23. Some Weights and Measurements of Large Mammals.

By Col. R. MEINERTZHAGEN, D.S.O., F.Z.S.

[Received December 17, 1937 : Read May 24, 1938.]

Accurate weights of larger mammals have for some time been a matter of discussion and speculation. Menagerie animals are scarcely a fair test, and those sportsmen who only weigh their larger beasts give us an entirely false estimate of the average weight In the following tables it will be seen that weights and measurements fall below those usually given, the reason being that though all my beasts were believed to be fully adult, they were not selected for size and were just weighed and measured as they came. They represent a fair average animal of each species.

All weights were taken in the field, always within a few minutes of death. The machine used was a steelyard specially made for me by Avery and took a single weight of 800 pounds. The yard was rigged with block and tackle on to a portable tripod the apex of which was 8½ feet from the ground. The whole apparatus weighed 58 pounds, a complete carrier's load.

A few animals weighed over 800 pounds. In that case they were cut into portions and weighed piecemeal, blood and offal being collected in a ground-sheet and weighed separately.

Weights taken several hours after death in the tropics or after the viscera have been removed are not reliable. Neither can weights taken with a spring balance be relied on. They have a large and often daily range of error. Rust, heat, and cold, previous strain, and rough usage all contribute towards inaccurate results.

Measurements were taken in a straight line between pegs. For length a peg was placed at the nose and another at tip of tail, the beast removed and the distance between pegs taken with steel tape. The shoulder measurement was taken similarly between pegs placed at the withers and the heel of the foreleg.

All the following were shot, weighed, and measured by me personally.

Tiger (*Panthera tigris*.)

Sex.	Locality.	Length. ft.	in.	Shoulder height. in.	Weight. pounds.
♂	Nilgiri Hills.	10	4	41	498
♂	Mysore.	9	6	40	454

Leopard (*Panthera pardus*).

		ft.	in.	in.	pounds.
♀	Nilgiri Hills.	7	2	25	129
♂	Mysore.	7	4	24	142
♂	Kenya.	7	5	25	137
♂	,,	6	10	28	131
♀	,,	6	5	25½	98
♀	,,	6	7	23	129
♂	,,	7	10	24	139
♂	,,	6	11	26	134
♂	,,	6	7	25	144

Lion (*Panthera leo*).

Sex.	Locality.	Length. ft. in.	Shoulder height. in.	Weight. pounds.
♂	Kenya.	8 6	36	329
♀	,,	7 11	34½	269
♂♂	,,	8 7½	35½	376
♂♂	,,	9 1	38	384
♂♂	,,	9 4	39	379
♂♀	,,	7 11	34	269
♂♂	,,	8 10½	35¾	389
♂♂	,,	9 4	41	406
♂♂	,,	9 4	42	418
♂♀	,,	8 10	39	409
♂♂	,,	9 0	40	396
♂♀	,,	8 6	40	421
♂♀	,,	8 4	40	369
♂♂	,,	8 8	38	346
♂♂	,,	9 3	40	410
♂♂	,,	8 11	39	381
♂♀	,,	8 9	34	349
♂♂	,,	8 1	32	386
♂	,,	9 0	34	399

Cheetah (*Acinonyx jubatus*).

		ft. in.	in.	pounds.
♀	Kenya.	7 9	33	139
♂♂	,,	7 4	30	136
♂♂	,,	6 7	29	127
♂♂	,,	7 0	32	143
♂	,,	6 11	31	129

Serval Cat (*Leptailurus serval*).

		in.	in.	pounds.
♂♂	Kenya.	41	19	22
♂♀♀	,,	40	19	24
♂♂	,,	39	19	23
♂♂	,,	43	20	26
♂♂	,,	44	21	—
♂♀	,,	43	20	27

Rhinoceros (*Diceros bicornis*).

		ft. in.	in.	pounds.
♀	Kenya.	11 2	61	2812
♂	,,	11 4	63½	2896
♂♀	,,	11 0	62	2274
♂♂	,,	11 6	61	2606
♂♂	,,	11 8½	63	2461
♀♀	,,	10 10	58½	2274
♀♀	,,	10 8	60	2199
♂♂	,,	11 2	62½	2364
♂♂	,,	11 7	59	2617
♂♂	,,	11 1	60	2471
♂♂	,,	11 6	63	2382
♂♂	,,	11 8	65	2512
♂♀	,,	11 8	59	2341
♂♂	,,	11 1	62	2672
♂♂	,,	10 11	61	2691
♂	,,	11 1	64	2571