



GRAZING SEASON RATION RECORD (Electronic Version)

Use this worksheet to document Dry Matter Intake (DMI) from pasture for specific groups of ruminants during the grazing season. Complete a new worksheet (Ration 1, Ration 2, Ration 3 etc.) each time the supplemented feed ration changes significantly for each group. The % DMI total from each ration worksheet will automatically be entered onto the Results Sheet to calculate average DMI from pasture for the overall grazing season. Use a separate set of worksheets for each specific type of ruminant livestock.

Operation Name:		Type of Ruminant Livestock:	
Date Ration Began:		Dairy Cows	Beef Slaughter
Date Ration Ended:		Dairy Heifers	Goats
# of Grazing Days:		Dry Cows	Sheep
* Dry Matter Demand (DMD) in Lbs:		Beef Cows	

* When calculating Dry Matter Demand (DMD) for the type of organic ruminant livestock, please refer either to the Reference Charts (on the last worksheet) or use your own DMD estimate (please provide proof of this estimate).

Feed Type (do not list pasture)	Avg. # fed/hd/day	** Dry Matter %	DMI fed in Lbs
<i>Example: Dry Hay</i>	<i>Example: 25</i> X	<i>Example: 85 %</i>	= 21.25
Grain	X	%	=
Dry Hay	X	%	=
Haylage	X	%	=
Corn Silage	X	%	=
Baleage	X	%	=
High Moisture Corn	X	%	=
	X	%	=

Total DMI fed from non-pasture:

$$\begin{array}{c}
 \text{DMD} - \text{Total Dry Matter Fed} = \text{DMI from Pasture} \div \text{DMD} = \text{DMI from Pasture} \times 100 \\
 = \text{\%} \\
 \text{\underline{\underline{\text{TOTAL \% DMI FROM PASTURE (for this period)}}}}
 \end{array}$$

** When estimating Dry Matter % of supplemented feed types, please refer to the Reference Charts provided on the last worksheet. If you test feed and have % Dry Matter from testing, use your own numbers in this calculation.



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Listed below is a summary of the specific rations provided, along with the calculated average DMI % from pasture overall for the entire grazing season. Please keep in mind that National Organic Standard 205.240 states that producers must provide an average minimum of 30% for each group of ruminants.

Operation Name:		Type of Ruminant Livestock:	
Total # Days in Grazing Season:			
Dry Matter Demand (DMD):			

Specific Grazing Dates:		# of Days	Daily DMI % from Ration record	DMI from Pasture during period
From:	<i>Example:</i> 4/25/2010			
To:	6/30/10	X	%	=
From:		X	%	=
To:				
From:		X	%	=
To:				
From:		X	%	=
To:				
From:		X	%	=
To:				
From:		X	%	=
To:				
From:		X	%	=
To:				
From:		X	%	=
To:				
Total Days :			DMI Pasture Total:	
Weighted Average % DMI from Pasture During the Grazing Season				=

To calculate the weighted average (season average), multiply each number of grazing days by the corresponding daily DMI% from each Ration Record worksheet (see example provided above). Add these numbers up (in the far right column) to get the DMI pasture total, then divide by the total number of days in the grazing season and multiply by 100.



REFERENCE CHARTS

PERCENTAGE DRY MATTER (% DM) OF COMMON FEEDS*
Hay (dry, both legume and grass) =85% DM
Haylage (any chopped forage except corn)=35% DM
Green chop (any green chopped forage)=20% DM
Baleage (any baled and wrapped forage)=60% DM
Corn silage=40% DM
High moisture corn=76% DM
Grain (dry corn, beans, small grains)=89% DM

DAIRY COWS DRY MATTER DEMAND (DMD)		
AVERAGE MILK PER DAY	SMALL BREED <900-1200#+ DMD	LARGE BREED 1200-1400#+ DMD
10#	21#	27#
15#	23#	28#
20#	24#	30#
25#	26#	31#
30#	28#	33#
35#	30#	34#
40#	31#	36#
45#	33#	37#
50#	35#	39#
55#	36#	40#
60#	38#	42#
65#	40#	43#
70#	42#	45#
75#	43#	46#
80#	45#	48#

RUMINANT GROUPS: DRY MATTER DEMAND AS A PERCENTAGE OF BODY WEIGHT	
Dry dairy cows	1.8%
Bred dairy heifers (14-24 months of age)	2.5%
Unbred dairy heifers (6-14 months of age)	2.5%
Beef cattle (more than 1 year of age)	2.25%
Beef cattle (weaned, less than 1 year of age)	2.75%
Sheep (brood or milking animals)	3.65%
Goats (brood or milking animals)	4%
Sheep (weaned, slaughter or replacement stock)	3.3%
Goats (weaned, slaughter or replacement stock)	2.25%

*If you test feed and have % DM from testing, use your own numbers in the calculations.

SILO CAPACITY: TONS OF CORN OR GRASS SILAGE (68% MOISTURE) IN SETTLED UNOPENED SILOS

Depth of silage (in feet)	Inside diameter of silo in feet							
	12'	14'	16'	18'	20'	24'	26'	30'
8	11	15	20	25	31	45	52	70
12	19	25	33	42	52	75	88	117
16	28	38	49	62	77	111	130	173
20	38	51	67	85	105	151	177	236
24	49	66	87	110	135	194	228	304
28	61	83	108	137	169	243	286	380
32	74	100	131	166	205	295	346	461
36	87	118	155	196	242	348	409	545
40	101	138	180	229	280	403	473	630
44	117	159	207	261	320	461	541	720
50	137	186	248	310	389	560	673	875
55	---	212	383	365	444	639	750	999
60	---	---	319	415	500	720	845	1125
70	---	---	---	---	574	827	970	1290
80	---	---	---	---	650	1100	1330	1880
90	---	---	---	---	---	---	---	2470

Standard Weights of Farm Products per Bushel (estimated at 89% DM)

Barley -	48 lbs.
Rye -	56 lbs.
Corn (shelled) -	56 lbs.
Corn (ear) -	70 lbs.
Oats -	32 lbs.
Soybeans -	60 lbs.
Wheat -	60 lbs.

*These figures are general estimates. If you have acquired values through weighing or testing, then use your own more specific figures.

Capacities of silage bags at 13 pounds dry matter per cubic foot density (65% moisture):

Bag Diameter								
8 feet			9 feet		10 feet		12 feet	
Bag Length	Silage Length	Capacity-wet tons	Silage Length	Capacity-wet tons	Silage Length	Capacity-wet tons	Silage Length	Capacity-wet tons
100	84	80	82	100	80	115	76	160
150	134	125	132	150	130	190	126	265
200	184	170	182	215	180	260	176	370
250	234	220	232	270	230	335	226	475
300	284	265	282	330	280	405	276	580