



## Morphometric Characterization of Caravan Dog

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### Abstract

In present study, total 400 Caravan dogs from different districts i.e., Latur, Osmanabad, Nanded, Parbhani of Marathwada region were surveyed for morphometric body characterization. The total Caravan dog population was classified as male, female and polled (Male + Female) with different age groups i.e., 6 to 12, 13 to 24, 25 to 36 and 37 months and above and as per body coat colour pattern. In present study, total 19 morphometric body measurements of Caravan dogs were studied. It was observed that, most of the studied body characters were found to be significantly higher in male Caravan than female Caravan dog. Out of observed six coat coloured Caravan dogs, most of the body measurements were found to be higher in fawn coat coloured Caravan dogs and lowest in brindle coat coloured Caravan dogs. As the Caravan dog is a hound breed of dog, their streamline body posture was specially designed for racing and hounding so that they can run faster and with the help of their long snout they can grasp their prey within short time period.

**Keywords:** Morphometric; Coat Colour; Measurements

### Abbreviations

HW: Height at Withers; BL: Body Length; CG: Chest Girth; PG: Paunch Girth; BW: Body Weight; HBT: Height at Base of Tail; EYW: Eye Width; SL: Snout Length; EL: Ear Length; EW: Ear Width; NL: Neck Length; NG: Neck Girth; HFL: Hind Foot Length; LHLL: Lower Hind Leg Length; UHLL: Upper Hind Leg Length; TL: Tail Length; FFL: Fore Foot Length; LFL: Lower Fore Leg Length; UFL: Upper Fore Leg Length;

### Introduction

In present study, the focus has been given over the unidentified dog population. National Bureau of Animal Genetic Resources (NBAGR) has registered only 3 breeds of dogs that are Rajapalayam, Chippiparai and Mudhol hound. Hence, there is huge unidentified dog population in different localities of India. Such dog population has to be identified and classified from different localities to identify unique breed characters of such dog population from various localities. Dogs are categorized depending on their functions, such as guarding, herding, flocking, mountain, companion, fighting, snifering, patrolling, toy and so on. Some unregistered dog breeds in India, such as the Caravan Hound, Pashmi, Combai, Rampur Hound, Kanni, Indian Mastiff (Bulli), Himalayan sheep dog and Bhutia dogs are contributing social and economic values of

owners and enhancing our country's domestic animal biodiversity. In Maharashtra, Caravan and Pashmi dog population is most commonly found. Both the dog population is distributed in most part of Maharashtra but their concentrated population seen in most of districts of Marathwada region of Maharashtra state. This local Marathwada dog population has unique body characterization different from other non-descript dog population. As per the popular article of Nazeer Yar Jung in local newspaper, the Caravan dog possesses some important body characterization as head of Caravan dog is long and narrow between the ears, with a tapering nose, and its jaws are large and powerful. The nose is big and could be black in colour. Ears are long and dangle towards the skull and movable. The eyes are huge and oval in form, with black rims. The neck is long, straight and muscular and it fits comfortably into the shoulders. Forelegs are long, straight and powerful with a well-laid back. The body coat is short and smooth with fringes on the ears, legs, backs of the thighs and tail. Body coat of fawn red, cream and colour with different combinations can be seen in Caravan.

### Materials and Methods

The present study has the goal of evaluating and analysing various body measurements of Caravan dogs in Marathwada region

of Maharashtra state. The observations and measurements were mostly recorded early in the morning or late in the evening, when the animals were least disturbed. During the data recording process, the animals were not harmed in any manner. At the onset of research work, pre-survey was carried out to identify the population of Caravan dogs. The 400 Caravan dogs were selected for morphometric characterization from different villages of Marathwada region. The major instruments used in this investigation were a tailor's measuring tape, weighing balance with an accuracy of one or two grams and a visual evaluation. Data was acquired by measuring and physically analysing various body parameters. Efforts were made to avoid mechanical errors when recording the measurement. The animal was positioned in a normal position on an even surface during the actual measurement by standing comfortably and evenly on its feet. Data obtained on morphometric characterization of 400 Caravan dogs were classified under age and body coat colour pattern.

