



ACS

Agricultural Consulting Services

1st Cutting Newsletter 2016

Forage Scissor - Cut Results

Measuring is the only way to know where the true %NDF of your alfalfa stand is. This year this is true more than ever. We have lots of quick and easy tools that help us estimate where %NDF might be in the stand but this year our very cool spring peppered with periodic hard frosts and even snow has changed how accurate those tools might be because alfalfa is damaged and growing differently than usual while grasses are maturing at their usual calendar pace but with less biomass. To demonstrate how different this year is than other years I took a look at our Base 41 Growing Degree Days. Using the station in Auburn, NY as an example, in 2012 we had 639 GDD on May 16th, in 2013 we had 463 GDD by the 16th, in 2014 436, in 2015 496 and this year we only had 375 GDD on May 16th. With our current and projected weather patterns that predicts the target 680 GDD is still 3 weeks away! The second week of June! This was the same for Glen Falls, NY and Burlington, VT; still 3 weeks away. In Batavia, NY it was much less at 1.5 weeks away.



In times like these we discuss the management implications of different decisions; we look to people with lots of years of experience to see what their advice is. Jerry Cherney, Cornell's E.V. Baker Professor of Agriculture and one of New York's go-to people for mixed-stand management for high quality dairy forage says;

"Alfalfa growth is generally stunted this spring, while grass is moving along, probably heading about normally, but probably shorter than normal.

As far as spring harvest, it depends on the percent grass in the mixture:

- More than 50% grass in the stand: Harvest like a grass stand and ignore the alfalfa. Orchardgrass is in boot stage now in many locations.
- Less than 25% grass in the stand: Wait for a little more alfalfa growth to minimize chances of damaging alfalfa stand. Grass will be more mature than normal.
- 25-50% grass: Something in between. Harvest a little earlier than normal for alfalfa.

Not clear if the alfalfa is going to bolt once temperatures rise or just start growing at a normal pace. Most likely alfalfa height will not have a normal relationship with NDF as it typically does. Keep in mind that the alfalfa has continued to mature (increase in fiber, lignify) even if it is not growing upward much."

Take home for me:

1. If alfalfa height isn't likely to have a normal relationship with %NDF and grasses and alfalfa growth are not matched like they might be in a normal year, we need to measure.
2. If what we measure is a long way off from what we want and general rules of thumb do not apply this year, we need to measure a second time.

On April 16th ACS fanned our people across the state and took forage samples from 44 fields. We also recorded plant height and stage data to calculate the PEAQ estimation for %NDF. The result of the measured Scissors Cut and data for the PEAQ estimation are shown in Table 1.

TABLE 1

County	Town	State	Crop	Growth Stage**	Plant Height	% NDF (NIR)
Washington	Schaghticoke	NY	alfalfa	early bud	26	39.1
Onondaga	Fabius	NY	alfalfa	late veg	18	27.5
Ontario	Seneca	NY	alfalfa	early bud	20	30.5
Ontario	Seneca	NY	alfalfa	early bud	19	32.9
Ontario	Stanley	NY	alfalfa	early bud	23	29.9
Ontario	Stanley	NY	alfalfa	early bud	22	30.3
Cortland	Harford	NY	clover/grass	early flag	19	36.8
Cortland	Harford	NY	alfalfa/grass	mid veg	12	33.2
Cortland	Harford	NY	alfalfa/grass	mid veg	17	39.3
Tompkins	Groton	NY	alfalfa/grass	late veg	18	26.3
Cayuga	Auburn	NY	alfalfa/grass	early bud	24	37.7
Cayuga	Belltown	NY	alfalfa/grass	late veg	20	32.1
Cayuga	Genoa	NY	alfalfa/grass	late veg	19	28.1
Cayuga	King Ferry	NY	alfalfa/grass	late veg	26	28.6
Cayuga	King Ferry	NY	alfalfa/grass	late veg	23	29.8
Cayuga	King Ferry	NY	alfalfa/grass	late veg	21	34.4

