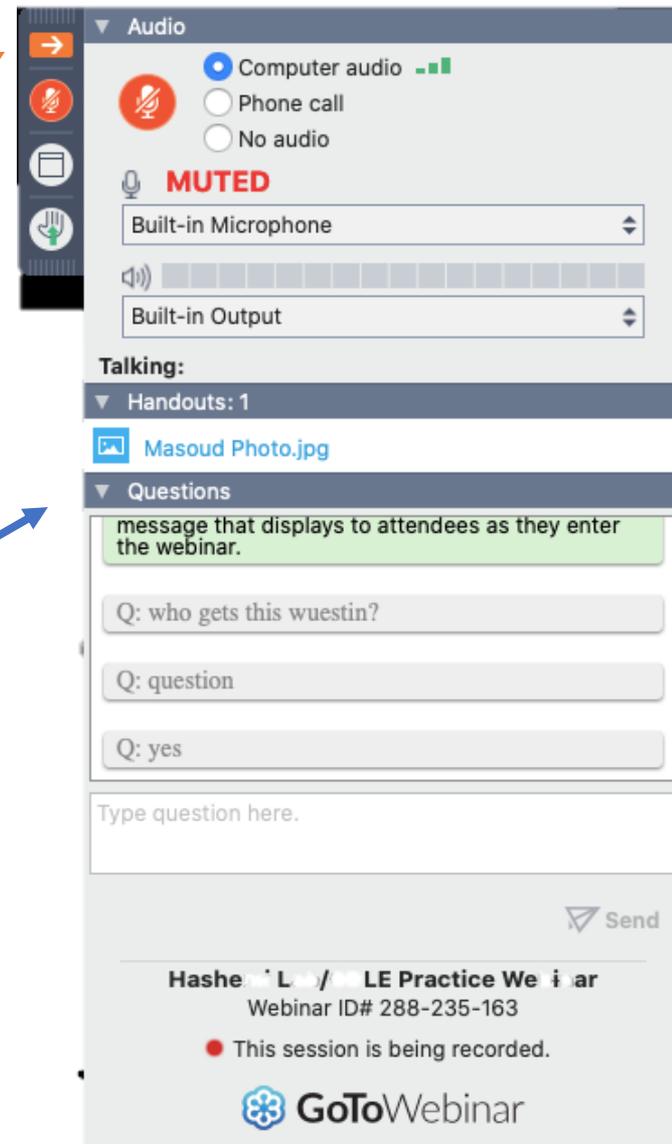


Welcome to the Webinar

The webinar will begin at 7:00 PM. We are scheduled to end at 8:00 but will keep going as late as 8:30 if there are lots of questions.

Housekeeping

- To open the full webinar panel, click the **white arrow in the orange box**.
- Audience members are currently muted by the host. Audience members are not visible to others.
- You can ask a question by **typing it into the question box**. The host will read your question out loud to the presenter and the audience. We will hold questions until the end, but you can enter them anytime.
- *Please note: the webinar is being recorded and will be posted for future viewing.*



The screenshot shows a webinar interface. At the top, there's an 'Audio' section with 'Computer audio' selected and a 'MUTED' status. Below that, there's a 'Talking:' section and a 'Handouts: 1' section showing 'Masoud Photo.jpg'. The 'Questions' section is expanded, showing a green message box: 'message that displays to attendees as they enter the webinar.' Below this are three question input fields with the text 'Q: who gets this wuestin?', 'Q: question', and 'Q: yes'. At the bottom, there's a 'Type question here.' input field and a 'Send' button. The footer displays 'Hashe L / LE Practice Webinar', 'Webinar ID# 288-235-163', and a red dot indicating 'This session is being recorded.' with the GoToWebinar logo.

Partners and Grant Agencies



The Center for
Agriculture,
Food and the
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Upper Susquehanna Coalition



