

Table 1

**Suggested PA Grazing Stubble Heights and
Typical Yields for Forages in a Grazing System**

Species	Height In Inches		Quality Yield* (lbs DM/Ac.)		
	Turn In	Removal	Good	Poor	Overgrazed
COOL SEASON GRASS					
Kentucky bluegrass	4 to 6	3	4500	2000	1000
Smooth brome grass	6 to 8	3 to 4	6500	3000	1500
Orchardgrass	6 to 8	3 to 4	8000	3000	1500
Reed canarygrass	8 to 10	3 to 4	8000	3000	1500
Ryegrass	6	3 to 4	7500	4000	2000
Tall fescue	6 to 8	3 to 4	7000	3500	1750
Timothy	8	4	6500	3000	1500
GRASS-LEGUME MIX					
Alfalfa / Grass	6 to 8	3 to 4	10000	4500	2250
Orchardgrass - ladino clover	6 to 8	3 to 4	6500	3000	1500
Birdsfoot trefoil / Grass	6	3 to 4	8500	3500	1750
Ryegrass - clover	6	3	6000	2750	1375
Tall fescue - ladino clover	6 to 8	3 to 4	6000	3000	1500
Red Clover / Grass	4 to 7	3 to 4	9000	6000	3000
Kentucky bluegrass - white clover	4 to 6	3	3500	1500	750
LEGUMES					
Alfalfa	6	3 to 4	8000	4000	2000
Ladino / White clover	6 to 8	3	2500	1000	500
WARM SEASON GRASS					
Bermudagrass	4	3	5000	2500	
Switchgrass	18-Dec	6 to 8	9000	6000	
ANNUAL CROPS					
Small grains	4 to 6	3	3500	1500	
Sorghum	18 to 30	10	10000	5000	
Brassicas (spring seeding)	30 days	6	10000	5000	
Brassicas (summer seeding)	30 days	6	9000	4000	
CROP RESIDUES					
Corn Stover	N/A		6000	3000	
Soybean	N/A		2000	1000	
<p><i>*Select Poor Quality Yields for soil types with low productivity. Select Good Quality Yields for soil types with high productivity. Producer's management should be considered in yield determination as well. Select "overgrazed" yields if documenting 528 for vegetation management of pastures.</i></p>					

Table 2: Average Weights of Livestock

(Adapted from PA Act 38 Supplement 5- Standard Animal Weights)

Type	Beef	Dairy	Sheep/Goat	Horse
Mother w/Young	1400	N/A	225	1200
Mature Female	1100	1400	175	1000
Immature/Feeder	950	950	150	850
Growing	650	750	75	500
Young	300	375	50	200
Breeding Male	1500	2000	300	1100

Table 3: Average Length of Grazing Season (Based on Forage Production Zone)

Pennsylvania Average	180 days
Central Northeast	180
Northern Northeast	165
Southern Northeast	195
Upper Mid-South	210 days

Forage Production Zones

- Central Northeast
- Northern Northeast
- Southern Northeast
- Upper Mid South
- State Line
- County Line

Forage Production Zone N

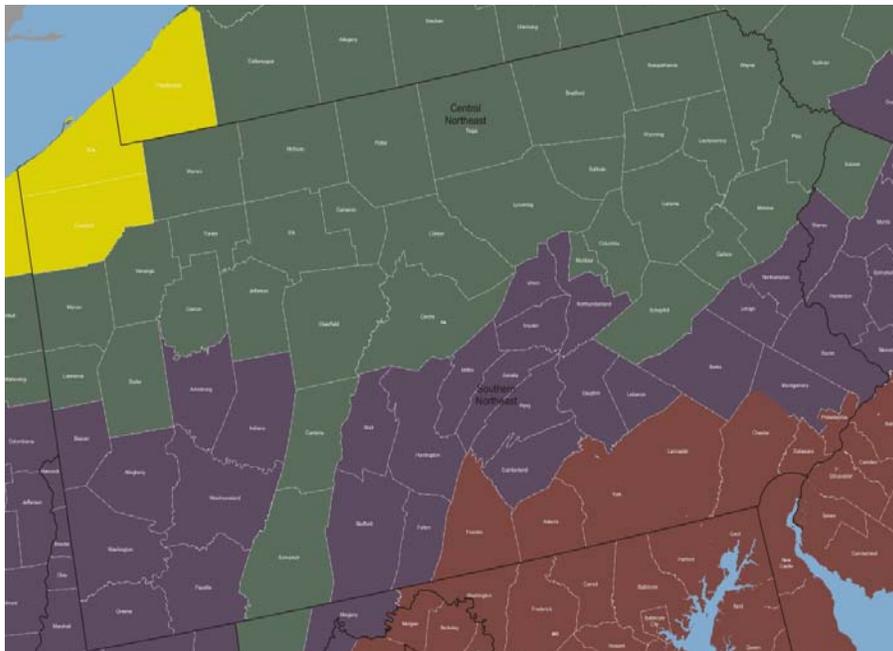


Table 4: Dry Matter Intake as % Body Weight (BW) per Day

Beef Animals	2.5%
Ewes-Lactating	2.5-4.0%
Ewes-Maintenance	1.8-2.0%
Horses	2.0%
Goats-Lactating	5.0%
Goats-Maintenance	1.8-2.0%
Lactating Dairy Cows - Pasture Only	3.0%
Lactating Dairy Cows - TMR/Grain (High Milk Production)	4.0%
Dry Cows/Heifers	2.4%

Table 5: Utilization Rate Based on Length of Paddock Occupation

Length of Occupation (days)	Utilization Rate (%)
1 day or less	80%
2 -3 days	75%
4 days	70%
5 days	65%
6+ days	60%
Continuous Grazing - Low Stocking Density	35%
Continuous Grazing - High Stocking Density / Overgrazed	90%

Table 6. Rest Periods for Grazing Systems

Season	Weather Condition	Forage Growth Rate	Rest Period
Spring	Cool, Moist	Fast	10 - 14 days
Spring	Warm, Dry	Medium	14 - 20 days
Summer	Hot, Moist	Slow	30 - 35 days
Summer	Hot, Dry	Very Slow	40 - 60 days

Average summer rest for PA is typically 35 days.

(Taken from PSU Agronomy Fact 43, 1994)

Table 7. Dry Matter (DM) Values for Common Feed Supplements

Common Feeds	% DM/lbs of Feed
Corn Silage	35
Alfalfa Haylage	43
Grass Haylage	44
Sudex Haylage	28
Wheatlage	34
Ryelage	30
Barley Silage	38
Dry Hay	89
Baleage	50 - 65
Grain and Grain Mixes	90

Note - to convert pounds of "as fed" feed to pounds of DM fed:

Pounds of feed x %DM = Total lbs of DM fed

Table 8. Estimated Forage Yield

Non-Irrigated Forage Yield/Year		Forage Yield / Acre-Inch
Tons / Acre / Year	lbs DM / Acre / Year	
4.5	9000	300
4	8000	270
3.5	7000	230
3	6000	200
2.5	5000	170
2	4000	130
1.5	3000	100

*Note - Yield is based on 5 rotations/year, harvesting an average of 6 inches each rotation.
 lbs DM produced/Ac/Season = 6 rotations X 5 inches of available forage X lbs DM Forage/Inch