Cornell University
Cooperative Extension
Northwest New York Dairy, Livestock & Field Crops Team

Summary of Alfalfa Height and Prediction of % NDF- May 17, 2017

1st Cutting Forage Quality Update

We are into the third week of monitoring 1st cutting for quality this year. Our procedure consists of using 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.

Height indicators alfalfa and grass for NDF content are below:

In general we say 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 desired 40% NDF.

Predicted days to cut are based on daily NDF increases for grasses of 1% point, 50/50 mixed stands of 0.8% points and alfalfa of 0.5% point. NDF usually 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 warmer. Alfalfa NDF increases about 0.4 to 0.7/ day again depending on temperatures. Predictions are adjusted for the coming week's weather and right now assuming normal growth.

In the attached spreadsheet 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 farm.

The 2017 hay crop is ahead of 2016 first cutting. For 2017 on May 17, 2017 the alfalfa averaged 20 inches tall and only 2% of the fields were 18 inches or less. Triticale and grass fields should be knocked down at this point otherwise you will be losing quality. It is important that you get first cutting off in a timely manner, so if it comes down to making a choice between planting corn or getting first cutting, opt for the first cutting. The warmer summer weather may help the corn but you can't get first cutting quality back and you may lose the advantage of adequate soil moisture to gain a quality second harvest.

Mixed stand harvest should start by the weekend with pure alfalfa stands (28 inches for desired 40% NDF) to follow a week later.

	Name	Jodi Letham	Date	########						
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
Genesee	Pavilion	Stewart Road	1010	18	52.6	39.7	31.1	5/14/17	5/22/17	5/30/17
Livingston	Avon	Jenks Road	830	20.4	54.6	41.8	32.8	5/12/17	5/19/17	5/27/17
Livingston	Avon	Bronson Hill Road	910	20.4	54.6	41.8	32.8	5/12/17	5/19/17	5/27/17
Seneca	Waterloo	Yellow Tavern Road	590	21.6	55.7	42.8	33.6	5/11/17	5/18/17	5/25/17
Seneca	Waterloo	Yost Road	550	21	55.1	42.3	33.2	5/11/17	5/19/17	5/26/17
Wayne	Manchester	Outlet Road	570	22	56.0	43.2	33.9	5/10/17	5/18/17	5/25/17
Wayne	Manchester	Stevens Road	590	20.2	54.5	41.6	32.6	5/12/17	5/19/17	5/27/17
Wayne	Manchester	Co. Rd 7	550							
Ontario	Hopewell	Spangle Road	860	16.8	51.5	38.7	30.3	5/15/17	5/23/17	6/1/17
Ontario	Hopewell	Spangle Road	740	18	52.6	39.7	31.1	5/14/17	5/22/17	5/30/17
Ontario	Hopewell	Co. Rd 20 & Jensen Rd	840	21	55.1	42.3	33.2	5/11/17	5/19/17	5/26/17
Ontario	Hopewell	Ontario Street	740							

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Crop Alert

May 17, 2017

Mike Stanyard & Jodi Letham, Regional Agronomists, Cornell Cooperative Extension

Winter Tritcale Harvest

Many fields of winter triticale are being mowed and harvested this week. The cool wet weather has delayed harvest a little bit and some of the plants are into growth stage 10 (awns are visible and pushing out of the boot). Many heads will be fully visible by the end of the week with this hot weather. Yields will be higher but prime quality will have passed.

Wide Swath Same Day Harvest Tips – Tom Kilcer, Advanced Ag Systems

Wide swath same day haylage **needs sun for photosynthetic drying**. In the sun the plant takes moisture and carbon dioxide to make sugars and oxygen, drying the plant faster than any machine manipulation can do. The cool, CLOUDY, and damp conditions coupled with some very high yields (thick swaths) will make it more of a challenge to harvest. To dry for silage you will need to wide swath (swath width greater than 80% of cutterbar) **and** use a tedder at least once. We suggest **increasing the length of cut to an inch**. Our field research has found this dramatically **reduces the leachate** from the silos and, like bmr products, gives **more effective rumen fiber** to get extent of digestion for this rapidly digestible product. As with bmr sorghums that are also wet and high sugar, adding a **good straight homolactic bacteria** type product to bring the pH down fast and actually limit off fer-mentation by wild bacteria. There are some specifically designed for these wet, high sugar forages that will **inhibit** the tendency to produce clostridia and butyric acid. This is not the L. buchneri types for these wet crops. L. buchneri is for drier forage. The only caution is that if we get a week of cloudy rainy weather and you mow on the first sunny day, the crop will probably NOT be high in sugar for rapid fermentation. You are on thin ice then and I don't know what will happen.