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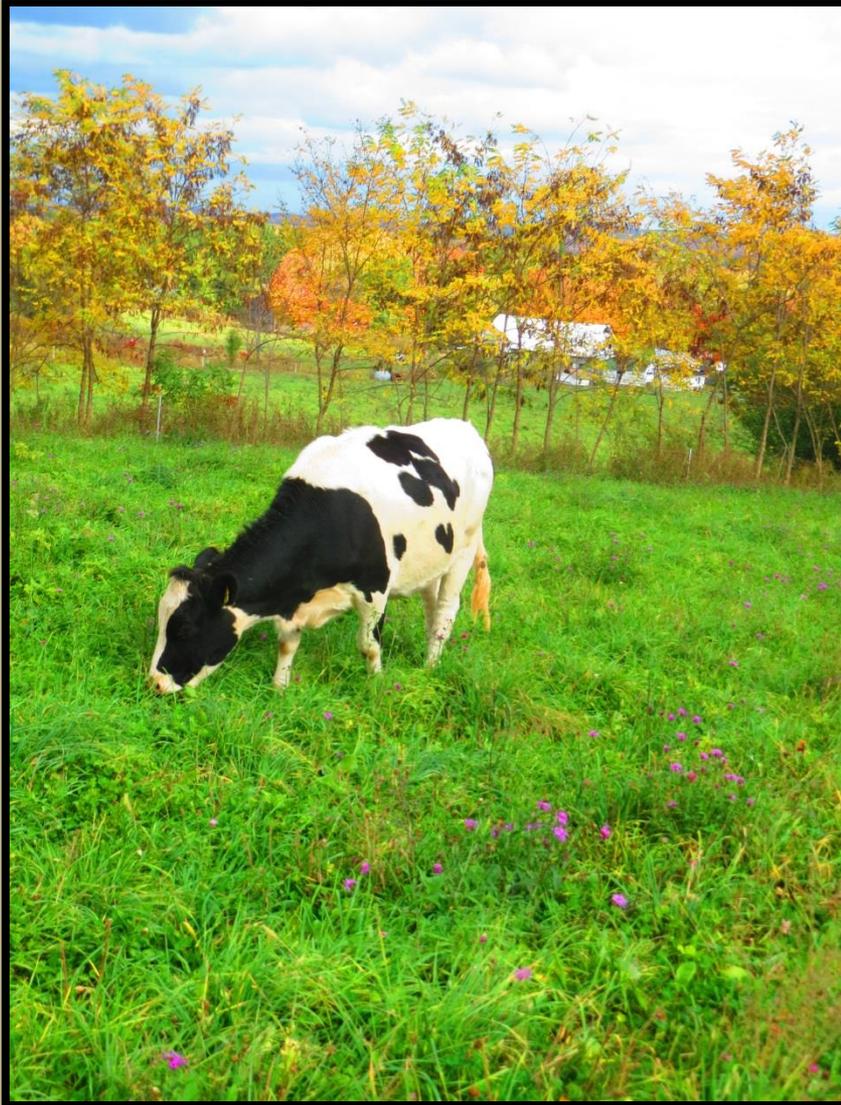
@new_england_grazing_
network