The Following parameters were performed

- **Height at the withers (HW):** It is the distance from the ground up to the point where the two shoulder blades meet. During measurement, measuring tape should not be curved.
- **Height at base of tail (HBT):** The distance measured from the floor straight up to the base of the tail i.e. where the coccygeal vertebra meets last sacral vertebra.
- **Eye width (EYW):** The distance measured between the inner canthus of the eyes.
- **Snout length:** The distance measured from the tip of nose to just between the eyes, where the inside corners of the eyes meet.
- **Neck length (NL):** The distance measured from bony process on the back of the head down the back of the neck to the point where the shoulder blades meet on the back
- **Body length (BL):** It is the distance measured from the point of shoulder blades meets in the middle of the back (withers), down along the spine to where the lumbo-sacral vertebra meets the first coccygeal vertebra.
- **Tail length (TL):** The distance measured from the base of the tail (first coccygeal vertebra joins with the lumbo-sacral vertebra to the last coccygeal vertebra) to the tip of the tail (the extra hairs at the tip of the tail should not be included). If tail docking is practiced, it needs to be recorded.
- **Ear length (EL):** It is the measurement from the base of the outside of the ear (where it meets the skull) straight up to the tip of the ear and don't include hairs at the tip of the ear. If ear cropping is done, it needs to be recorded with any specific reason for the practice.
- **Ear width (EW):** The measurement made at widest part of the ear perpendicular to orientation of the ear or the measure of length.
- **Neck girth (NG):** It is the measurement of the circumference or distance all the way around the neck.
- **Chest girth (CG):** It is the circumference around the deepest part of the chest located just behind the foreleg.
- **Paunch girth (PG):** It is the circumference around the abdomen measured just before the hind limb. This measurement shall indicate the abdomen shape like, tucked-up, round and complete.
- **Hind foot length (Metatarsals):** On the hind foot, starting from the inside of the body count 3 toes out, and measure underneath the foot from the tip of the toe (the claw or fur should not be included in the measurement) to the hock (this is the bony projection off the back of the heel).
- **Lower hind leg length (Tibia):** The measurement made from the hock (heel, as in hind foot length) to the knee cap.
- **Upper hind leg length (Femur):** The maximum length measured from the knee cap to where the base of the tail meets the body i.e. up to last sacrum and first coccygeal vertebra meets.
- **Fore foot length (Metacarpals):** Measurement of the maximum length from the wrist bone to the end of the claw based third digit of the foot counting from inside out (the claw or fur should not be included in the measurement).
- **Lower foreleg length (Radius):** Measure from the wrist bone (as in fore foot length) to the elbow joint.
- **Upper foreleg length (Humerus):** Measure the maximum length from the elbow joint to the shoulder point most prominent in the chest (head of the humerus). The shoulder bones are the same bones used to measure chest width.
- **Body weight (BW):** The body weight should be recorded by using a weighing balance with minimum error. Digital balance with accuracy to weigh 1 or 10 grams may be used.
- **Coat Colour (CC):** The colour of Caravan dog is to be observed by visual examination.



**Figure 1:** A-B: Neck length; D-E: Tail length; F-G: Height at base of tail; H-I: Height at wither; J-K: Snout length; L-M: Ear length; N-O: Ear width; P: Chest girth; Q: Paunch girth

## Result and Discussion

All body measurements and body weights are illustrated in table 1. The significant higher ( $p \leq 0.05$ ) body weights were seen for male Caravan dogs at 6-12 months of age and other age groups shown non-significant differences for live body weights of Caravan dogs in the present study. The height at wither observed in male and female Caravan dog (67.64 and 64.99 cm) in present study is found to be higher than height at wither in Chippiparai dog (63.0 and 56.30 cm), followed by Kanni dog (59.86 cm) and Rajapalayam dog (63.10 and 58.91 cm) [7,13,12]. The body length observed in male and female Caravan dog (54.09 and 52.42 cm) in present study is found to be lower than body length observed in Chippiparai dog (63.90 and 58.08 cm) [7], Kanni dog (60.28 cm) [13] and Rajapalayam dog (60.67 and 57.42 cm) [5]. The Chest girth observed in male and female Caravan dog (68.48 and 65.67 cm) is found to be higher than chest girth in Chippiparai dog (60.36 cm) [7], Kanni dog (58.38 cm) [13] and Rajapalayam dog (67.11 and 62.77 cm) [5]. Higher chest girth Kangal Shepherd dog (86.12cm) [1] followed by Mannara dog (80.13 and 74.00 cm) [8], in Fõnni dog (69.37 and 68.73) [14]. All these research workers reported higher chest girth in exotic dogs than Caravan dog. The paunch girth observed in male and female Caravan dog (45.66 and 43.61 cm) in present study is found to be higher than paunch girth in Chippiparai dog (40.95 and 37.75 cm) [7], Kanni dog (38.95 cm) [13] and found to

