

## Using Farm Records to Determine Pasture Production and Growth Rate

Well kept grazing records can be very useful as a means of estimating pasture productivity during the grazing season. This can be helpful for pasture planning and feed budgeting purposes. It can also allow you to compare productivity of various pastures in the system. Below is an example of two pastures from a Shelburne Farm in 2005. By using their pasture records, we can estimate “harvested” yield (lbs dm/acre) for each grazing. A mid-date between each grazing is calculated and used for graphing estimated pasture growth (lbs dm/acre/day). Lbs. of pasture dry matter consumed per day was estimated by using 2.5% of body weight per animal.

The limitation of this method is that it does not account for pre or post grazing mass nor the percentage of the pasture actually utilized by the grazing animals. However, if a farmer included an estimate of pasture cover (pre-grazing yield in lbs/acre) and residual yield based on weekly pasture walks, then pre and post yields could be estimated.

<b>Pasture</b>		<b>Grazing Times</b>								<b>lbs dm/a</b>
<b>Upper Limit</b>	<b>Acres</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	
4.4	No. Animals	109	112	108	102	93	90	97	110	Total 4665
	Date	16-May	28-May	9-Jun	1-Jul	18-Jul	7-Aug	23-Aug	8-Sep	
	Mid-date		22-May	3-Jun	20-Jun	9-Jul	28-Jul	15-Aug	31-Aug	
	Lbs dm/d	25	25	25	25	25	25	25	25	
	Grazing days	1	1	1	1	1	1	1	1	
	lbs dm/a	619	636	614	580	528	511	551	625	
	lbs dm/a/d		53.0	51.1	26.3	31.1	25.6	34.4	39.1	

<b>Chapell W Flats</b>										<b>lbs dm/a</b>
<b>Upper Limit</b>	<b>Acres</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	
8.1	No. Animals	109	113	103	85	20	100	20		Total 2287
	Date	17-May	3-Jun	28-Jun	22-Jul	8-Aug	24-Aug	15-Sep		
	Mid-date		25-May	15-Jun	10-Jul	30-Jul	16-Aug	4-Sep	15-Sep	
	Lbs dm/d	25	25	25	25	25	25	25	25	
	Grazing days	1.5	1.5	1	1	3	1	3		
	lbs dm/a	505	523	318	262	185	309	185	0	
	lbs dm/a/d		30.8	12.7	10.9	10.9	19.3	8.4	0.0	