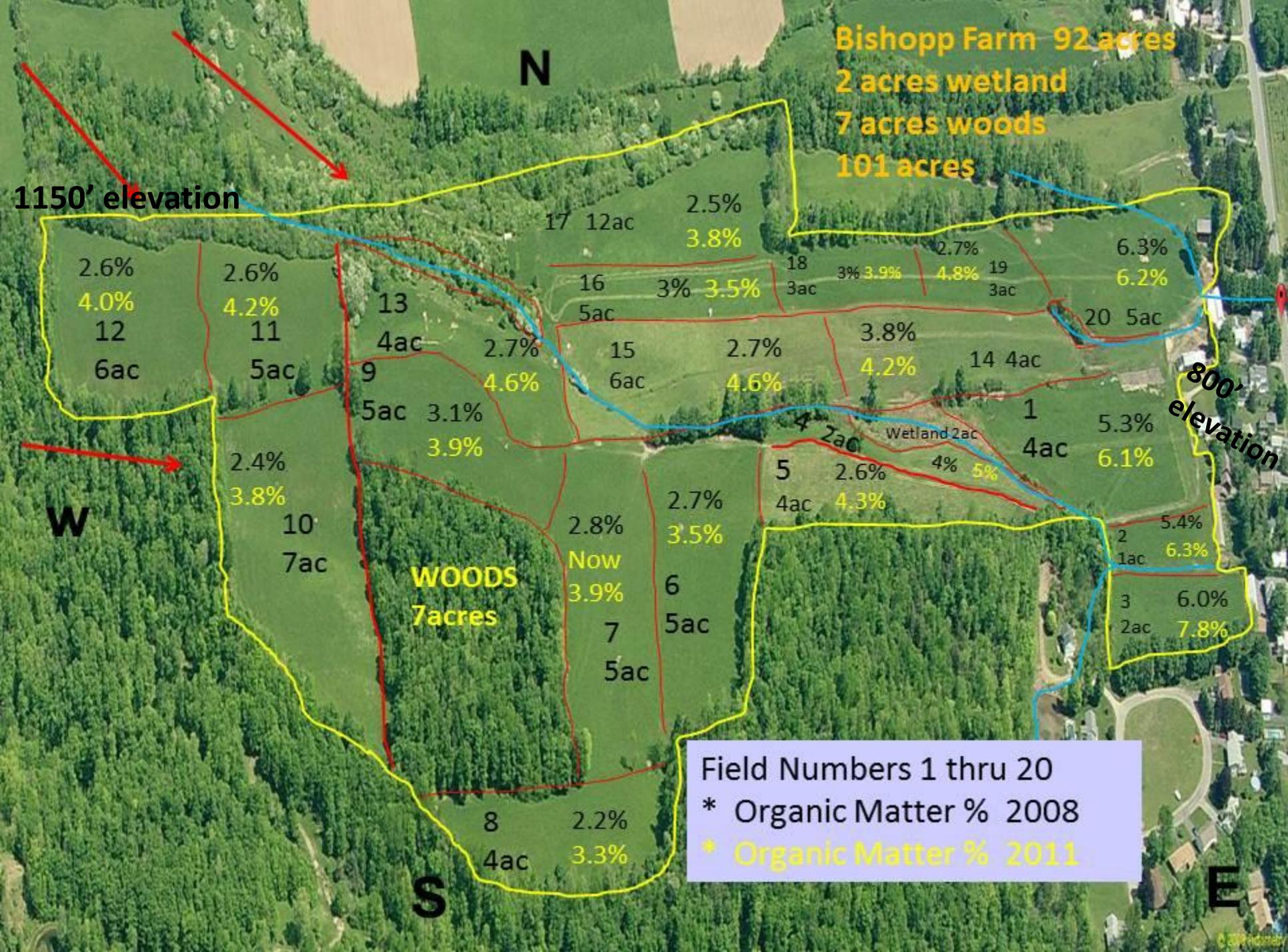
The Realities of Stockpiling Perennial Pastures

My Context—My Experience—My Opinions

By

Troy Bishopp, Bishopp Family Farm Deansboro, NY





Linger Grazing- The act of observing the *little* things and thinking about how it effects the *big* things

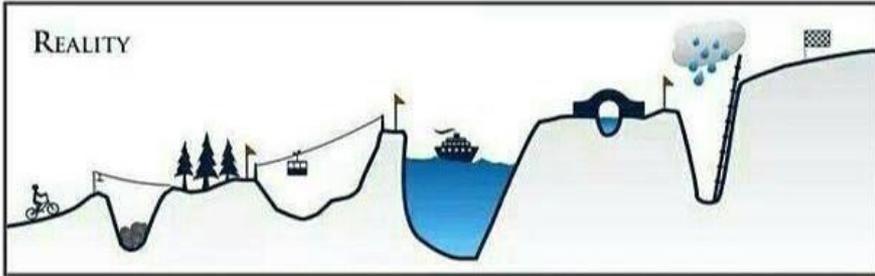


Stockpiling 101

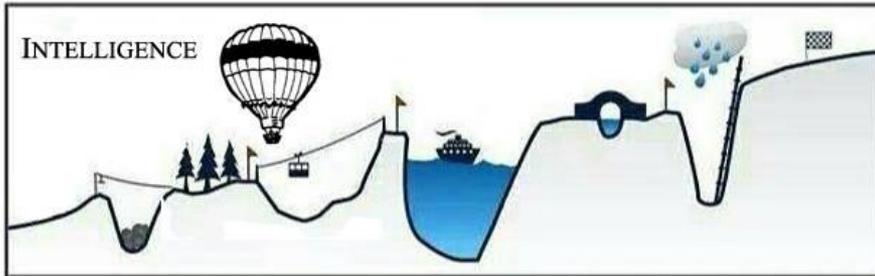
YOUR PLAN



REALITY



INTELLIGENCE



What is it?

Why do I do it?

Can you do it?

It doesn't mean you never feed hay again.

KICK *the* **HAY HABIT**

**A PRACTICAL GUIDE TO
YEAR-AROUND GRAZING**



JIM GERRISH

You have to believe it's possible

Find a mentor

(J. Gerrish, G. Judy, R. Wilson)

Do your homework

**What is your animal to acre
balance?**

**What is your daily wintering feed
cost per head?**

Could you use an extra grand?

