

How much fertilizer do your animals produce? (A3601)

Use this chart to come up with a quick estimate of the amount of manure that your animals produce annually and its fertilizer content.

For each animal type and size class

- **Annual manure production = Number of animals x Manure produced per animal**

Example: 50 dairy cows (1,400 lb average size) x 21.9 tons/year produce 1,095 tons/year

- **Annual fertilizer production = Number of animals x Fertilizer produced per animal**

Example: 50 dairy cows (1,400 lb average size) x 65 lb N/year produce 3,250 lb N/year

For animals confined all the time, the amount of manure produced is approximately the amount you will spread. Less manure will be collected for spreading if animals are pastured. For example, with dairy cattle that are totally confined for 6 winter months and in summer are only confined during milking, feeding and at night, you will be spreading about 83% of their total annual production. If they are only in during milking and feeding in the summer, you'll get about 66% of their annual production.

Example: 1,095 tons/year (produced by 50 dairy cows) x 83% confinement = 909 tons/year for spreading

Approximate Annual Manure Production and Fertilizer Content

Animal Type & Size		Daily Production	Approximate Annual Production*				
Animal (Type)	Size (lb)	Manure (lb/day)	Manure (tons/year)	Nitrogen* (lb N/year)	Phosphate* (lb P ₂ O ₅ /year)	Potash* (lb K ₂ O/year)	Sulfur* (lb S/year)
Cattle							
Dairy cattle	500	43	7.8	25	25	60	5
	1,400	120	21.9	65	65	175	20
Beef cattle	750	45	8.2	35	40	65	5
	1,250	75	13.7	55	70	110	10
Swine							
Finishing pig	150	9.8	1.8	5	5	15	5
	200	13.1	2.4	10	10	15	5
Sow and litter	375	22.5	4.1	15	10	30	5
Poultry							
Layers	4	0.21	0.038	0.50	0.50	0.35	0.05
Broilers	2	0.14	0.026	0.35	0.35	0.25	0.05

* N, P₂O₅, K₂O and S values represent amounts **available** for crop use the first year after manure application assuming 100% confinement of animals (i.e. all manure is spread) and accounting for expected handling and post-application losses.

Sources: Midwest Plan Service (MWPS-18) and University of Wisconsin-Extension (publications A3411 and A3557)