

# Pasture Nitrogen Balance Worksheet

Area Identification <sup>1</sup>	Acres <sup>1</sup>	Expected Yield <sup>2</sup>
<sup>1</sup> Operation Data Collection <sup>2</sup> Estimating Forage Yields For Pastures <sup>3</sup> Penn State Agronomy Guide - Table 1.2-6 <sup>4</sup> Penn State Agronomy Guide - Table 1.2-14B <sup>5</sup> Penn State Agronomy Guide - Table 1.2-7 <sup>6</sup> Agronomy Facts 54 (Act 38 Standard Weights Table) <sup>7</sup> Penn State Agronomy Guide - Table 1.2-13 <sup>8</sup> Penn State Agronomy Guide - Table 1.2-14A		N Recommendation (lb/A) <sup>3</sup>
		Planned Fertilizer (lb/A) <sup>1</sup>
		Residual Manure N <sup>4</sup>
		Residual Legume N (lb/A) <sup>5</sup>
		<b>Net Nitrogen Requirement (lb/A)</b>

Calculation of Uncollected Manure Nitrogen & Available Nitrogen Per Acre				
Animal Group <sup>1</sup>				
Number of Animals <sup>1</sup> x				
Weight <sup>6</sup> ÷ 1000				
Number of AUs x				
Daily Manure Production Per AU (lb) <sup>7</sup> x				
Total Days Animals Have Access To Area <sup>1</sup>				
Hours Per Day Animals Have Access To Area <sup>1</sup>				
Total Uncollected Manure (tons) (AUs x daily production x days uncollected x hours uncollected ÷ 24 ÷ 2000)				
Manure Nitrogen Analysis (lb/ton) <sup>7</sup>				
Total Pounds of Nitrogen (tons x analysis)				
Pounds of Nitrogen Per Acre (pounds of N ÷ acres)				
Total Pounds of Nitrogen Per Acre (sum of each animal group)				<b>Total Available N/A &lt; Net N Requirement</b> (Manure deposited at this stocking rate is under N balanced rate; may need supplemental N)
<b>Total Available N Per Acre (lb/A x N Availability Factor) <sup>8</sup></b>				<b>Total Available N/A &gt; Net N Requirement</b> (Manure deposited at this stocking rate is over N balanced rate; stocking rate must be adjusted to reach N balance)