

Summary of Nutrient Excretion, Nutrient Remaining After Storage and Field Losses, and Land Requirements For Agronomic Application

Producer's Name: 1000 cow dairy example Address:
Farm Name: Address:
Town:
Contact Person Who Completed Worksheet:

Phone:
Fax:
e-mail:
Phone:

Herd/Flock Summary:	One-Time Capacity	Animals Finished per Year	Average Weight	Notes on Livestock System (e.g. Feed Program, Animal Performance, Animal Housing)
Species and Animal Facility				
Dairy, Lactating Cows: 1000 cow dairy example	850		1375 lb	
Dairy, Dry Cows: 1000 cow dairy example	150		1500 lb	
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Nutrient Excretion by Livestock Summary						
1.	1000 cow dairy example	347,015 lbs. N/year		56,072 lbs. P/year		
2.						
3.						
4.						
TOTAL		347,015 lbs. N/year		56,072 lbs. P/yr.		
Nutrients Remaining After Storage Losses						
		Amount Retained	% Retained	Amount Retained	% Retained	
1.	1000 cow dairy example	260,261 lbs. N/year	75%	56,072 lbs. P/year	100%	
2.						
3.						
4.						
	Collected Runoff	- lbs. N/year	5%	- lbs. P/year	5%	
TOTAL		260,261 lbs. N/year		56,072 lbs. P/yr.		
Nutrients Remaining After Field Application Losses						
		Amount Retained	% Retained		Amount Retained	% Retained
			Org -N	NH ₄ -N		
1.	1000 cow dairy example	221,222 lbs. N/year	70%	95%	56,072 lbs. P/year	100%
2.						
3.						
4.						
	Collected Runoff				- lbs. P/year	100%
TOTAL		221,222 lbs. N/year			56,072 lbs. P/yr.	
Crop Land Requirements if Manure Nutrients are Distributed According to Crop Nutrient Removal Rates (Land Base worksheet).						
Land Base		Nitrogen		P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining
2,110 ac	221,222 lb	221,222 lb	0 lb	128,405 lb	128,405 lb	0 lb
	1,340 acres to utilize N			2,110 acres to utilize P		
Crop Land Requirements if Runoff Nutrients are Distributed According to Crop Nutrient Removal Rates (Land-Runoff worksheet).						
Land Base		Nitrogen		P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining
0 ac	0 lb	0 lb	0 lb	0 lb	0 lb	0 lb
	0 acres to utilize N			0 acres to utilize P		
Crop Land Requirements for Accumulated Phosphorus in Settled Solids and Sludge of an Anaerobic Lagoon						
Land Base		P ₂ O ₅				
Identified	Available	Utilized	Remaining			
0 ac	0 lb	0 lb	0 lb			
	0 acres to utilize P					

Developed by Rick Koelsch, Livestock Environmental Engineer, University of Nebraska-Lincoln.

Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the USDA.
Elbert Dickey, Director of Cooperative Extension, University of Nebraska, Institute of Agriculture and Natural Resources.

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Summary of Nutrient Excretion, Nutrient Remaining After Storage and Field Losses, and Land Requirements For Agronomic Application

Producer's Name: 1,000 Beef Feedlot Exam
 Farm Name: Address:
 Town:
 Contact Person Who Completed Worksheet:

Phone:
 Fax:
 e-mail:
 Phone:

Herd/Flock Summary:	One-Time Capacity	Animals Finished per Year	Average Weight	Notes on Livestock System (e.g. Feed Program, Animal Performance, Animal Housing)
Species and Animal Facility				
Beef, Feeder Cattle: 1000 head example	1,000	1,000	982.5 lb	

