GRAZING PLAN

Date: 12/1/21

Name of Farm/Operator: DBIC Grazing Example

********** FAP Rotational Grazing Payment Eligibility **********

Rotationally grazed fields in this plan are eligible for FAP practice payments if:

(a) livestock are excluded from surface water (*access allowable only at well managed discrete watering areas and livestock crossings when no other available options exist*);
(b) adequate perennial vegetation (including at least 3in of residue) is maintained on pastures;
(c) animal rotations occur at least twice weekly; AND
(d) those fields are not under agreement or within a contract lifespan to receive payment for the same conservation practice from any state or federal program.

Not all of the acres on this grazing plan need fulfill these criteria, but these criteria must be met on specific fields for you to be eligible for payment on that acreage. Indicate in your separate FAP application which fields, as identified in this plan and marked on your map, are eligible for payment under these criteria and how much acreage that represents.

NOTE: An end of season grazing report will be required prior to FAP payment.

Goals: *Why do you rotationally graze? What are your goals from grazing your land?*

We are rotationally grazing our milk cows and other stock, so that we can save money on feeding hay and other stored feeds. We also, want to improve the productivity our pastures and to reduce runnoff of cow manure from our pastures by leaving more residual. We are also rotationally grazing to improve our cow health by giving our animals more exercise and to give their feet a rest from concrete floors. We believe that properly planned rotational grazing with improve our soils, capture more water to improve productivity during drought conditions, and support our local bird and insect populations.

Description: *What is your grazing system/strategy and how does it fit into your operation as a whole? (e.g. ideal residual height, length of rotation, incorporation of hayfields, current and ideal forage quality, soil types, fertility, etc)*

We plan to graze our milk cows for 24 hours on pasture, moving them once a day. Paddock sizing is based on our herd eating 20 lb each of dry matter per day from pasture. They will eat another 25 lbs of dry matter in the barn during milking of grain and balage. Our rest period will start at 20 days in May and increase by 5 days during the growing season so that our paddocks will have 35 days of rest in August and then jump to 45 days in September. Because our landbase is somewhat limited. We will be switching to 12 hours of grazing in late August in order to give our fields the rest they need. We will also be adding additional acres into our rotation on July 1st from a hay field that had first cut taken in May.

Grazing Season: *What is your planned grazing season?*

Turnout Date: 5/12/22 End of Grazing Season: 10/20/22

Map(s): *Attach map(s) illustrating rotational grazing plan.*

(1) Highlight fields rotationally grazed. Include field name and acreage. Indicate fields designated for each livestock group/type, if applicable.

(2) Indicate location of grazing infrastructure, including:

- *Permanent fencing*
- *Laneways*
- *Watering stations*
- *Stream crossings*
- *Access to surface water**

Fill out one calculations sheet per group of livestock that you rotate together.

Grazing Group #1: Milk Cows

Include livestock type (E.g. "Milking Cow herd")

Dedicated Acreage: 27

Illustrate on attached map

Sufficient Acreage: *Do the calculations below suggest that you have sufficient acreage to fulfill this group's forage requirements from grazing during the length of your grazing season?*

YES ☐ NO ☑

If no, explain your plan to compensate for the deficiency:

We switch to 12 hours/pasture per day starting in August instead of 24 hours.

1	Number of grazing livestock in this group (#)	**40**
2	Number of days in each paddock (*days*)	**1**
3	Average body weight of grazing livestock (*lbs*) *	**1200**
4	Estimated dry matter intake (DMI) as percent of body weight (%) *	**1.65%**
5	Calculated DMI for a single animal (*lbs/day)* Autofill: (line 3) x (line 4)	**19.8**
6	Calculated DMI for the herd (*lbs/day)* Autofill: (line 1) x (line 5)	**792**
7	Estimated available forage dry matter (*lbs/acre)* *	**1,000**
8	Calculated estimated paddock size (*acres*) Autofill: [(line 6) / (line 7)] x (line 2)	**0.8**

Note: *This page is intended to provide a general estimate of acreage and paddock requirements of your grazing herd(s). Forage requirements will change with weather, stocking density, soil fertility etc. For more precise estimates, discuss your specific situation with a grazing specialist.*

	May	June	July	Aug	Sept	Oct
Estimated paddock recovery period (*days)*	**18**	**24**	**30**	**36**	**42**	**64**
Estimated number of paddocks needed *(#)* Autofill: [(line 10)/(line 2)]+1	**19**	**25**	**31**	**37**	**43**	**65**
Calculated acres needed for grazing (*acres)* Autofill: (line 8) x (line 11)	**15.0**	**19.8**	**24.6**	**29.3**	**34.1**	**51.5**

***For assistance developing estimates of these values, see the Reference Table on the last page**

Re-calculate equations

Fill out one calculations sheet per group of livestock that you rotate together.

