

1b - Beef												
Operation Name:		Gall										
Operation Type	Animal Category	Storage Type	Volatilization	Animal Numbers	Weight In (lb)	Weight Out (lb)	Average Animal Wt (lb)	Days per Cycle (Days)	Cycles per Year	Rate of Gain (lb/day)	Days Place is Occupied per Year (days)	P2O5 Excreted Per Herd Per Year (lb P2O5/year)
Cow Calf	Mature Cows (>2 years old)	Field Storage	40%	470	1375	1375	1375	210	1.0		210	10637
Cow Calf	Bred Heifer (19 mo - >2 years)	Field Storage	40%	80	1150	1375	1263	210	1.0	1.48	210	1903
Cow Calf	Replacement Heifers (7 mo-14 mo)	Field Storage	40%	80	581	926	754	210	1.0	1.64	210	1146
Cow Calf	Unweaned Calves (0-2 mo)	Field Storage	40%	500	86	200	143	45	1.0	2.53	45	3168
Cow Calf	Bulls	Field Storage	40%	25	2100	2200	2150	210	1.0		210	1187
Cow Calf	Mature Cows and Bred Heifers, plus associated livestock	Field Storage	40%		n/a	n/a	n/a	n/a	n/a	n/a	n/a	0
Feeder	Feedlot Cattle - long keep	Field Storage	40%		581	1300	941	240	1.0	3.00	240	0
Feeder	Feedlot Cattle - short keep	Field Storage	40%		975	1300	1138	116	1.0	2.80	116	0
Feeder	Backgrounders - pasture	Field Storage	40%		793	975	884	105	1.0	1.73	105	0
Feeder	Backgrounders - confined	Field Storage	40%	430	500	793	647	180	1.0	1.63	180	5686

Last Revised January 21, 2015

Note: 40% volatilization was used as manure from pens and confined area is pushed up in spring and hauled/spread in fall. There is another quarter of land (Fields 4 and 5 -113 acres where cattle are kept during the winter) on this area I also used 40% volatilization as manure is not incorporated over the winter time frame. Also all cattle are moved about 35 miles away onto about 5000 acres of leased crown pasture land from June 1 to October 31. Therefore the cattle numbers and "Days per Cycle" only reflect the Nov 1 to May 31 period. As this land area is all pasture no mechanical spreading will occur on this land and therefore not included in the tables and maps.

2 - Crop Rotation										
Operation Name:					Gall					
Crop	Removal		Uptake		Yield	Units	Acreage	Removal		Uptake
	P2O5	N	N	Units				P2O5 (lb)	N (lb)	N (lb)
Alfalfa	13.8	58	58	lb/ton	2.508	ton/ac	382	13221	55567	55567
Barley Grain	0.42	0.97	1.39	lb/bu		bu/ac		-	-	-
Barley Silage	11.8	34.4	34.4	lb/ton		ton/ac		-	-	-
Canola	1.04	1.93	3.19	lb/bu		bu/ac		-	-	-
Corn Grain	0.44	0.97	1.53	lb/bu		bu/ac		-	-	-
Corn Silage	12.7	31.2	31.2	lb/ton		tons/ac		-	-	-
Dry Edible Beans	1.39	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	1.376319	tons/ac	467	6427	21982	21982
Lentils	1.03	3.39	5.08	lb/cwt		cwt/ac		-	-	-
Oats	0.26	0.62	1.07	lb/bu	78.8	bu/ac	80	1639	3908	6745
Pasture (grazed)	10	34.2	34.2	lb/ton	0.5	ton/ac	62	310	1060	1060
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		bu/ac		-	-	-
Sunflower	1.1	2.8		lb/cwt		cwt/ac		-	-	-
Wheat - Spring	0.59	1.5	2.11	lb/bu		bu/ac		-	-	-
Wheat - Winter	0.51	1.04	1.35	lb/bu		bu/ac		-	-	-
Total Acres							991	21598	82518	85354
Estimated Average Removal/Uptake (lb/ac)								21.8	83.3	86.1
Acres in Hanover and La Broquerie										
Proportion in Hanover or La Broquerie							0%			
Additional Acres										
Crop Planned on Additional Acres										
Total Acreage							991			

***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.

3 - Farm Excretion

Operation Name:

Gall

Species	Animal Category/Operation type	N (lb/year)	P2O5 (lb/year)
Pigs	Boars	0	0
	Weanlings	0	0
	Growers/finishers	0	0
	Sows, farrow to 5 kg	0	0
	Sows, farrow to 23 kg	0	0
	Sows, farrow to finish	0	0
Beef	Mature Cows (>2 years old)	27346	10637
	Bred Heifer (14 mo - 2 years)	4708	1903
	Replacement Heifers (7 mo-14 mo)	2918	1146
	Unweaned Calves (0-7 mo)	4872	3168
	Bulls	2671	1187
	Mature Cows and Bred Heifers, plus associated livestock	0	0
	Feedlot Cattle - long keep	0	0
	Feedlot Cattle - short keep	0	0
	Backgrounders - pasture	0	0
	Backgrounders - confined	12332	5686
Dairy	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	0	0
	Feeder	0	0
Chickens	Broilers	0	0
	Broiler Breeder Pullets	0	0
	Broiler Breeder Hens	0	0
Layers	Layer Pullets	0	0
	Layer Hens	0	0
	Breeder Pullets	0	0
	Breeder Hens	0	0
Turkeys	Broiler Hens (0-9 wks)	0	0
	Hens (0-11 wks)	0	0
	Heavy Hens (0-14 wks)	0	0
	Light Toms (0-12 wks)	0	0
	Toms (0-13 wks)	0	0
	Heavy Toms (0-15 wks)	0	0
	Breeding Hen Growers (0-30 wks)	0	0
	Breeding Hens (30-60 wks)	0	0
	Breeding Tom Grower (0-18 wks)	0	0
	Breeding Tom Grower (0-30 wks)	0	0
Breeding Tom (30-60 wks)	0	0	
Total		54847	23726

Note:

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

4 - Land Base Summary

Operation Name:	Gall
Nutrients Excreted	lbs
Nitrogen	54847
Phosphorus (P2O5)	23726
Crop Nutrient Use	lb/ac
Crop N Uptake	86.1
Crop Phosphorus (P2O5) Removal	21.8
Operation-specific Phosphorus (P2O5) Credit	43.6
Land Available	991
Land Base Required	acres
Acres for Nitrogen	637
Acres for Phosphorus (P2O5)	544
Phosphorus Balance	acres
Acres for Phosphorus Balance (1X)	1089

Last revised October 16, 2018