

Pasture Nitrogen Balance Worksheet

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

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