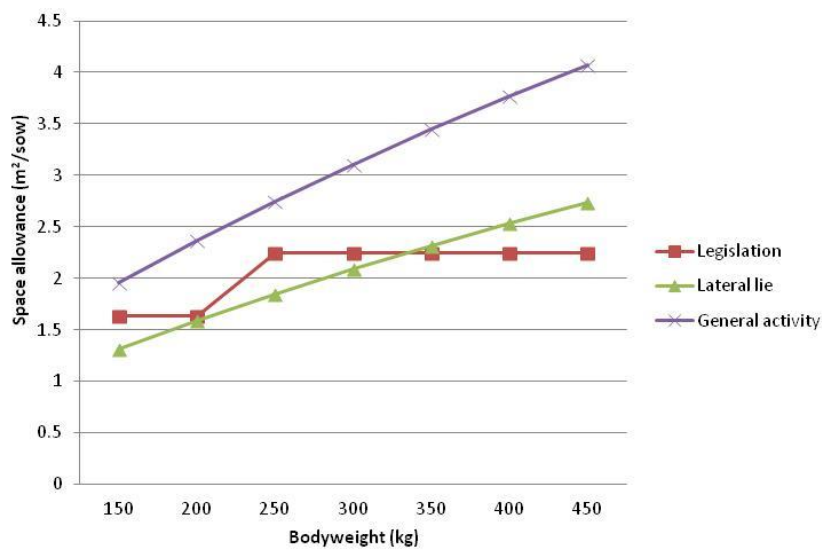# Space Allowance: Sows

The allometric approach: The physical space occupied by an animal is given by the allometric equation $A=kW^{0.67}$, where A = m²/animal, k is the empirical constant and W is bodyweight (kg). Space allowance increases non-linearly with increasing bodyweight and increases with an increasing value of k.

Minimum legislative limits for sows are in line with the lateral lie curve up to 350kg bodyweight.

Lateral k value = 0.0457. Extrapolated line 'Active' = 0.068, taken from the FAWC (1995) recommendation for the upper limit for stocking density (25kg/m²) for 5kg turkeys

Bodyweight	Space allowance (m2/sow)		
(kg)	Legislation	Lateral	Active
150	1.64	1.31	1.95
200	1.64	1.59	2.37
250	2.25	1.85	2.75
300	2.25	2.09	3.11
350	2.25	2.31	3.45
400	2.25	2.53	3.77
450	2.25	2.74	4.08

Space Allowance: Meat Pigs

The allometric approach: Minimum legislative limits for meat pigs are staggered around the sternal lie curve, and provide a constant 1m²/pig after 110kg.
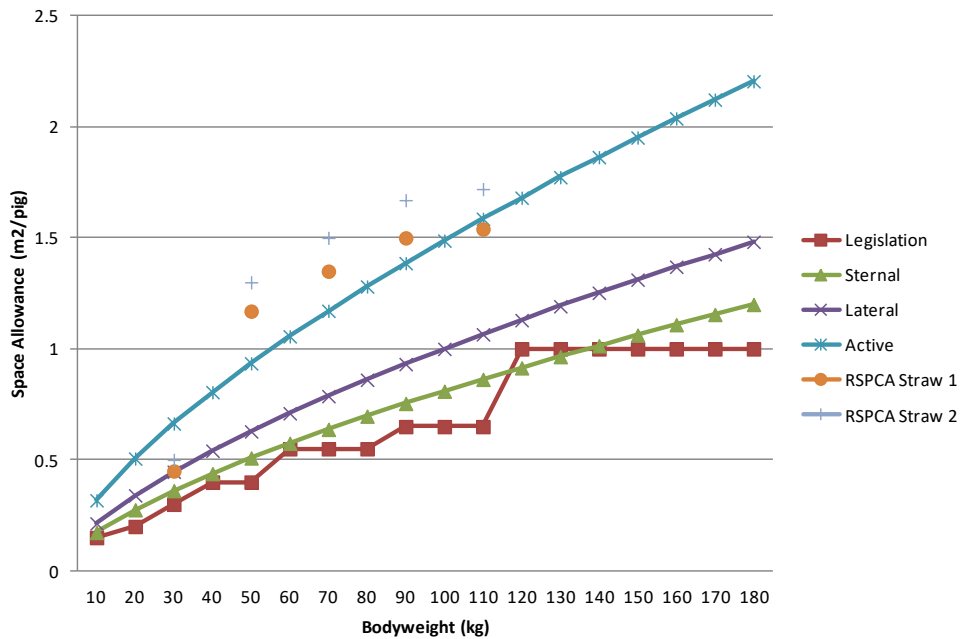
Sternal k value = 0.037; lateral = 0.0457. Extrapolated line 'Active' = 0.068, taken from the FAWC (1995) recommendation as the upper limit for stocking density (25kg/m²) for 5kg turkeys

Bodyweight	Space Allowance (m2/pig)					
kg	Legislation	Sternal	Lateral	Active	RSPCA Straw 1	RSPCA Straw 2
10	0.15	0.17	0.21	0.32		
20	0.2	0.28	0.34	0.51		
30	0.3	0.36	0.45	0.66	0.45	0.5
40	0.4	0.44	0.54	0.81		
50	0.4	0.51	0.63	0.94	1.17	1.3
60	0.55	0.57	0.71	1.06		
70	0.55	0.64	0.79	1.17	1.35	1.5
80	0.55	0.70	0.86	1.28		
85	0.65	0.73	0.90	1.33		
90	0.65	0.75	0.93	1.39	1.5	1.67
100	0.65	0.81	1.00	1.49		
110	0.65	0.86	1.07	1.59	1.54	1.72
120	1	0.91	1.13	1.68		
130	1	0.97	1.19	1.77		
140	1	1.01	1.25	1.86		
150	1	1.06	1.31	1.95		
160	1	1.11	1.37	2.04		
170	1	1.16	1.43	2.12		
180	1	1.20	1.48	2.21		