Grazing Group #2: heifers
Include livestock type (E.g. "Dry Cows")

Dedicated Acreage: 13
Illustrate on attached map

Sufficient Acreage: *Do the calculations below suggest that you have sufficient acreage to fulfill this group's forage requirements from grazing during the length of your grazing season?*

YES ☑ NO ☐

If no, explain your plan to compensate for the deficiency:

1	Number of grazing livestock in this group (#)	**8**
2	Number of days in each paddock (*days*)	**3**
3	Average body weight of grazing livestock (*lbs*)	**790**
4	Estimated dry matter intake (DMI) as percent of body weight (%)	**3.00%**
5	Calculate DMI for a single animal (*lbs/day)* Autofill: (line 3) x (line 4)	**23.7**
6	Calculate DMI for the herd (*lbs/day)* Autofill: (line 1) x (line 5)	**189.6**
7	Estimated available forage dry matter (*lbs/acre)* *	**1,000**
8	Calculated estimated paddock size (*acres*) Autofill: [(line 6) / (line 8)] x (line 2)	**0.6**

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	May	June	July	Aug	Sept	Oct
Estimated paddock recovery period (*days)*	**18**	**24**	**30**	**36**	**42**	**64**
Estimated number of paddocks needed *(#)* Autofill: [(line 10)/(line 2)]+1	**7**	**9**	**11**	**13**	**15**	**22**
Total acres needed for grazing (*acres)* Autofill: (line 8) x (line 11)	**4.0**	**5.1**	**6.3**	**7.4**	**8.5**	**12.7**

***For assistance developing estimates of these values, see the Reference Table on the last page**

Re-calculate equations

Fill out one calculations sheet per group of livestock that you rotate together.

Grazing Group #3: dry cows

Include livestock type (E.g. "Dairy Heifers")

Dedicated Acreage: 10

Illustrate on attached map

Sufficient Acreage: *Do the calculations below suggest that you have sufficient acreage to fulfill this group's forage requirements from grazing during the length of your grazing season?*

YES ☑ NO ☐

If no, explain your plan to compensate for the deficiency:

1	Number of grazing livestock in this group(#)	4
2	Number of days in each paddock (*days*)	3
3	Average body weight of grazing livestock (*lbs*)	1200
4	Estimated dry matter intake (DMI) as percent of body weight (%)	3.00%
5	Calculate DMI for a single animal (*lbs/day)* Autofill: (line 3) x (line 4)	36
6	Calculate DMI for the herd (*lbs/day)* Autofill: (line 1) x (line 5)	144
7	Estimated available forage dry matter (*lbs/acre)* *	1,000
8	Calculated estimated paddock size (*acres*) Autofill: [(line 6) / (line 7)] x (line 2)	0.4

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	May	June	July	Aug	Sept	Oct
Estimated paddock recovery period (*days)*	**18**	**24**	**30**	**36**	**42**	**64**
Estimated number of paddocks needed *(#)* Autofill: [(line 10)/(line 2)]+1	7	9	11	13	15	22
Total acres needed for grazing (*acres)* Autofill: (line 8) x (line 11)	3.0	3.9	4.8	5.6	6.5	9.6

***For assistance developing estimates of these values, see the Reference Table on the last page**

Re-calculate equations

Reference Tables

1. Weight, Dry Matter Intake and Grazing Period by Livestock type

	Animal Type	Approx. Average Weight (*lbs*)	Daily Dry Matter Intake (*% of Body Weight*)	Suggested Grazing Period (*days*)
Beef	Beef Cow (lactating)	1600	2.0 - 3.0%	3 to 4
	Beef Cow (dry)	1600	1.5 - 2.0%	4 to 7
	Feeder Beef	900	2.5 - 3.0 %	3 to 4
Dairy	Dairy Cow (lactating)	1400	3.00%	0.5 to 2
	Dairy Cow (dry)	1400	2.5 - 3.0 %	4 to 7
	Dairy Heifer	550	2.5 - 3.0 %	3 to 4
Horses	Horse, Mature	1250	2.0-2.5%	4 to 7
Goats and Sheep	Goat/Sheep (dry)	170	3.50%	1 to 2
	Goat/Sheep (lactating)	170	4.0-4.5%	1 to 2
	Kid/Lamb (1 year old)	110	4.0-4.5%	3 to 4

2. Estimated Available Pasture Forage Dry Matter (*lbs Dry Matter/acre*)*

According to NRCS guidelines, the ideal height of pasture when livestock are introduced is 8-12" and the ideal residual left when the livestock are moved out is 3-4". These estimates of available pasture forage dry matter assume that pastures are grazed from the listed height down to 3-4" of residual.

Height	Density
14"	1000-1600
12"	900-1400
10"	800-1000
8"	700-800
6"	500-600

Note: Pounds of dry matter per acre at each height varies widely with plant density and species, as well as soil type and soil fertility. Exceptionally high- or low-producing pastures could extend outside of the range of these estimates.

Data on this reference sheet are derived from NRCS estimates included in the official Vermont NRCS grazing plan template. Actual numbers for your herd may vary. If you have more accurate estimates for your herd/land, we encourage you to use those numbers instead. We also urge you to reach out to your local grazing specialists for personalized guidance and assistance with creating your Grazing Plan.