

4 - Land Base Summary

Operation Name:

Enter the operation name on the livestock tab(s)

Nutrients Excreted		lbs
Nitrogen		505407
Phosphorus (P2O5)		292801
Crop Nutrient Use		lb/ac
Average Crop N Uptake		155.6
Average Crop Phosphorus (P2O5) Removal		39.1
Operation-specific Phosphorus (P2O5) Allowance		78.2
Land Available		
		11016
Land Base Required		acres
Acres for Nitrogen		3249
Acres for Phosphorus (P2O5)		3743
Phosphorus Balance		acres
Acres for Phosphorus Balance (1X)		7486

Note: For lands located in Hanover and/or La Broquerie, the acres required for phosphorus are based on phosphorus balance (1X). For other lands, the acres required for phosphorus are based on twice crop phosphorus removal (2X). Land requirements for operations with lands inside and outside Hanover and/or La Broquerie are based on a weighted average.

Last revised November 26, 2019

3 - Farm Excretion

Operation Name: Enter the operation name on the livestock tab(s)

Species	Animal Category/Operation type	N (lb/year)	P2O5 (lb/year)
Pigs	Boars	0	0
	Weanlings/Nursery	0	0
	Growers/Finishers	0	0
	Sows, farrow to 5 kg	0	0
	Sows, farrow to 23 kg	0	0
	Sows, farrow to finish	448024	260233
Beef	Mature Cows and Bred Heifers, plus associated livestock	29580	12238
	Feedlot Cattle - long keep	0	0
	Feedlot Cattle - short keep	0	0
	Backgrounders - pasture	0	0
	Backgrounders - confined	0	0
Dairy	Lactating cow	0	0
	Lactating First Calf Heifer	0	0
	Dry cow	0	0
	Calf, 0-3 months	0	0
	Calf, 4-13 months	0	0
	Replacements, >13 months	0	0
	Mature Cows, plus assoc livestock	0	0
Sheep	Ewes	0	0
	Replacement Ewes	0	0
	Rams	0	0
	Lambs	0	0
	Ewes, plus assoc livestock	346	207
	Feeder	286	170
Chickens	Light Broilers	0	0
	Broilers	18307	12165
	Broiler Breeder Pullets	0	0
	Broiler Breeder Hens	0	0
Layers	White Layer Pullets	1502	1240
	White Layer Hens	5371	5077
	White Breeder Pullets	0	0
	White Breeder Hens	0	0
	Brown Layer Pullets	0	0
	Brown Layer Hens	0	0
	Brown Breeder Pullets	0	0
	Brown Breeder Hens	0	0
Turkeys	Broiler Turkey (0-9 wks)	1072	773
	Hen Turkey (0-11 wks)	0	0
	Heavy Hens (0-14 wks)	918	698
	Toms (0-14 wks)	0	0
	Breeding Hen Growers (0-30 wks)	0	0
	Breeding Hens (31-End of Lay)	0	0
	Breeding Tom Grower (0-17 wks)	0	0
	Breeding Tom Grower (17-30 wks)	0	0
	Breeding Tom (31-End of Lay)	0	0
Total		505407	292801

Note: Be sure all livestock species on your farm are represented in this table, not just the livestock in the proposed expansion.

2 - Crop Rotation

Operation Name:

Enter the operation name on the livestock tab(s)

Crop	Removal		Uptake		Yield	Units	Acreage	Removal		Uptake		
	P2O5 (lb)	N (lb)	P2O5 (lb)	N (lb)				P2O5 (lb)	N (lb)	P2O5 (lb)	N (lb)	
Alfalfa	13.8	58	58	lb/ton		ton/ac						
Barley Grain	0.42	0.97	1.39	lb/bu	83.1	bu/ac	765	26700	61664		88364	
Barley Silage	11.8	34.4	34.4	lb/ton		ton/ac						
Canola	1.04	1.93	3.19	lb/bu	42.6	bu/ac	2975	131804	244599		404285	
Corn Grain	0.44	0.97	1.53	lb/bu	110.2	bu/ac	935	45336	99946		157647	
Corn Silage	12.7	31.2	31.2	lb/ton		tons/ac						
Dry Edible Beans	1.39	4.17	4.17	lb/cwt		cwt/ac						
Fababeans	1.79	5.02	8.4	lb/cwt		cwt/ac						
Flax	0.65	2.13	2.88	lb/bu		bu/ac						
Grass Hay	10	34.2	34.2	lb/ton		tons/ac						
Lentils	1.03	3.39	5.08	lb/cwt		cwt/ac						
Oats	0.26	0.62	1.07	lb/bu	127.5	bu/ac	680	22542	53754		92769	
Pasture (grazed)	10	34.2	34.2	lb/ton	0.5	ton/ac						
Peas	0.69	2.34	3.06	lb/bu		bu/ac						
Potatoes	0.09	0.32	0.57	lb/cwt		cwt/ac						
Rye	0.45	1.06	1.67	lb/bu		bu/ac						
Soybeans	0.84	3.87	5.2	lb/bu	37.7	bu/ac	2890	91521	421648		566556	
Sunflower	1.1	2.8		lb/cwt		cwt/ac						
Wheat - Spring	0.59	1.5	2.11	lb/bu	69.1	bu/ac	2771	112971	287214		404015	
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac						
Total Acres							11016	430874	1168825	1713635		
Estimated Average Removal/Uptake (lb/ac)												
Acres in Hanover and La Broquerie								39.1	106.1	155.6		
Proportion in Hanover or La Broquerie							0%					
Additional Acres												
Crop Planned on Additional Acres												
Total Acreage							11016					

***Notes:**

Enter the number of acres that are in the RM's of Hanover or La Broquerie in cell H26.
Additional acres include acres for which crop removal or soil data is limited or unavailable.