Crop/Grazing Planning Chart Set-up, Keys, Questions, Considerations and Decision Points

- * Set Goals: What are you doing and why are you doing it?
Financial, environmental & family/community objectives
- * Look to conservation plan to delineate field and paddock acreages; record field numbers; get a good map
- * Consult nutrient management plan, soil test or biological monitoring chart to assess fertility levels
- * What are the species, weight and number grazing?
- * What are the daily dry matter requirements?
- * One herd, multi-herd, multi-species, leader-follower?
- * Estimate forage production per acre?
- * Estimate paddocks and number of acres needed
- * Paddock time, density and recovery periods you want
- * Employing grazing impact strategies to certain fields?
- * What is your average killing frost date?
- * What is your typical grazing start date?
- * What is your general stockpiling timeframe?
- * Is a bird fledging date important to you?
- * What fields are being deferred for haying or emergencies?
- * When are you birthing, breeding? What fields?
- * How are you adjusting to animal bodyweight increases?
- * Typical drought prone times? Pugging times?
- * What paddocks are used for sacrifice or emergencies?
- * When are you planning a vacation, 4-H trip, concerts, etc?
- * Do you have hunting season timeframes?
- * What paddocks may you want to winter on?
- * What fields may need renovation, frost-seeding etc.
- * Any fields weakened by armyworms, overgrazing etc.
- * Move animals off farm for crop residue
- * Silvo-pasturing opportunities on the farm?
- * What are your wildlife needs?
- * Track rainfall, temperatures, snowfall
- * Graze riparian areas when or if?
- * Infrastructure or conservation construction projects?
- * Tree planting? Hedgerow building?
- *
- *

Critical Decision Points

- * Haying when and how much
- * Clipping?
- * When to supplement when things go awry
- * Vacation
- * Processing times and loading out animals
- * Drought recognition timing
- * When to pull animals off pasture
- *
- *
- *
- *

Weak Links, Bottlenecks

- * Infrastructure
- * Labor
- * Capital
- * Time to manage
- *
- *
- *
- *
- *
- *
- *
- *

There are plenty of things to think about

Stockpiling **IS** Forage Inventory Management

Stockpiling is a strategy that is part of a total grazing plan

A grazing management plan and monitoring program must be practiced all year

If you want to extend the grazing season, **YOU** have to plan to make it happen

Over-stocked, overgrazed and under-managed operations are not good stockpiling candidates

You must know your goals & feed costs to vet out the feasibility of doing this practice



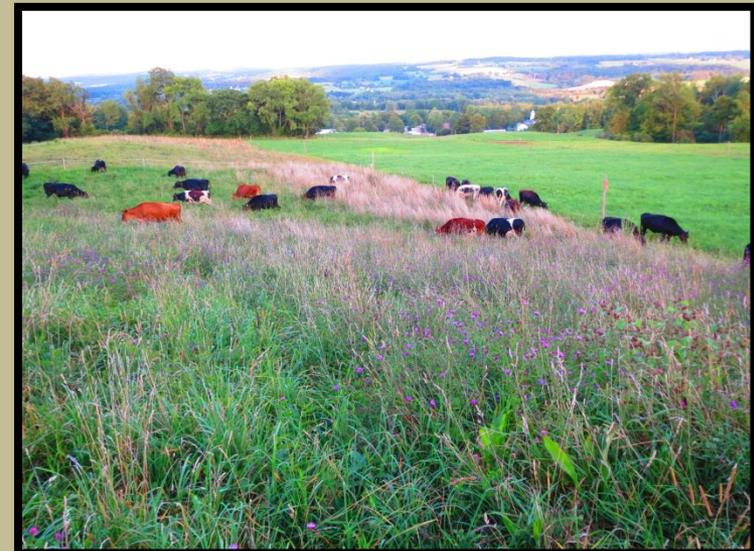
Stockpiling **IS** Forage Inventory Management

You'll need to sharpen your grazer's eye and measure and allocate forage efficiently

Successful stockpiling implementation is highly weather dependent with continual adaptation

Stockpiling forage can be done anytime of the year for different goals--drought, fertility, camping, etc.

