2014 Alfalfa Harvest Alert Project Plans Made

U of M Extension is working with Central Minnesota Forage Council, agribusinesses and farmers on the Alfalfa Harvest Alert Project again this year. Cooperator sites have been arranged in Stearns, Benton, Morrison, and Wright Counties and being worked on in McLeod, Meeker, Wright, Scott and Carver Counties – similar to recent years.

For 2014, it looks like alfalfa is coming through the winter well. Growth is slow so far with cool weather. Cooperators will sample fields on Monday and Thursday mornings starting when the crop is 14 to 16 inches tall to establish a trend line. The first samples might be taken the week of May 19 this year.

We have found generally that when alfalfa gets to be 24 to 26 inches we can expect to see buds and test in a range where harvesting for better quality dairy hay makes sense if the weather looks favorable. With a late spring in 2013, harvesting dairy quality hay got underway the first week of June with the challenge of working between showers. We might be on a similar schedule this year.

**USING PEAQ AND SCISSORS CUT SAMPLE INFO**

Clipped samples are tested to determine Relative Feed Value (RFV), Neutral Detergent Fiber (NDF), Relative Feed Value (RFV) and other alfalfa quality factors related to harvest decisions. We note the stage of maturity and the height of the tallest stems to estimate quality and maturity. This is based on a “Predictive Equation for Alfalfa Quality” (PEAQ – or “peek”) tables listed below.

For this process, check a 2 foot square area at several locations in the field. Use the height of the tallest stem and the growth stage of the most mature stem to read the charts. “Hgt” is the height of the tallest stem in inches. “Veg” is vegetative stage. “Bud” is bud stage. “Flr” is Flower stage. The bud stage is identified by a hard flower bud in contrast to the softer bud of emerging leaves.

The RFV numbers listed corresponds to what you could expect from a fresh cut sample lab test. Because of harvest and storage losses, there could be a 15 to 25 point drop from what the PEAQ Chart or a fresh-cut sample test indicates. To get hay in the feed manager at 160 RFV, we might aim to start harvesting the PEAQ chart or fresh-cut test shows 180 or 185.

<table>
<thead>
<tr>
<th>Hgt</th>
<th>Veg</th>
<th>Bud</th>
<th>Flr</th>
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<tbody>
<tr>
<td>20</td>
<td>211</td>
<td>201</td>
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</tr>
<tr>
<td>22</td>
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<td>32</td>
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We can also use NDF as the gauge for harvest decisions. The goal might be to have hay in the manger with NDF less than 40. An NDF of 40 typically correlates with hay at about 150 RFV. NDF might increase 3 to 6 points from field samples results to what will be in the manger. To have hay in the manger at less than 40 NDF, we might aim to harvest when PEAQ charts or fresh cut tests are around 35.
Here are some numbers from the PEAQ “NDF” chart.

<table>
<thead>
<tr>
<th>Hgt</th>
<th>Veg</th>
<th>Bud</th>
<th>Flr</th>
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<tbody>
<tr>
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<td>40.8</td>
<td>42.4</td>
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GETTING INFORMATION FROM THIS PROJECT
To get the data from Scissors-Cut samples and PEAQ readings in the Stearns-Benton-Morrison County area:
KASM 1150 AM
KLTF 960 AM
Internet search for “Minnesota Extension Crop News”
Voice mail box by calling 1-800-964-4929 and enter 5081 when it answers.
Call 968-5077 if a local call to Foley.
Other counties might be working with other radio stations and information access points.

PEAQ Sticks for measuring alfalfa height and estimating quality based on stage of maturity are available from the Midwest Forage Association: http://www.midwestforage.org

More information about managing forage crops can be found at the U of M Extension Forage Website: http://www.extension.umn.edu/agriculture/forages

We appreciate farm and agribusiness cooperators and sponsors for this project, at this point Paynesville Cooperative, Total Agri Business Services, Scot Heilig Dairyland Seeds, Barry Visser and Jack Hales at Vita Plus, and United Farmers Cooperative at Waconia.