1e - Poultry

Operation Name: [REDACTED]

Species / Commodity	Type of Operation	Storage Type	Volatilization	Bird Places	Weight in kg	Weight out kg	Days on Feed	Cycles per Year	N Excreted Adjusted for N Loss lb/flock/yr	P2O5 Excreted lb/flock/yr
Chickens	Light Broilers	Solid Manure Shed	20%		0.043	1.8	30	7	0	0
Chickens	Broilers	Field Storage	40%	35000	0.043	2.275	35	7	18307	12165
Chickens	Broiler Breeder Pullets	Solid Manure Shed	20%		0.040	2.975	168	2	0	0
Chickens	Broiler Breeder Hens	Solid Manure Shed	20%		2.975	3.950	245	1	0	0
Eggs	White Layer Pullets	Liquid Uncovered Earthen	30%	5000	0.040	1.355	133	2	1502	1240
Eggs	White Layer Hens	Liquid Uncovered Earthen	30%	5800	1.355	1.875	357	1	5371	5077
Eggs	White Breeder Pullets	Solid Manure Shed	20%		0.040	1.240	119	2	0	0
Eggs	White Breeder Hens	Solid Manure Shed	20%		1.240	1.670	350	1	0	0
Eggs	Brown Layer Pullets	Solid Manure Shed	20%		0.040	1.630	133	2	0	0
Eggs	Brown Layer Hens	Solid Manure Shed	20%		1.630	2.025	357	1	0	0
Eggs	Brown Breeder Pullets	Solid Manure Shed	20%		0.040	1.407	119	2	0	0
Eggs	Brown Breeder Hens	Solid Manure Shed	20%		1.407	1.950	350	1	0	0
Turkey	Broiler Turkey (0-9 wks)	Field Storage	40%	800	0.070	4.950	63	5	1072	773
Turkey	Hen Turkey (0-11 wks)	Solid Manure Shed	20%		0.070	6.650	77	4	0	0
Turkey	Heavy Hens (0-14 wks)	Field Storage	40%	500	0.070	9.750	98	3	918	698
Turkey	Toms (0-14 wks)	Solid Manure Shed	20%		0.070	13.000	98	3	0	0
Turkey	Breeding Hen Growers (0-30 wks)	Solid Manure Shed	20%		0.070	12.900	210	1	0	0
Turkey	Breeding Hens (31-End of Lay)	Solid Manure Shed	20%		12.900	12.400	252	1	0	0
Turkey	Breeding Tom Grower (0-17 wks)	Solid Manure Shed	20%		0.070	15.770	119	1	0	0
Turkey	Breeding Tom Grower (17-30 wks)	Solid Manure Shed	20%		15.770	25.000	91	1	0	0
Turkey	Breeding Tom (31-End of Lay)	Solid Manure Shed	20%		25.000	28.180	252	1	0	0

1d -Sheep

Operation Name	Storage Type	Volatilization	Animal Numbers	Weight In lb	Weight Out lb	Ave Weight lb	Days on Feed	Cycles per Year	N Excreted per Flock adjusted for Loss lb/flock/yr	P2O5 Excreted Per Flock lb/flock/yr
Sheep/Operation Type										
Ewes	Field Storage	40%		120	170	145	365	1	0	0
Replacement Ewes	Field Storage	40%		45	80	63	210	1	0	0
Rams	Field Storage	40%		100	200	150	365	1	0	0
Lambs	Field Storage	40%		8	45	27	70	1.4	0	0
Ewes, plus assoc livestock	Field Storage	40%	20	n/a	n/a	n/a	n/a	n/a	346	207
Feeder	Field Storage	40%	40	45	100	73	365	1	286	170

1b - Beef

Operation Name:

Operation Type	Animal Category	Storage Type	Volatilization	Animal Numbers	Weight In (lb)	Weight Out (lb)	Days per Cycle (Days)	Cycles per Year	Rate of Gain (lb/day)	Days Place is Occupied per Year (days)	N Excreted Per Herd Adjusted for Storage N Loss (lb N/yr/herd)	P2O5 Excreted Per Herd Per Year (lb P2O5/year)
Cow Calf	Mature Cows and Bred Heifers, plus associated livestock	Field Storage	40%	220	n/a	n/a	n/a	n/a	n/a	n/a	29580	12238
Feeder	Feedlot Cattle - long keep	Field Storage	40%		581	1300	240	1.0	3.00	240	0	0
Feeder	Feedlot Cattle - short keep	Field Storage	40%		975	1300	116	1.0	2.80	116	0	0
Feeder	Backgrounders - pasture	Field Storage	40%		793	975	105	1.0	1.73	105	0	0
Feeder	Backgrounders - confined	Field Storage	40%		500	793	180	1.0	1.63	180	0	0

Last Revised January 21, 2015

1a - Pigs

Operation Name:

Operation Type	Storage Type	Volatilization	Animal Numbers (Places)	N Excreted Per Herd Adjusted for Storage N Loss (lb/yr/herd)	P2O5 Excreted Per Herd Per Year (lb/yr/herd)
Gilts (Purchased) Boars	Liquid Uncovered Earthen	30%		0	0
	Liquid Uncovered Earthen	30%		0	0
Weanlings/Nursery Growers/Finishers	Liquid Uncovered Earthen	30%		0	0
	Liquid Uncovered Earthen	30%		0	0
Sows, farrow to 6.2 kg Sows, farrow to 28 kg Sows, farrow to finish	Liquid Uncovered Earthen	30%	1650	0	0
	Liquid Uncovered Earthen	30%		0	0
	Liquid Uncovered Earthen	30%		448024	260233

Last Revised February 12, 2020