Stockpiling is an awesome tool for plant/soil health and contributing to the seedbank



Stockpiling **IS** Forage Inventory Management

A Northeast cool-season perennial pasture species mix can be a limiting factor

Always have outside feed on hand so you can adjust to variable conditions (that WILL happen)

Animal performance & welfare consciousness must be accounted for every day

You graze sooner in the spring



Pencil out common practices that may help boost stockpile growth

“Timing IS Everything”

Hope and Prayer	Free
Grazing Management/animal impact	\$ 30/hr.
No-till or inter-seeding into existing stuff	\$ 40- \$110 per acre
Commercial Fertilizer	\$ 45-75 per acre
Chicken Litter	\$ 45-65 per acre
Foliar Feeding	\$ 12 - \$18 per acre/trip
Lime spreading	\$ >50 per acre
Liquid Manure penny a gallon?	\$ 42 per acre
Compost spread	\$ 90 per acre
Plant an annual? (sorghum, brassicas, cover crop)	>\$ 50/acre
Clipping	\$ 25 per acre
Bale grazing/rolling	\$ 40 per bale
Rent land	\$ 10 - 100/acre



The “Ah-Ha’s”

Unpredictable weather and moisture during grazing season and stockpile phase

Predicting growth, good measuring and planning out utilization

Is a frost really a frost?
“Perpetual Novembers”

Too wet or early season snow makes forage into worm food



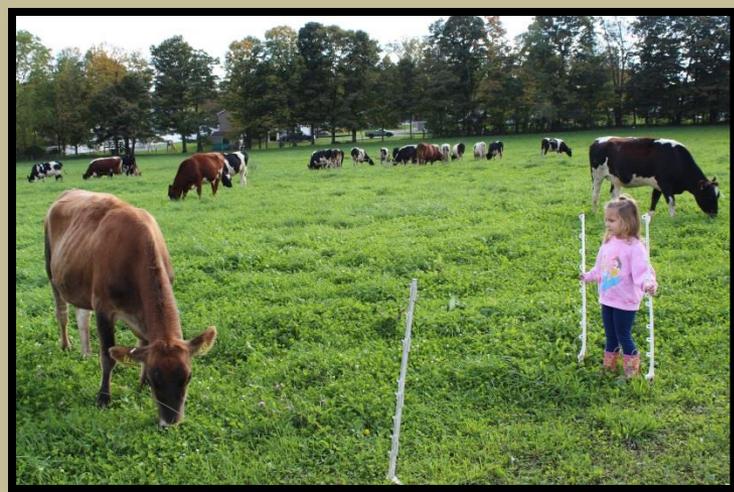
The “Ah-Ha’s”

Does the feed quality match the animal performance requirements?

Rationing out the forage and finding a practical balance

Resistant to adding any inputs other than hay/baleage cause it guarantees feed inventory

How much residual to leave and not hurt new plant tillers



The “Ah-Ha’s”

Cold weather and grazing through snow requires more energy and rumen fill (30-40% more)

When do you give up and just feed hay? What are the risk factors.

I’m very uncomfortable not giving the animals a good place to bed down in snowy conditions

Watering points, shelter and sacrifice areas need to be very flexible



Our Stockpile Experience: Custom Grazing

<https://onpasture.com/the-grass-whisperers-winter-stockpile-grazing-series/>

Variable stocking rate (sometimes)

Stocked at >2 acres per animal unit

Start planning August 10th

Monitor growth, Measure
and pray for good moisture and a dry fall 😊

Generally we strive for >3000lbs./DM/acre

Grazing plan is designed to have them off the hill
before weather issues are a problem



3 strategies we have done:

Set aside specific planned fields for the full recovery and graze others normally

Move animals off to a rental farm and stockpile entire farm (variable stocking rate)

Currently “grazing up” with 40 head and will lightly graze all paddocks during the stockpile phase and heavier after frost.

The strategies changed because our goals changed.



Other options:

Limit stockpile and feed hay to stretch out time on pasture

Rent other land specifically for haymaking, grazing annuals, grazing “fescue”

Work with a crop farmer where livestock complements the operation

Send animals south for the winter and take a vacation

Increase stocking rate during the grazing season and forget season extension

January 15th to April 15th IS our weak link!



Rationing Grass

Know your supply & demand.