Nutrient Excretion by Livestock Summary						
1.	1000 head example	55,986 lbs. N/year		7,180 lbs. P/year		
2.						
3.						
4.						
	TOTAL	55,986 lbs. N/year		7,180 lbs. P/yr.		
Nutrients Remaining After Storage Losses						
		Amount Retained	% Retained	Amount Retained	% Retained	
1.	1000 head example	27,993 lbs. N/year	50%	6,821 lbs. P/year	95%	
2.						
3.						
4.	Collected Runoff	2,799 lbs. N/year	5%	359 lbs. P/year	5%	
	TOTAL	27,993 lbs. N/year		6,821 lbs. P/yr.		
Nutrients Remaining After Field Application Losses						
		Amount Retained	% Retained		Amount Retained	% Retained
			Org -N	NH ₄ -N		
1.	1000 head example	15,156 lbs. N/year	50%	71%	6,821 lbs. P/year	100%
2.						
3.						
4.	Collected Runoff	1,456 lbs. N/year	70%	50%	359 lbs. P/year	100%
	TOTAL	15,156 lbs. N/year			6,821 lbs. P/yr.	
Crop Land Requirements if Manure Nutrients are Distributed According to Crop Nutrient Removal Rates (Land Base worksheet).						
Land Base	Nitrogen			P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining
256 ac	15,156 lb	15,156 lb	0 lb	15,620 lb	15,620 lb	0 lb
	92 acres to utilize N			256 acres to utilize P		
Crop Land Requirements if Runoff Nutrients are Distributed According to Crop Nutrient Removal Rates (Land-Runoff worksheet).						
Land Base	Nitrogen			P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining
14 ac	1,456 lb	1,456 lb	0 lb	822 lb	822 lb	0 lb
	9 acres to utilize N			14 acres to utilize P		
Crop Land Requirements for Accumulated Phosphorus in Settled Solids and Sludge of an Anaerobic Lagoon						
Land Base	P ₂ O ₅					
Identified	Available	Utilized	Remaining			
0 ac	0 lb	0 lb	0 lb			
	0 acres to utilize P					

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Summary of Nutrient Excretion, Nutrient Remaining After Storage and Field Losses, and Land Requirements For Agronomic Application

Producer's Name: 1,000 Beef Feedlot Exam
 Farm Name: Address:
 Address:
 Town:
 Contact Person Who Completed Worksheet:

Phone:
 Fax:
 e-mail:
 Phone:

Herd/Flock Summary:	One-Time Capacity	Animals Finished per Year	Average Weight	Notes on Livestock System (e.g. Feed Program, Animal Performance, Animal Housing)
Species and Animal Facility Beef, Feeder Cattle: 1000 head example	1,000	1,000	982.5 lb	

Nutrient Excretion by Livestock Summary		
1.	1000 head example	55,986 lbs. N/year
2.		
3.		
4.		
TOTAL		55,986 lbs. N/year

Nutrients Remaining After Storage Losses				
	Amount Retained	% Retained	Amount Retained	% Retained
1.	1000 head example	39,190 lbs. N/year	70%	7,180 lbs. P/year
2.				
3.				
4.				
	Collected Runoff	- lbs. N/year	5%	- lbs. P/year
TOTAL		39,190 lbs. N/year		7,180 lbs. P/yr.

Nutrients Remaining After Field Application Losses					
	Amount Retained	% Retained		Amount Retained	% Retained
		Org -N	NH ₄ -N		
1.	1000 head example	21,218 lbs. N/year	50%	71%	7,180 lbs. P/year
2.					
3.					
4.					
	Collected Runoff				- lbs. P/year
TOTAL		21,218 lbs. N/year			7,180 lbs. P/yr.

Crop Land Requirements if Manure Nutrients are Distributed According to Crop Nutrient Removal Rates (Land Base worksheet).							
Land Base		Nitrogen			P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining	
270 ac	21,218 lb	21,218 lb	0 lb	16,442 lb	16,442 lb	0 lb	
129 acres to utilize N				270 acres to utilize P			

Crop Land Requirements if Runoff Nutrients are Distributed According to Crop Nutrient Removal Rates (Land-Runoff worksheet).							
Land Base		Nitrogen			P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining	
14 ac	0 lb	0 lb	0 lb	0 lb	0 lb	0 lb	
9 acres to utilize N				9 acres to utilize P			

Crop Land Requirements for Accumulated Phosphorus in Settled Solids and Sludge of an Anaerobic Lagoon					
Land Base		P ₂ O ₅			
Identified		Available	Utilized	Remaining	
0 ac		0 lb	0 lb	0 lb	
0 acres to utilize P					

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Summary of Nutrient Excretion, Nutrient Remaining After Storage and Field Losses, and Land Requirements For Agronomic Application

Producer's Name: 1000 head broiler
 Farm Name:

Address:
 Address:
 Town:

Phone:
 Fax:
 e-mail:
 Phone:

Contact Person Who Completed Worksheet:

Herd/Flock Summary:	One-Time Capacity	Animals Finished per Year	Average Weight	Notes on Livestock System (e.g. Feed Program, Animal Performance, Animal Housing)
Species and Animal Facility Broilers: Stockpiled Litter	100,000	600,000	6 lb	
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:				
:				
:				
:				
:				
:				
:				
:				

Nutrient Excretion by Livestock Summary		
1. Stockpiled Litter	70,838 lbs. N/year	22,613 lbs. P/year
2.		
3.		
4.		
TOTAL	70,838 lbs. N/year	22,613 lbs. P/yr.

