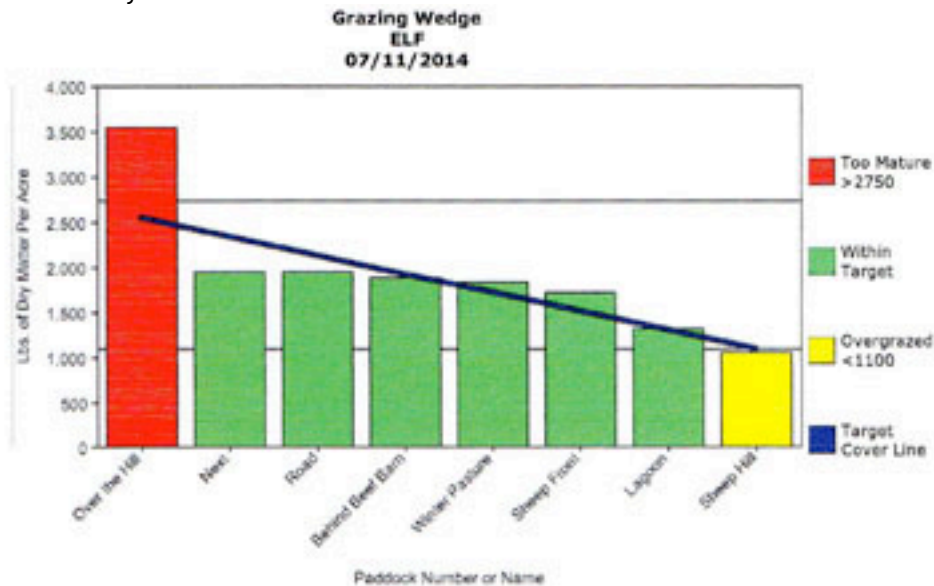


NNYADP 2014 Beef Project APPENDIX A. Figure 1. Grazing wedge example from University of Missouri website: grazingwedge.missouri.edu; photo: Betsy Hodge, CCE St. Lawrence County.



Summary of KEY INDICATORS for Grazing Management and Animal Performance		
Livestock Class		
Estimated Growth Rate (lbs of dry matter accumulation per acre per day)		16
Cover when cows turned onto a paddock (lbs DM/acre)	Actual: 3547	Ideal: 2750
Cover when cows removed from paddock (lbs DM/acre)	Actual: 1066	Ideal: 1100
Average Pasture Cover (lbs DM/acre)	Actual: 1978	Ideal: 1925
Rotation length current (days till cows return to given paddock)		
Milk production (lbs per day)		
Lbs of hay for milking herd currently being fed (per cow per day)		
Lbs of grain for milking herd currently being fed (per cow per day)		
Lbs of hay for dry cows currently being fed (per cow per day)		
Lbs of grain for dry cows currently being fed (per cow per day)		
Critical issues right now:		

Paddock	Dry Matter	Species	Acres	Tons of Feed in Paddock
Over the Hill	3547	Cool Season	6.99	12.396765
Next	1947	Cool Season	3.24	3.15414
Road	1947	Cool Season	2.4	2.3364
Behind Beef Barn	1893	Cool Season	3.7	3.50205
Winter Pasture	1846	Cool Season	5.68	5.24264
Sheep Front	1726	Cool Season	2.36	2.03668
Lagoon	1327	Cool Season	7.6	5.0426
Sheep Hill	1066	Cool Season	4.6	2.4518

NNYADP 2014 Beef Project Appendix B.

Beef Comments, August 2014: Using a Plate Meter to Manage Pastures:

Project Update; Betsy Hodge, Livestock Educator, St. Lawrence County.