- Cut current paddocks in half with polywire
- Calculate a paddock size
- *Rotate based on the grass and cattle not time*
- Acres per paddock =

$$\frac{\text{Animal Weight} \times 0.03 \times \text{Number of Head} \times \text{Days on Paddock}}{\text{Inches} \times \text{pounds of forage/ac inch} \times \text{grazing efficiency}}$$

Example: Given: 30- 1,000 lb cows, graze 3 days on 8" good grass

$$\frac{1000 \text{ lb} \times 0.03 \times 30 \times 3}{8'' \times 300 \text{ lb forage/ac inch} \times 0.50} = 2.25 \text{ acres}$$

$$\frac{2700}{1200}$$

How long will your grass last?

Herd days per paddock =

$$\frac{\text{Inches} \times \text{pounds of forage/ac inch} \times \text{acres} \times \text{grazing efficiency}}{\text{Animal Weight} \times 0.03 \times \text{Number of Head}}$$

Example: Given 8" tall good grass, 10 acre field, 30- 1000 lb cows

$$\frac{8'' \times 300 \text{ lb forage/ac inch} \times 10 \text{ ac} \times 0.50}{1000 \text{ lb} \times 0.03 \times 30} = \frac{12,000}{900} = 13 \text{ days grazing}$$

Trial and Error

Courtesy of Greg Brann--Greg Brann Consulting gregbrann5@gmail.com 615-351-2533

2020-21 Grazing Season

DRAFT PLAN adapted and modified from NATURAL RESOURCES CONSERVATION SERVICE SYRACUSE, NEW YORK

PRESCRIBED GRAZING MANAGEMENT PLANNING WORKSHEET

LANDOWNERS NAME Bishopp Farm DATE 2020

STEP 1a. Estimate the Forage Demand:

The forage demand is the amount of forage dry matter (DM) required to feed a group of livestock for one day. It is calculated based on the rule of thumb that grazing animals require an amount of forage DM equal to about 2.5 to 3.0% of their body weight per day. For lactating animals and growing stock use 3.0% of body weight. For all other classes of livestock use 2.5%.

$$\frac{1800 \text{ lb. Beef finishers} \times .025 \text{ or } .03 = 24}{\text{Average Weight/Animal}} \times \frac{40}{\text{\# of Animals}} = \frac{960 \text{ DM}}{\text{Forage Demand}}$$

$$2 \times .025 \text{ or } .03 = \frac{\text{Unadjusted Daily Forage Demand}}{\text{Lbs./DM/Day}}$$

Step 1b. Adjust Daily Forage Demand as a result of supplemental feed use by deducting the pounds of supplemental feeds from the daily forage demand.

If supplemental forages are provided, they are substituted on a pound for pound basis. If supplemental grain is fed, the substitution rate is one pound of grain equals .5 pounds of forage.

$$\frac{\text{Unadjusted Daily Forage Demand} - \text{Lbs. of supplemental feed}}{\text{Lbs./DM/Day}} = \frac{\text{Adjusted Daily Forage Demand}}{\text{Lbs./DM/Day}}$$

Step 3. Select Residency Period:

Residency Period $\frac{1}{\text{Days}}$

*Note** One half to 1-day residency periods are recommended for lactating dairy cows. Residency periods of 2 to 7 days may be used for all other livestock. To maximize harvest efficiency, use shorter residency periods.*

Step 4. Determine Paddock Size by Major Soil Type:

Paddock size is based on meeting the forage demand of the livestock for the designated residency period.

$$\frac{1 \text{ } 960}{\text{Forage Demand}} + \frac{1400}{\text{Forage Supply}} = \frac{.7 \text{ acre}}{\text{Acres Required/Day}} \times \frac{1}{\text{Residency Period}} = \frac{.7 \text{ acre/day}}{\text{Paddock Size (Ac)}}$$

Step 5. Determine the Number of Paddocks

$$\frac{20 \text{ days rest} + 1}{\text{Residency Period}} = \frac{21}{\text{Number of Paddocks}}$$

$$\frac{30 \text{ days rest} + 1}{\text{Residency Period}} = \frac{31}{\text{Number of Paddocks}}$$

$$\frac{45 \text{ days rest} + 1}{\text{Residency Period}} = \frac{46}{\text{Number of Paddocks}}$$

$$\frac{60 \text{ days rest} + 1}{\text{Residency Period}} = \frac{61}{\text{Number of Paddocks}}$$

$$\frac{90 \text{ days rest} + 1}{\text{Residency Period}} = \frac{91}{\text{Number of Paddocks}}$$

