ALFALFA HARVEST

The weather during May of 2016 wasn’t conducive to proper alfalfa harvest management. In a normal year we should be swathing and baling our first cutting of alfalfa in Riley County about mid-May. This year, most of the alfalfa was harvested the first full week of June, or about two to three weeks late.

From the road, fields didn’t look overly mature; they weren’t full bloom. However, if you walked out into fields and got down on your hands and knees, there was considerable regrowth. Ideally, the first cutting of the season should be taken before the regrowth is tall enough to be cut off when the hay is swathed. But that didn’t happen this year. Fields were too soggy to drive on during the entire month of May.

Crown regrowth is initiated in response to replenished root reserves and is the signal that it is time to harvest the first cutting of alfalfa each year. This regrowth will be the second cutting so you don’t want to cut it off when it is three to six inches tall and make the plant start over. Instead, you want to harvest when that regrowth first appears so you don’t damage it and it can just keep on growing.

With the first cutting of the year, regrowth occurs before blooming. Most producers attempt to harvest subsequent crops at about one tenth bloom, but the first cutting should be taken before fields even start to bloom. Regrowth, not blooming, is the signal to harvest the first cutting of alfalfa each year.
The timing of second, third, fourth, and fifth cuttings is a balancing act. Harvesting at the bud stage yields higher protein hay, but research has shown that continually cutting at the bud stage will produce lower yields and fewer total pounds of protein per acre than cutting at one-tenth bloom.

On the other end of the spectrum, if a producer is wanting the highest yields possible and isn’t as concerned about protein, then harvesting at later maturity stages (half-bloom or later) would be the way to go. For a nice balance of protein and yield, most shoot for one-tenth bloom.

Cutting management for newly established stands of alfalfa is slightly different from established stands. The first cutting on new stands should be delayed to about one-half bloom to ensure replenishment of root reserves for rapid regrowth. In a new stand of alfalfa the regrowth isn’t likely to be tall enough to be cut off with the first cutting. After the initial first cutting at half-bloom, subsequent cuttings can be made at one-tenth bloom.

The timing of the last cutting in the fall is important too since replenishment of root reserves in the fall can affect performance the following year. If root reserves aren’t replenished before the fall killing freeze (20 to 25 degrees F), the stand is more susceptible to winter damage, resulting in slower initial spring growth.

The last cutting in the fall should be made so there are 8 to 12 inches of foliage, or 4 to 6 weeks of growth time before the average killing freeze date. This allows adequate time for replenishment of root reserves.

In the northern part of the state, the third week of September should be the target date for the last cutting before dormancy. Many times it is tempting to harvest in mid-October, and while this will work some years, it comes with some risks. Most years, a killing freeze will hit at just the wrong time, knocking back tender regrowth after a mid-October harvest and causing
diminished yields the following year.

Rather than taking another cutting in mid-October, I suggest grazing that final growth after a killing freeze, and after allowing time for dry-down so we can avoid bloat. Unless we have an exceptionally wet fall, grazing won’t hurt the stand. Mechanically harvesting after a killing freeze is another option, but it is often hard to get hay to dry down during cool fall days.

Looking at a calendar, if you harvested on June 5 and you harvest alfalfa every four weeks, you’ll be making your final cutting on September 26. In my world, that’s close enough. That will be my target date for my final cutting this fall.

If you have questions, you can reach me at the Riley County Extension Office at 785/537-6350. Or, you can send e-mail to gmcclure@ksu.edu.

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