

Body weight reading table

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Assessment of body weight of livestock from measurements of body length and girth is a commonly practised and most wanted technique for Veterinary Practitioners and students especially under field situations. Determination of growth rate, calculation of drug dosage, decisions on the time for breeding and the preslaughter assessment of meat availability are some of the common indications for weight assessment.

Body weight in Kilograms is calculated using the formula

$$\text{Body weight (W)} = LG^2 / 660 \text{ (Kgs)}$$

Where L is the length in inches

from point of shoulder to point of buttocks (Pin bone).

G - chest girth or diameter just behind the point of elbows taken in inches.

Calculation of the body weight from the formula requires repeated multiplication followed by division, hence time consuming or necessitates the use of a calculator and even with calculator requires some time. Alternatively if we can read the weight directly from a table using length and girth, it will be very useful for routine use. Preparation of a table by arranging all possible figures of length and girth directly in two axis will make the table very bulky and confusing, but a table for routine use should be simple, concise and handy to make it a part of pocket diary. Such a table prepared for all possible figures of length and girth, is given below.

BODY WEIGHT CHART

Girth in inches

Length units in inches

1	2	3	4	5	6	7	8	9	
21	0.6	1.2	1.8	2.4	3.0	3.6	4	5	5
22	0.7	1.5	2.2	2.9	3.7	4.4	5	6	7
23	0.8	1.6	2.4	3.2	4.0	4.8	6	7	7
24	0.8	1.7	2.6	3.5	4.4	5.2	6	7	8
25	0.9	1.9	2.8	3.8	4.7	5.7	7	8	9
26	1.0	2.0	3.1	4.1	5.1	6.1	7	8	9

27	1.1	2.2	3.3	4.4	5.5	6.6	8	9	10
28	1.2	2.4	3.6	4.8	6.0	7.1	8	10	11
29	1.3	2.5	3.8	5.1	6.3	7.6	9	10	11
30	1.4	2.7	4.1	5.5	6.8	8.2	10	11	12
31	1.4	2.9	4.4	5.8	7.3	8.7	10	12	13
32	1.6	3.1	4.7	6.2	7.8	9.3	11	12	14
33	1.7	3.3	5.0	6.6	8.3	9.9	12	13	15
34	1.8	3.5	5.3	7.0	8.8	10.5	12	14	16
35	1.9	3.7	5.6	7.4	9.3	11.1	13	15	17
36	2.0	3.9	5.9	7.9	9.8	11.8	14	16	18
37	2.1	4.1	6.2	8.3	10.4	12.4	15	17	19
38	2.2	4.4	6.6	8.8	10.9	13.1	15	18	20
39	2.3	4.6	6.9	9.2	11.5	13.8	16	18	21
40	2.4	4.8	7.3	9.7	12.1	14.5	17	19	22
41	2.5	5.1	7.6	10.2	12.7	15.3	18	20	23
42	2.7	5.3	8.0	10.7	13.4	16.0	19	21	24
43	2.8	5.6	8.4	11.2	14.0	16.8	20	22	25
44	2.9	5.9	8.8	11.7	14.7	17.6	21	23	26
45	3.1	6.1	9.2	12.3	15.3	18.4	21	25	28
46	3.2	6.4	9.6	12.8	16.2	19.2	22	26	29
47	3.3	6.7	10.0	13.4	16.7	20.1	23	27	30
48	3.5	7.0	10.4	14.0	17.5	20.9	24	28	31
49	3.6	7.3	10.9	14.6	18.2	21.8	25	29	33
50	3.8	7.6	11.4	15.2	19.0	22.7	27	30	34
51	3.9	7.9	11.8	15.8	19.7	23.6	28	32	35
52	4.1	8.2	12.3	16.4	20.5	24.6	29	33	37
53	4.3	8.5	4.8	17.0	21.3	25.5	30	34	38
54	4.4	8.8	13.3	17.7	22.1	26.5	31	35	40
55	4.6	9.2	13.7	18.3	22.9	27.5	32	37	41
56	4.8	9.5	14.3	19.0	23.8	28.5	33	38	43
57	4.9	9.8	14.8	19.7	24.6	29.5	34	39	44
58	5.1	10.2	15.3	20.4	25.5	30.6	36	41	46
59	5.3	10.5	15.8	21.1	26.4	31.6	37	42	47
60	5.5	10.9	16.4	21.8	27.3	32.7	38	44	49
61	5.6	11.3	16.9	22.6	28.2	33.8	39	45	51

62	5.8	11.6	17.5	23.3	29.1	34.9	41	47	52
63	6.0	12.0	18.0	24.1	30.1	36.1	42	48	54
64	6.2	12.4	18.6	24.8	31.0	37.2	43	50	56
65	6.4	12.8	19.2	25.6	32.0	38.4	45	51	58
66	6.6	13.2	19.8	26.4	33.0	39.6	46	53	59
67	6.8	13.6	20.4	27.2	34.0	40.8	48	54	61
68	7.0	14.0	21.0	28.0	35.0	42.0	49	56	63
69	7.2	14.4	21.6	28.8	36.1	43.3	50	58	65
70	7.4	14.8	22.3	29.7	37.1	44.5	52	59	67
71	7.6	15.2	22.9	30.6	38.1	45.8	53	61	69
72	7.8	15.7	23.6	31.4	39.3	47.1	55	63	71
73	8.1	16.1	24.2	32.3	40.4	48.4	56	64	73
74	8.3	16.6	25.0	33.2	41.5	49.8	58	66	75
75	8.5	17.0	25.6	34.1	42.6	51.1	60	68	77

The table gives girths in the left margin column and lengths 1 to 9 inches in the uppermost columns. Body weight corresponding to the length and girth can be read from the table as follows

Convert the length into decimal pattern

eg:-1) Length 35 is written as (3 x 10) + 5. Read the length 3 against girth measurement from the table and multiply with 10; then read 5 against the same girth and add together to get the weight in Kgs.

eg:-(2) If L=28, G=35

$$L=2 \times 10 + 8$$

From the table, 2 against 35 = 3.7

$$8 \text{ against } 35 = 15$$

$$W = (3.7 \times 10) + 15 \quad 37 + 15 = 52 \text{ Kg}$$

eg:- (3) L= 39 G=48

$$W = (10.4 \times 10) + 31 = 135 \text{ Kg}$$

The table is very easy to read if we understand the way of reading and provides body weight with the correctness assured by the formula $LG^2/660$.



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