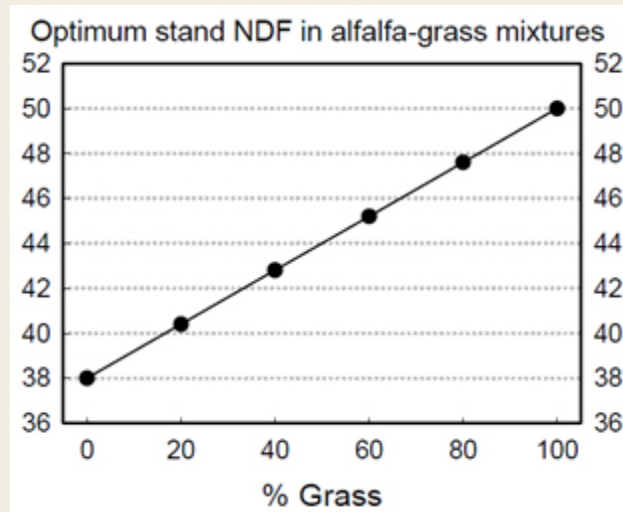
Cayuga	King Ferry	NY	alfalfa/grass	late veg	24	37.3
Cayuga	Ledyard	NY	alfalfa/grass	late veg	18	33.9
Cayuga	Scipio	NY	alfalfa/grass	late veg	21	30.7
Cayuga	Union Springs	NY	alfalfa/grass	early bud	18	38.7
Cayuga	Venice	NY	alfalfa/grass	late veg	21	29.6
Wayne	Savannah	NY	alfalfa/grass	early bud	18	38.0
Livingston	Geneseo	NY	alfalfa/grass	early bud	18	31.7
Livingston	Geneseo	NY	alfalfa/grass	late veg	20	33.6
Livingston	Sparta	NY	alfalfa/grass	late veg	16	36.5
Livingston	Wayland	NY	alfalfa/grass	late veg	15	32.4
Genesee	Batavia	NY	alfalfa/grass	early bud	15	35.5
Washington	Schaghticoke	NY	grass/alfalfa	early bud	26	43.0
Tompkins	Lansing	NY	grass/alfalfa	early boot	20	50.2
Wayne	South Butler	NY	grass/alfalfa	boot	22	51.3
Wayne	Wolcott	NY	grass/alfalfa	boot	22	39.0
Livingston	Caledonia	NY	grass/alfalfa	late veg	24	45.2
Livingston	Avon	NY	grass/alfalfa	late veg	20	47.9
Washington	Schaghticoke	NY	grass	boot	26	52.5
Washington	Eagle Bridge	NY	grass	flag leaf	29	48.8
Chenango	Lincklaen	NY	grass	early boot	20	38.1
Onondaga	Fabius	NY	grass	early boot	22	50.6
Cortland	Preble	NY	grass	flag leaf	18	49.7
Broome	Whitney Point	NY	grass	flag leaf	21	44.2
Livingston	Geneseo	NY	grass	early boot	20	44.2
Genesee	Batavia	NY	grass	boot	18	50.4
Washington	Greenwich	NY	triticale	flag leaf	33	50.5
Washington	Eagle Bridge	NY	triticale	boot	38	53.6
Cortland	Preble	NY	triticale	flag leaf	25	46.3
Cortland	Harford	NY	triticale	flag leaf	26	47.4

Result Summary

Forage samples collected on Tuesday May 17, 2016 show that alfalfa and alfalfa/grass mixes have a current %NDF average of 32.1% and 33.5% respectively. If we estimate 0.5 - 0.7 %NDF points per day and a %NDF goal of 43%-47% than we still have 14- 20 days to go for mixed stands! Grass/alfalfa and pure grass stands have an average of 46 and 47 %NDF respectively. If we use a goal of 48%-55% then we should be starting to harvest those fields tomorrow.

General %NDF guidelines for high quality dairy feed are as follows:

Stand Mixture	%NDF Goal
Pure Alfalfa	38% - 42%
Mixed Stands	43% - 47%
Grass Stands	48% - 55%



Optimum NDF varies depending on the percent of alfalfa and grass in the stand. (source: Cherney and Cherney, Grass of Dairy Cows)

In addition to the goal %NDF other factors must be considered to pick a start date for 1st cutting for the farm such as current farm inventories, weather windows and field conditions. Knowing the % NDF gives you one piece of information to guide one of the most important decisions you make in your forage program this year!

Remember measure %NDF in your fields this year. If your forage needs more time, measure again. ACS will be conducting a second scissor cut next week in order to include our Vermont and North NY clients. Call us if you want your fields measured too.

Happy spring and be safe!

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ACS recognizes the value of this timely information to our clients and subsidizes the cost of this project and works with area labs to negotiate a low-cost analysis in order to conduct this program. A special THANKS to the Dairy One Forage Lab for analyzing our New York samples and Poulin Grain for free analysis of our Vermont samples!



Dairy One
Forage Laboratory



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