be lower than paunch girth in Rajapalayam (51.89 and 48.88 cm) [5]. The height at base of tail observed in male and female Caravan dog (68.60 and 65.23 cm) in present study is found to be higher than height at base of tail in Chippiparai dog (62.41 and 57.35 cm) [7], Kanni dog (60.10 cm) [13] and Rajapalayam (61.55 and 57.65 cm) [5]. The snout length observed in male and female Caravan dog (11.76 and 11.42 cm) in present study is found to be higher than snout length observed in Chippiparai dog (10.00 and 9.15 cm) [7], Kanni dog (9.70 cm) [13] and Rajapalayam dog (10.73 and 10.44 cm) [12]. The ear length observed in male and female Caravan dog (12.76 and 12.61 cm) in present study is found to be higher than ear length in Chippiparai dog (11.56 and 10.40 cm) [7], Kanni dog (11.56 and 10.40 cm) [13] and Rajapalayam dog (11.33 and 10.52 cm) [5]. Moderately long ear length reported as 12.70 [2] and 14.32 cm [1] in Kangal Shepherd dog. As per the study of different research workers in indigenous dog breeds it is observed that, the ear width in male and female Caravan dog found to be 7.05 and 7.05 cm which is lower than ear width observed in Chippiparai dog (8.56 and 7.72 cm) [7], Kanni dog (8.10 cm) [13] and Rajapalayam dog (10.06 and 9.36 cm) [5]. The neck length observed in male and female Caravan dog (23.52 and 22.84 cm) in present study is found to be higher than neck length observed in Rajapalayam dog (18.40 and 17.53 cm) [12] and Kanni dog (20.28 cm) [12]. The neck girth observed in male and female Caravan dog (36.66 and 35.57 cm)

in present study was found to be lower than neck girth in Rajapalayam dog (40.00 cm) [12] and Kanni dog (40.44 cm) [12]. The tail length observed in male and female Caravan dog (46.90 and 45.50 cm) in present study is found to be higher than tail length observed in Chippiparai dog (42.47 and 38.2 cm) [7], Kanni dog (39.20 cm) [13] and Rajapalayam dog (35.55 and 33.83 cm) [5]. The hind foot length, lower hind length and upper hind leg length in adult male

and female Caravan dog were (19.20 and 18.69, 24.62 and 24.48, 21.17 and 21.10 cm) found to be lower than in Rajapalayam dog (23.65 and 20.86, 25.95 and 23.24, 22.95 and 21.98 cm) [12] respectively. The forefoot length, lower foreleg length and upper foreleg length in male and female Caravan dog (14.98 and 14.05, 22.66 and 22.65, 19.36 and 19.47 cm) found to be lower than the said values reported in Rajapalayam dog (15.95 and 14.88, 19.95 and 18.50, 21.30 and 20.30 cm) [12] respectively.