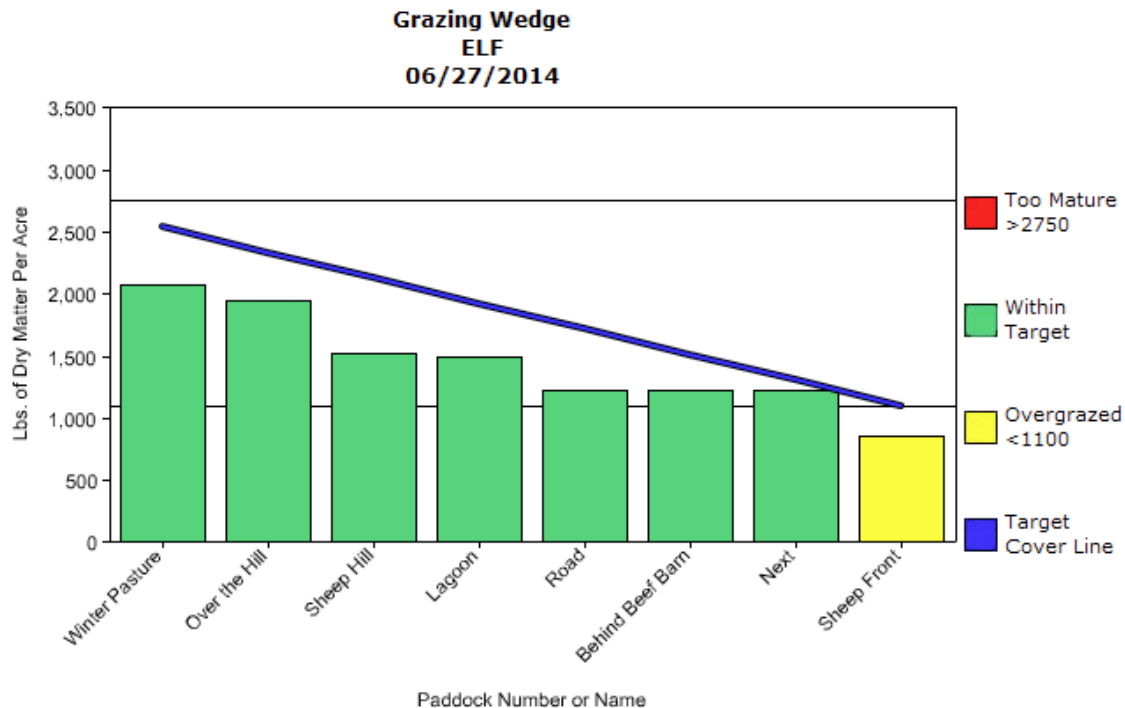
Pasture management is a key factor in the success of a backgrounding operation and could improve productivity cow-calf operations. As part of a Northern New York Agriculture Development grant, Ron Kuck, Cornell Cooperative Extension (CCE), Jefferson County, Betsy Hodge, CCE St. Lawrence County and Pete Hagar, CCE Clinton County have been working with some northern New York (NNY) beef farmers using a rising plate meter (RPM) to improve their pasture management, both quality and quantity. To be accurate for a specific region, the RPM has to be calibrated for the type of forages in NNY; as such forage samples are being collected to calibrate the RPM.

A RPM is an instrument with a round plate on the bottom that can move up and down on its handle (see picture below). The handle has little grooves that cause it to “click” as it goes up. It also has a counter that counts the clicks up. So we do fifty “plops” with the RPM and then make an average of the number of clicks per plop. Then we have an equation we use to figure out the dry matter per acre of pasture. One of the things we are doing with the RPM is to take forage samples in the same places where the RPM is used to compare the figures we get with the RPM. Using actual values and RPM values, we can develop an equation that is more accurate for our conditions.



Using a plate meter to estimate forage yield.

In the meantime, we are putting the information into a website at the University of Missouri (<http://grazingwedge.missouri.edu/>) that makes a grazing wedge (look under the farm ELF, pick a date and click on the Grazing Wedge).



The grazing wedge is a key tool for managing feed on a pasture-based farm. It visually represents the quality and quantity of forage dry matter available both now and during the next round of grazing. You enter the different dry matters per acre of your paddocks and it puts them in a graph from highest dry matter to lowest. There are two lines indicating over maturity and over grazing. Normally the paddocks will fall in the order you are grazing them. It can be used to see when a paddock is ready for grazing. If you cut a hay field with the idea of grazing the re-growth you can have an idea when it is at its peak. By taking a measurement each week, you can see the progression of your paddocks and your utilization.

Another purpose for the RPM is to design your pasture paddocks. If you are breaking up a large pasture you can use your animals units to figure out how much dry matter you need and then make your paddocks according to how many days you want your animals to be in the paddock. For example, Ron Kuck used the RPM to design paddocks sizes for a stocker operation. You will notice on ours that the “Sheep Front” pasture is over grazed. In this case, we over-grazed it on purpose to make it easier to do the weed wiper demonstration.

I should mention that you can’t use the data from the RPM without looking at the pasture. An estimated yield of 2400 lb. of DM/acre is great unless it is all thistles, nut sedge or something else your stock won’t eat. So the RPM gives you a good estimate of the dry matter per acre in the real grazing areas.

For more information, contact Betsy Hodge, Livestock Educator, CCE – St. Lawrence County, bmf9@cornell.edu, 315-379-9192, or go www.nnyagdev.org.