Nutrients Remaining After Storage Losses				
	Amount Retained	% Retained	Amount Retained	% Retained
1. Stockpiled Litter	19,835 lbs. N/year	28%	21,482 lbs. P/year	95%
2.				
3.				
4.				
Collected Runoff	- lbs. N/year	5%	- lbs. P/year	5%
TOTAL	19,835 lbs. N/year		21,482 lbs. P/yr.	

Nutrients Remaining After Field Application Losses					
	Amount Retained	% Retained		Amount Retained	% Retained
		Org -N	NH ₄ -N		
1. Stockpiled Litter	9,917 lbs. N/year	50%	23%	21,482 lbs. P/year	100%
2.					
3.					
4.					
Collected Runoff				- lbs. P/year	100%
TOTAL	9,917 lbs. N/year			21,482 lbs. P/yr.	

Crop Land Requirements if Manure Nutrients are Distributed According to Crop Nutrient Removal Rates (Land Base worksheet).							
Land Base		Nitrogen			P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining	
811 ac	9,917 lb	9,917 lb	0 lb	49,194 lb	49,194 lb	0 lb	
61 acres to utilize N				811 acres to utilize P			

Crop Land Requirements if Runoff Nutrients are Distributed According to Crop Nutrient Removal Rates (Land-Runoff worksheet).							
Land Base		Nitrogen			P ₂ O ₅		
Identified	Available	Utilized	Remaining	Available	Utilized	Remaining	
0 ac	0 lb	0 lb	0 lb	0 lb	0 lb	0 lb	
0 acres to utilize N				0 acres to utilize P			

Crop Land Requirements for Accumulated Phosphorus in Settled Solids and Sludge of an Anaerobic Lagoon				
Land Base	P ₂ O ₅			
Identified	Available	Utilized	Remaining	
0 ac	0 lb	0 lb	0 lb	
0 acres to utilize P				

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Summary of Nutrient Excretion, Nutrient Remaining After Storage and Field Losses, and Land Requirements For Agronomic Application

Producer's Name: 1000 Finishing Pigs Address:
 Farm Name: Example Address:
 Town:
 Contact Person Who Completed Worksheet:

Phone:
 Fax:
 e-mail:
 Phone:

Herd/Flock Summary:	One-Time Capacity	Animals Finished per Year	Average Weight	Notes on Livestock System (e.g. Feed Program, Animal Performance, Animal Housing)
Species and Animal Facility				
Swine-Finishing Pigs: 1000 Finishing pigs	1,000	2,500	154.5 lb	

Nutrient Excretion by Livestock Summary				
1.	1000 Finishing pigs	26,129 lbs. N/year		4,205 lbs. P/year
2.				
3.				
4.				
	TOTAL	26,129 lbs. N/year		4,205 lbs. P/yr.
Nutrients Remaining After Storage Losses				
		Amount Retained	% Retained	Amount Retained % Retained
1.	1000 Finishing pigs	22,209 lbs. N/year	85%	4,205 lbs. P/year 100%
2.				
3.				
4.				
	Collected Runoff	- lbs. N/year	5%	- lbs. P/year 5%
	TOTAL	22,209 lbs. N/year		4,205 lbs. P/yr.
Nutrients Remaining After Field Application Losses				
		Amount Retained	% Retained	Amount Retained % Retained
			Org -N NH ₄ -N	
1.	1000 Finishing pigs	18,878 lbs. N/year	70% 95%	4,205 lbs. P/year 100%
2.				
3.				
4.				
	Collected Runoff			- lbs. P/year 100%
	TOTAL	18,878 lbs. N/year		4,205 lbs. P/yr.
Crop Land Requirements if Manure Nutrients are Distributed According to Crop Nutrient Removal Rates (Land Base worksheet).				
	Land Base	Nitrogen		P ₂ O ₅
	Identified	Available	Utilized Remaining	Available Utilized Remaining
	158 ac	18,878 lb	18,878 lb 0 lb	9,630 lb 9,630 lb 0 lb
		115 acres to utilize N		158 acres to utilize P
Crop Land Requirements if Runoff Nutrients are Distributed According to Crop Nutrient Removal Rates (Land-Runoff worksheet).				
	Land Base	Nitrogen		P ₂ O ₅
	Identified	Available	Utilized Remaining	Available Utilized Remaining
	0 ac	0 lb	0 lb 0 lb	0 lb 0 lb 0 lb
		0 acres to utilize N		0 acres to utilize P
Crop Land Requirements for Accumulated Phosphorus in Settled Solids and Sludge of an Anaerobic Lagoon				
	Land Base	P ₂ O ₅		
	Identified	Available	Utilized	Remaining
	0 ac	0 lb	0 lb	0 lb
		0 acres to utilize P		

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