

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

This is our third 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

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 third week of record or close to record low growing degree days for alfalfa (Base 41) across our region but warmer predicted temperatures look to get us off record lows this coming week. The fifteen-year average for this date across our region is 429 GDDs since March 1 and we have only had 240 GDDs Base 41 through May 19 but 79 GDDs since last week a 70 GGD improvement. Since last Tuesday alfalfa height increased 4.1 inch (9.4 to 13.5 inches) a more normal increase. We expect NDF accumulation to pick up this week with days around 80°F predicted this weekend.**

**We would expect twenty-seven of our thirty-two fields (87%) if they had all grass to be ready for harvest this coming week. Cannot emphasize enough that if you have all grass or mostly grass fields get out and look at your particular situation. We are also predicting six 50/50 mixed fields should be ready for harvest before our next monitoring date but again assess your situation. Better to underestimate the amount of alfalfa cut earlier and gain quality than to assume more and then have lower grass quality overrides the amount of legume actually present.**

**We have been suggesting keeping after the corn planting but this week it will be time to consider mowing if you have grass stands or mixed stands.**

Summary of Alfalfa Height and Prediction of % NDF – May 19, 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	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Chenango	Greene	County Road 32	950	16	50.8	38.0	29.6	5/18/20	5/26/20	6/4/20
Chenango	New Berlin	State Route 8	1065	15	50.0	37.1	28.9	5/19/20	5/27/20	6/6/20
Chenango	Smyrna	County Road 20	1190	13	48.2	35.4	27.5	5/20/20	5/29/20	6/9/20
Fulton	Johnstown	State Route 67	715	13	48.2	35.4	27.5	5/20/20	5/29/20	6/9/20
Herkimer	Columbia	Dugan Road	1559	11	46.5	33.7	26.1	5/22/20	5/31/20	6/11/20
Herkimer	Columbia	McKoons Road	1450	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Herkimer	Danube	Bellinger Road	902	12	47.4	34.5	26.8	5/21/20	5/30/20	6/10/20
Herkimer	Danube	Newville Road	740	11	46.5	33.7	26.1	5/22/20	5/31/20	6/11/20
Herkimer	Danube	State Route 5S	437	14	49.1	36.3	28.2	5/19/20	5/28/20	6/7/20
Madison	Brookfield	Furman Mills Road	1350	8	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Madison	Fenner	Nelson Road	1470	10	45.6	32.8	25.4	5/23/20	6/2/20	6/13/20
Madison	Hamilton	State Route 12	1210	14	49.1	36.3	28.2	5/19/20	5/28/20	6/7/20
Madison	Oneida	Middle Road	565	13	48.2	35.4	27.5	5/20/20	5/29/20	6/9/20
Madison	Sullivan	Ridge Road	973	12	47.4	34.5	26.8	5/21/20	5/30/20	6/10/20
Montgomery	Amsterdam	Swart Hill Road	545	19	53.4	40.6	31.6	5/15/20	5/23/20	5/31/20
Montgomery	Florida	Cemetary Street	550	15	50.0	37.1	28.9	5/19/20	5/27/20	6/6/20
Montgomery	Glen	Van Epps Rd	522	15	50.0	37.1	28.9	5/19/20	5/27/20	6/6/20
Montgomery	Minden	Airport Road	666	9	Too Early	Too Early	Too Early	Too Early	Too Early	Too Early
Montgomery	Minden	River Road	420	17	51.7	38.8	30.2	5/17/20	5/25/20	6/3/20
Montgomery	Mohawk	Martin Road	440	12	47.4	34.5	26.8	5/21/20	5/30/20	6/10/20
Montgomery	Palatine	Dygart Road	600	11	46.5	33.7	26.1	5/22/20	5/31/20	6/11/20
Otsego	Cherry Valley	Keller Road	1390	11	46.5	33.7	26.1	5/22/20	5/31/20	6/11/20

*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	15	50.0	37.1	28.9	5/19/20	5/27/20	6/6/20
Otsego	Middlefield	State Route 166	1256	15	50.0	37.1	28.9	5/19/20	5/27/20	6/6/20
Otsego	Unadilla	County Road 1	1058	18	52.6	39.7	30.9	5/16/20	5/24/20	6/2/20
Saratoga	Northumberland	Callahan Road	280	19	53.4	40.6	31.6	5/15/20	5/23/20	5/31/20
Saratoga	Northumberland	King Road	315	19	53.4	40.6	31.6	5/15/20	5/23/20	5/31/20
Saratoga	Saratoga	County Road 68	440	17	51.7	38.8	30.2	5/17/20	5/25/20	6/3/20
Schoharie	Cobleskill	Warnerville Cutoff	944	15	50.0	37.1	28.9	5/19/20	5/27/20	6/6/20
Schoharie	Middleburgh	Amelia Lane	626	Cut						

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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