Bishopp

Bishopp

Step 6. Estimate the Total Number of Acres Needed: Use the average paddock size of the most prevalent soil types to estimate

$$\frac{.7}{\text{Paddock Size}} \times \frac{21}{\text{Number of Paddocks}} = \frac{15}{\text{Acres Needed for 20 days rest}}$$

$$\frac{.7}{.7} \times \frac{31}{46} = \frac{22}{32} \text{ Acres Needed for 30 days rest}$$

$$\frac{.7}{.7} \times \frac{61}{91} = \frac{43}{64} \text{ Acres Needed for 45 days rest}$$

$$\frac{.7}{.7} \times \frac{91}{91} = \frac{64}{64} \text{ Acres Needed for 60 days rest}$$

$$\frac{.7}{.7} \times \frac{91}{91} = \frac{64}{64} \text{ Acres Needed for 90 days rest}$$

Note: During spring and early summer, only about 40% to 60% of planned acres will be required for grazing. The remaining grazing acres could be mechanically harvested, planned to be grazed by another class/group of livestock, clipped, deferred for wildlife habitat or stockpiled for extended grazing depending on the goals of the family.

Step 7. Determine the Number of Actual Acres Planned:

Pad Size/	Ac. Needed/day	= # Days available
1 3	4	= 4
2 2	5	= 5
3 2	3	= 3
4 5	6	= 6
5 4	5	= 5
6 5	6	= 6
7 5	6	= 6
8 4	4	= 4
9 5	6	= 6
10 7	6	= 6

11 5	5	= 5
12 5	5	= 5
13 5	5	= 5
14 7	7	= 7
15 5	5	= 5
16 5	5	= 5
17 5	5	= 5
18 5	5	= 5
19 5	5	= 5
20 5	5	= 5

Actual Acres 94 Total # days rest 96 SEE GRAZING CHART

Rationing

10/19 108'W x 408'L 1.01 ac



10/20 42'W x 408'L .4 ac



10/21 65'W x 408'L .6 ac * Just Right!



10/22



Good tool for beginners

ACREAGE

.1
.2
.3
.4
.5
.6
.7
.8
.9
1

SIDE OF SQUARE

65
92
113
130
146
160
173
185
196
209

Courtesy of Dina Brewster

11/16



11/17



11/18



11/19



11/20



11/21



11/22



11/23



FORAGE TESTING LABORATORY

DAIRY ONE, INC.
 730 WARREN ROAD
 ITHACA, NEW YORK 14850
 607-257-1272 (fax 607-257-1350)

Sample Description	Farm/Code	Sample
MMG PASTURE	012	21110090

Paddock 6 Stock Piled Pasture 11/18/20		

Analysis Results

Sampled	Recvd	Printed	ST/CO
	11/21/14	11/25/14	

Components	As Fed	DM

TROY BISHOPP
 Madison Co SWCD
 6503 Wes Road
 Hamilton, NY 13346

% Moisture	69.3	
% Dry Matter	30.7	
% Crude Protein	6.5	21.2
% Adjusted Crude Protein	6.5	21.2
% Acid Detergent Fiber	9.0	29.3
% Neutral Detergent Fiber	14.9	48.5
% NFC	6.0	19.6
% TDN	20	64

ENERGY TABLE - NRC 2001

	Mcal/Lb	Mcal/Kg
DE, 1X	1.33	2.94
ME, 1X	1.14	2.52
NEL, 3X	0.66	1.45
NEM, 3X	0.69	1.53
NEG, 3X	0.42	0.93
TDN1X, %	64	

NEL, Mcal/Lb	.20	.64
NEM, Mcal/Lb	.19	.63
NEG, Mcal/Lb	.11	.36
Relative Feed Value		127
Horse DE, Mcal/Lb	.33	1.08

FORAGE TESTING LABORATORY

DAIRY ONE, INC.
 730 WARREN ROAD
 ITHACA, NEW YORK 14850
 607-257-1272 (fax 607-257-1350)

Sample Description	Farm/Code	Sample
MMG PASTURE	012	21110080

Paddock 8 Stock Piled Pasture 11/18/20		

Analysis Results

Sampled	Recvd	Printed	ST/CO
	11/21/14	11/25/14	

Components	As Fed	DM

TROY BISHOPP
 Madison Co SWCD
 6503 Wes Road
 Hamilton, NY 13346

% Moisture	69.6	
% Dry Matter	30.4	
% Crude Protein	5.9	19.3
% Adjusted Crude Protein	5.9	19.3
% Acid Detergent Fiber	9.5	31.4
% Neutral Detergent Fiber	17.0	55.9
% NFC	4.2	14.0
% TDN	19	62

