late in the growing season will directly impact how they perform next year.

In an un-managed situation perennial plants grow through the growing season, produce fruits, nuts, seeds, whatever and then as the days grow shorter they slip into winter dormancy. One of the last things that these perennial plants do is to store up sufficient root reserves (carbohydrates) to get them through the winter and to produce enough growth, which may be leaves and/or stems. Plants need that the new growth to start producing food with those new leaves to grow more leaves and eventually replace the carbohydrate reserves that the plant used for early season growth. Some plants may be able to get enough leaves out in just a couple of weeks to accomplish this and for others it may take a couple of months. If a plant goes into the dormant period with insufficient food reserves it'll likely be somewhat slower to come out of dormancy, it may well lose root mass in the early growth phase and overall growth and biomass production will be reduced for that growing season.

While all of this is of some concern with our grass pastures, especially native grass pastures, it is even more so with alfalfa. Alfalfa has a big tap root that it stores root reserves in to provide new growth at the start of the growing season as well as after each cutting during the summer. Under typical summer growing conditions we'll cut alfalfa about every four to five weeks and usually wait until we just start to see new growth starting at the crown of the plant. Once we cut the alfalfa the carbohydrate reserve levels drop for about three weeks. At that time there's usually enough leaves that carbohydrate levels are starting to rise and at about four weeks of growth root reserve levels have been restored.

As we head into the end of the year we want to time our final cutting of alfalfa such that when the weather has gotten cold enough to put plants into dormancy they do so with carbohydrate levels fully restored, or a full tank of gas if you will. The problem is that we don't know when the alfalfa will go dormant but in general I feel that that's going to be around the first of November. Knowing that it will likely take four to five weeks to get those root reserves fully restored we are likely at that point that we need to get that last cutting off real soon! Naturally, after the alfalfa has gone dormant you can mow it or graze it without any harm.

Sometimes mother nature throws us a curve ball with an early frost or we time that last cutting badly and we've only got a couple weeks of growth when growth stops. If this happens one year, it's not the end of the world. Early season (first cutting) production the following year may be reduced and you may have more weed problems so dormant season herbicide applications as well as fertilizer applications can be very helpful. But several years of poor timing on the last cutting can hurt the stand to the point that you may have to tear the field up several years earlier than you'd planned on it. So plan on the conservative side and get that last cutting done sooner rather than later!