

## 1<sup>st</sup> Cutting Forage Quality Update **Cornell Cooperative Extension** | Central New York Dairy, Livestock and Field Crops

This is our second week of monitoring 1<sup>st</sup> cutting for quality in 2020. If you are not familiar with our procedures we use alfalfa height to predict Neutral Detergent Fiber (NDF) for alfalfa, alfalfa/grass mixed and grass stands. Alfalfa height has proven to be a reliable indicator of NDF values in the field.

Here are numbers that are helpful when using alfalfa and grass height as an indicator of NDF content. In general:

Begin cutting 100% grass stands should be cut when nearby alfalfa is 14 inches tall to achieve the desired 50% NDF.

Begin cutting 50/50 mixed alfalfa and grass stands when nearby alfalfa is 22 inches tall for the desired 44% NDF.

Begin cutting 100% alfalfa stands when alfalfa is 28 inches tall for the desired 40% NDF.

To achieve the desired NDF it is necessary to begin cutting at NDF values slightly lower than the desired value assuming some harvest and storage losses which the above alfalfa height values reflect. For example, 28-inch-tall alfalfa is closer to 38% NDF but you will need to start then to end up at 40% NDF.

Predicted days to cut are based on daily NDF increases for grasses of 1% point, 50/50 mixed stands of .8% points and alfalfa of .5% point. Typically, NDF increases about 0.8 to 1.2/day for grasses expecting the lower end of that range in cooler weather and the higher end in warm. Alfalfa NDF increases about 0.4 to 0.7/day again figuring the lower end of that range with cool temperatures and the higher in warm. Predictions are adjusted for the coming week's weather and we are assuming normal temperatures and growth. Seems optimistic but we will trust the forecast for a few 70°F days in the next week!

In the attached tables locations around the region are listed where we have measured alfalfa height. You can use the location and elevation as a guide to conditions that may be similar to your own. Always check your fields to verify your heights and conditions!

**We have now had a second week of record or close to record low growing degree days for alfalfa (Base 41) across our region. The fifteen-year average for this date across our region is 321 GDDs since March 1 and we have only had 161 GDDs Base 41 through May 11 and only 9 GDDs since last week. Since last Tuesday alfalfa height barely increased 1 inch (8.5 to 9.4 inches) and about 4.5 inches in two weeks. We expect NDF accumulation to pick up this week with days above 70°F and correspondingly we have shortened the days to a predicted harvest date compared to last week.**

**We would expect seventeen of our thirty-two fields (53%) if they had all grass to be ready for harvest this coming week. This is where you really need to be checking your own fields because grasses will grow at cooler temperatures than alfalfa and may be a little out of sequence given this spring's temperatures. If you have grass fields 20-21 inches tall they are ready for harvest. The closest 50/50 mixed field date for harvest we would have would be a week away at current temperatures.**

**As last week right now if soil conditions remain dry stay focused on corn planting unless you have considerable all grass or mostly grass acreage in in the locals we have identified as might be ready to go.**

Summary of Alfalfa Height and Prediction of % NDF – May 12, 2020

County	Town	Road Name	Elevation	Alfalfa Height Inches	Predicted Grass % NDF	Predicted 50/50 Mix % NDF	Predicted Alfalfa % NDF	Predicted Date to Cut Grass	Predicted Date to Cut Mix	Predicted Date to Cut Alfalfa
Chenango	Bainbridge	Ives Settlement Road	1650	5	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Chenango	Greene	County Road 32	950	12	47.4	34.5	26.8	5/14/20	5/23/20	6/3/20
Chenango	New Berlin	State Route 8	1065	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Chenango	Smyrna	County Road 20	1190	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Fulton	Johnstown	State Route 67	715	8	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Columbia	Dugan Road	1559	7	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Columbia	McKoons Road	1450	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	Bellinger Road	902	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	Newville Road	740	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	State Route 5S	437	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Madison	Brookfield	Furman Mills Rd	1350	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Madison	Fenner	Nelson Road	1470	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Madison	Hamilton	State Route 12	1210	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Madison	Oneida	Middle Road	565	12	47.4	34.5	26.8	5/14/20	5/23/20	6/3/20
Madison	Sullivan	Ridge Road	973	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Montgomery	Amsterdam	Swart Hill Rd.	545	13	48.2	35.4	27.5	5/13/20	5/22/20	6/2/20
Montgomery	Florida	Cemetary Street	550	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Montgomery	Glen	Van Epps Rd	522	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Montgomery	Minden	Airport Road	666	4	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Montgomery	Minden	River Road	420	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Montgomery	Mohawk	Martin Road	440	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Montgomery	Palatine	Dygert Road	600	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Otsego	Cherry Valley	Keller Road	1390	7	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early

*First Cutting Project is being conducted by Cornell Cooperative Extension of Chenango, Fulton, Herkimer, Madison, Montgomery, Otsego, Saratoga and Schoharie Counties and the Central New York Dairy, Livestock and Field Crops Team*

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Otsego	Middlefield	County Road 33	1241	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Otsego	Middlefield	State Route 166	1256	10	45.6	32.8	25.4	5/16/20	5/26/20	6/6/20
Otsego	Unadilla	County Road 1	1058	13	48.2	35.4	27.5	5/13/20	5/22/20	6/2/20
Saratoga	Northumberland	Callahan Road	280	13	48.2	35.4	27.5	5/13/20	5/22/20	6/2/20
Saratoga	Northumberland	King Road	315	13	48.2	35.4	27.5	5/13/20	5/22/20	6/2/20
Saratoga	Saratoga	County Road 68	440	12	47.4	34.5	26.8	5/14/20	5/23/20	6/3/20
Schoharie	Cobleskill	Warnerville Cutoff	944	11	46.5	33.7	26.1	5/15/20	5/24/20	6/4/20
Schoharie	Middleburgh	Amelia Lane	626	16	50.8	38.0	29.6	5/11/20	5/19/20	5/28/20
Schoharie	Wright	Abrams Road	1149	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early

Note Given the COVID 19 outbreak, to keep our risk of exposure down we have reduced the number of fields we are measuring from 65 to 32. Apologies to those whose fields we have measured in the past.