ENERGY TABLE - NRC 2001

	Mcal/Lb	Mcal/Kg
DE, 1X	1.29	2.83
ME, 1X	1.10	2.41
NEL, 3X	0.63	1.38
NEM, 3X	0.66	1.45
NEG, 3X	0.39	0.86
TDN1X, %	62	

NEL, Mcal/Lb	.18	.59
NEM, Mcal/Lb	.18	.59
NEG, Mcal/Lb	.10	.33
Relative Feed Value		107
Horse DE, Mcal/Lb	.30	1.00

Will this forage be good enough?

ITHACA, NEW YORK 14850
 607-257-1272 (fax 607-257-1350)

Paddock 16 Stock Pile Pasture

Analysis Results

 | Sampled | Recvd
 | | | 12/11/

118 day
 old pasture
 Anomaly?

TROY BISHOPP
 TROY BISHOPP
 2809 RT 12-B
 DEANSBORO, NY 13420

Components	As Fed	DM
% Moisture	74.5	
% Dry Matter	25.5	
% Crude Protein	4.9	19.3
% Available Protein	4.7	18.3
% ADICP	.2	.9
% Adjusted Crude Protein	4.9	19.3
Soluble Protein % CP		38
Degradable Protein%CP		69
% NDICP	1.3	5.0
% Acid Detergent Fiber	7.0	27.4
% Neutral Detergent Fiber	12.4	48.6
% Lignin	1.0	4.0
% NFC	5.9	23.1
% Starch	.4	1.7
% WSC (Water Sol. Carbs.)	3.1	12.3
% ESC (Simple Sugars)	2.5	9.7
% Crude Fat	1.2	4.6
% Ash	2.38	9.35
% TDN	18	71
NEL, Mcal/Lb	.18	.71
NEM, Mcal/Lb	.19	.74
NEG, Mcal/Lb	.12	.46
Relative Feed Value		129
% Calcium	.15	.60
% Phosphorus	.06	.22
% Magnesium	.05	.18
% Potassium	.63	2.48
% Sodium	.003	.012
PPM Iron	82	321
PPM Zinc	6	25
PPM Copper	2	9
PPM Manganese	9	36
PPM Molybdenum	.2	.6
% Sulfur	.08	.32
% Chloride Ion	.30	1.17
IVTD 30hr, % of DM		86
NDFD 30hr, % of NDF		71
kd, %/hr		8.77
% Lysine	.19	.75
% Methionine	.07	.26

 ENERGY TABLE - NRC 2001

	Mcal/Lb	Mcal/Kg
DE, 1X	1.36	3.00
ME, 1X	1.17	2.59
NEL, 3X	0.68	1.50
NEM, 3X	0.71	1.57
NEG, 3X	0.44	0.97
-----	-----	-----
TDN1X, %	66	
-----	-----	-----

COMMENTS:

1. PLEASE CHECK OUR CURRENT PRICE LIST AND ENCLOSE \$3.00 WITH YOUR NEXT SAMPLE TO COVER UNPAID CHARGES ON THIS SAMPLE.

FORAGE LAB HOLIDAY CLOSINGS

*****NOVEMBER 28TH AND 29TH*****

****DECEMBER 25TH AND JANUARY 1ST***

Resource page

<https://onpasture.com/the-grass-whisperers-winter-stockpile-grazing-series/>

<http://www.madcoswcd.com/grazing-charts.html>

<https://www.youtube.com/watch?v=1eiaaXmhOUU> Jim Gerrish

<https://www.youtube.com/watch?v=Y2RM0U-FZ3w> Jim Gerrish

https://www.youtube.com/watch?v=3lmn_23p1VE OnPasture

https://www.youtube.com/watch?v=WAcXWGw_J6U OnPasture

<https://www.youtube.com/channel/UCi8jM5w49UezskDWBGyKq5g/videos> Greg Judy

<https://www.youtube.com/c/RussWilson/videos> Russ Wilson

<https://www.youtube.com/watch?v=P-yOrvTcw1Q> Farm Marketing Solutions

<https://www.youtube.com/playlist?list=PLsOsNBWRTjStFfd3FoP0fK8OgGsVW2emD> Allen Williams

Hope you gained some insight for your farm

Thank you for your time

Questions? Farmboytb@aol.com

