

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

This is our first 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 cooler temperatures and slower than normal growth.

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!

**May of 2020 brings 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 242 GDDs since March 1 and we have only had 152 GDDs Base 41 through May 5. We need 41°F to have alfalfa growth and in the next week the forecast is for at least three days in the 30-40s °F. Since our dry run last Tuesday we have only increased alfalfa height 3.5 inches (5 to 8.5 inches). We expect NDF accumulation to slow this week and correspondingly we have increased the days to a predicted harvest date.**

**We would expect twelve of our thirty-two fields (38%) if they had all grass to be ready for harvest this coming week. However, most other fields are far from being ready. Right now the closest 50/50 mixed field date we would have would be over ten days away at current temperatures. This could change if we get some warmer weather after this coming weekend which has some snow in the forecast. Will have a better handle on that next Tuesday, May 12 when we check fields again.**

**Right now if soil conditions remain dry stay focused on corn planting unless you have considerable all grass acreage in a few of the locals we have identified as might be ready to go.**

Summary of Alfalfa Height and Prediction of % NDF – May 5, 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	4	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Chenango	Greene	County Road 32	950	11	46.5	33.7	26.2	5/9/20	5/19/20	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	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Columbia	McKoons Road	1450	4	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	Bellinger Road	902	7	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	Newville Road	740	8	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	State Route 5S	437	8	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Madison	Brookfield	Furman Mills Rd	1350	5	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	25.5	5/10/20	5/21/20	6/5/20
Madison	Oneida	Middle Road	565	8	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Madison	Sullivan	Ridge Road	973	6	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Montgomery	Amsterdam	Swart Hill Road	545	12	47.4	34.5	26.8	5/8/20	5/18/20	6/2/20
Montgomery	Florida	Cemetery Street	550	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Montgomery	Glen	Van Epps Rd	522	10	45.6	32.8	25.4	5/10/20	5/21/20	6/5/20
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	5/10/20	5/21/20	6/5/20
Montgomery	Mohawk	Martin Road	440	10	45.6	32.8	25.4	5/10/20	5/21/20	6/5/20
Montgomery	Palatine	Dygart 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	5/10/20	5/21/20	6/5/20
Otsego	Middlefield	State Route 166	1256	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Otsego	Unadilla	County Road 1	1058	12	47.4	34.5	26.9	5/8/20	5/18/20	6/1/20
Saratoga	Northumberland	Callahan Road	280	12	47.4	34.5	26.8	5/8/20	5/18/20	6/2/20
Saratoga	Northumberland	King Road	315	12	47.4	34.5	26.8	5/8/20	5/18/20	6/2/20
Saratoga	Saratoga	County Road 68	440	11	46.5	33.7	26.1	5/9/20	5/19/20	6/3/20
Schoharie	Cobleskill	Warnerville Cutoff	944	8	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Schoharie	Middleburgh	Amelia Lane	626	14	49.1	36.3	28.2	5/6/20	5/16/20	5/29/20
Schoharie	Wright	Abrams Road	1149	8	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.

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