

Table 1. Estimated typical manure (urine and feces combined) characteristics as excreted by meat-producing livestock and poultry. Diet based numbers are in **BOLD**. Source ASAE D384.2 March 2005, Manure Production and Characteristics.

Animal Type and Production Grouping	Total solids	Volatile solids ³	COD ¹	BOD ¹	Nitrogen	P	K	Ca	Total Manure ²		Moisture ³	Assumed Finishing Time Period (days)
	lb/ finished animal (f.a.)								lb/ f.a.	ft ³ / f.a.	% w.b.	
Beef - Finishing cattle	780	640	670	150	55	7.3	38	17	9,800	160	92	153
Poultry - Broiler	2.8	2.1	2.3	0.66	0.12	0.035	0.068		11	0.17	74	48
Poultry - Turkey (male)	20	16	19	5.2	1.2	0.36	0.57		78	1.3	74	133
Poultry - Turkey (females)	9.8	7.8	8.8	2.4	0.57	0.16	0.25		38	0.61	74	105
Poultry - Duck	3.7	2.2	3.0	0.61	0.14	0.048	0.068		14	0.23	74	39
Swine - Nursery pig (27.5 lb)	10	8.7	9.7	3.4	0.91	0.15	0.35		87	1.4	90	36
Swine - Grow-finish (154 lb)	120	99	104	38	10	1.7	4.4		1200	20	90	120

Table 2. Estimated typical manure (urine and feces combined) characteristics as excreted by all other livestock and poultry. Diet based numbers are in **BOLD**. Source ASAE D384.2 March 2005, Manure Production and Characteristics.

Animal Type and Production Grouping	Total solids	Volatile solids ³	COD ¹	BOD ¹	Nitrogen	P	K	Ca	Mg	Total Manure ²		Moisture ³
	lb/ day-animal (d-a)									lb/ d-a.	ft ³ / d-a.	% w.b.
Beef - Cow (confinement) ⁴	15	13	14	3.0	0.42	0.097	0.30	0.20		-	-	88
Beef - Growing Calf (confinement)	6.0	5.0	5.2	1.1	0.29	0.055	0.19	0.088		50	0.81	88
Dairy - Lactating cow	20	17	18	2.9	0.99	0.17	0.23			150	2.4	87
Dairy - Dry cow	11	9.2	9.7	1.4	0.50	0.066	0.33			83	1.3	87
Dairy - Milk fed calves					0.017							
Dairy - Calf-330lb	3.2				0.14					19	0.30	83
Dairy - Heifer-970 lb	8.2	7.1	7.5	1.2	0.26	0.044				48	0.78	83
Dairy - Veal-260 lb	0.27				0.033	0.0099	0.044			7.8	0.12	96
Horse - Sedentary-1,100 lb ⁵	8.4	6.6		1.1	0.20	0.029	0.060	0.051	0.020	56	0.90	85
Horse - Intense exercise -1,100 lb ⁵	8.6	6.8		1.1	0.34	0.073	0.21	0.15	0.040	57	0.92	85
Layer	0.049	0.036	0.039	0.011	0.0035	0.0011	0.0013	0.0048		0.19	0.0031	75
Swine - Gestating sow-440 lb	1.1	0.99	1.0	0.37	0.071	0.020	0.048			11	0.18	90
Swine - Lactating sow ⁶ 423 lb	2.5	2.3	2.4	0.84	0.19	0.055	0.12			25	0.41	90
Swine - Boar-440 lb	0.84	0.75	0.60	0.29	0.061	0.021	0.039			8.4	0.13	90

1. BOD – Biochemical oxygen demand, 5-day, COD – Chemical oxygen demand
2. Total manure is calculated from Total Solids and manure moisture content.
3. Excreted manure was assumed to have a specific gravity of 1.0 to calculate manure volume.
4. Beef cows values are representative of animals during non-lactating period and first six months of gestation. Solids estimates (TS, VS, COD, and BOD) do not include solids in urine.
5. These values apply to a 500 kg horse (representative of 400 to 600 kg) 18 months of age or older that are not pregnant or lactating. "Sedentary" would apply to horses not receiving any imposed exercise. "Intense" represents horses used for competitive activities such as racing..
6. Bold values include contribution of nursing pigs