Trait	Age group (Months)	Male (N = 206)	Female (N = 194)	Pooled (N = 400)	t test value	P value
HW	6 to 12	60.62 ± 0.73	58.60 ± 0.68	59.70 ± 0.51	1.999*	0.049
	13 to 24	66.53 ± 0.39	63.84 ± 0.42	65.30 ± 0.30	4.732**	0.000
	25 to 36	68.92 ± 0.29	66.10 ± 0.34	67.28 ± 0.26	5.994**	0.000
	37 and above	68.85 ± 0.72	65.33 ± 0.71	67.56 ± 0.59	3.201*	0.003
	Overall adult	67.64 ± 0.27	64.99 ± 0.27	66.23 ± 0.20	7.039**	0.000
BL	6 to 12	49.24 ± 0.71	48.66 ± 0.62	48.97 ± 0.48	0.601	0.550
	13 to 24	53.34 ± 0.36	52.58 ± 0.37	52.99 ± 0.26	1.489	0.139
	25 to 36	55.33 ± 0.45	52.75 ± 0.31	53.83 ± 0.29	4.880**	0.000
	37 and above	54.12 ± 0.49	53.40 ± 0.72	53.85 ± 0.41	0.844	0.404
	Overall adult	54.09 ± 0.26	52.73 ± 0.23	53.42 ± 0.18	3.942**	0.000
CG	6 to 12	64.31 ± 0.70	60.66 ± 0.89	62.65 ± 0.59	3.269*	0.002
	13 to 24	67.79 ± 0.38	64.71 ± 0.50	66.39 ± 0.33	5.023**	0.000
	25 to 36	69.24 ± 0.42	66.35 ± 0.39	67.56 ± 0.31	4.940**	0.000
	37 and above	69.27 ± 0.69	67.07 ± 1.32	68.46 ± 0.66	1.634	0.110
	Overall adult	68.48 ± 0.27	65.67 ± 0.32	67.50 ± 0.22	6.752**	0.000
PG	6 to 12	42.45 ± 0.56	40.49 ± 0.61	41.56 ± 0.42	2.378*	0.020
	13 to 24	45.08 ± 0.47	42.44 ± 0.36	43.88 ± 0.32	4.359**	0.000
	25 to 36	46.20 ± 0.63	44.03 ± 0.47	44.93 ± 0.39	2.814*	0.006
	37 and above	46.58 ± 0.73	47.33 ± 2.11	46.85 ± 0.89	-0.407	0.687
	Overall adult	45.66 ± 0.34	43.61 ± 0.35	44.65 ± 0.25	4.238**	0.000
HBT	6 to 12	62.33 ± 0.71	58.60 ± 0.68	59.70 ± 0.51	2.783*	0.007
	13 to 24	67.41 ± 0.44	64.44 ± 0.48	66.06 ± 0.34	4.566**	0.000
	25 to 36	70.20 ± 0.42	65.93 ± 0.46	67.71 ± 0.37	6.617**	0.000
	37 and above	69.42 ± 0.72	65.73 ± 1.74	68.07 ± 0.82	2.280*	0.028
	Overall adult	68.60 ± 0.31	65.23 ± 0.34	65.94 ± 0.25	7.326**	0.000
BW	6 to 12	15.05 ± 0.48	14.09 ± 0.56	14.61 ± 0.37	2.416*	0.018
	13 to 24	18.38 ± 0.24	16.92 ± 0.24	17.71 ± 0.18	0.393	0.695
	25 to 36	18.80 ± 0.27	18.15 ± 0.24	18.43 ± 0.18	1.240	0.217
	37 and above	18.96 ± 0.42	18.80 ± 0.78	18.90 ± 0.39	0.805	0.426
	Overall adult	18.60 ± 0.17	17.65 ± 0.18	18.13 ± 0.13	3.904**	0.000

EYW	6 to 12	5.00 ± 0.00	4.94 ± 0.03	4.97 ± 0.02	1.958	0.054
	13 to 24	5.01 ± 0.01	4.99 ± 0.02	5.00 ± 0.01	1.001	0.318
	25 to 36	5.02 ± 0.02	5.00 ± 0.00	5.01 ± 0.01	1.182	0.240
	37 and above	5.00 ± 0.00	5.00 ± 0.00	5.00 ± 0.00	#	
	Overall adult	5.01 ± 0.01	5.00 ± 0.01	5.00 ± 0.01	1.200	0.116
SL	6 to 12	10.63 ± 0.12	10.69 ± 0.13	10.66 ± 0.09	-0.171	0.865
	13 to 24	11.52 ± 0.06	11.26 ± 0.07	11.42 ± 0.05	3.033*	0.003
	25 to 36	11.92 ± 0.06	11.56 ± 0.07	11.71 ± 0.05	2.964*	0.004
	37 and above	12.15 ± 0.10	11.53 ± 0.14	11.93 ± 0.09	4.060**	0.000
	Overall adult	11.76 ± 0.04	11.42 ± 0.05	11.59 ± 0.03	5.214**	0.000
EL	6 to 12	12.17 ± 0.11	12.14 ± 0.11	12.14 ± 0.08	0.324	0.747
	13 to 24	12.56 ± 0.09	12.56 ± 0.10	12.56 ± 0.06	0.312	0.755
	25 to 36	12.94 ± 0.07	12.80 ± 0.08	12.80 ± 0.05	2.192*	0.030
	37 and above	13.00 ± 0.16	12.83 ± 0.19	12.83 ± 0.13	1.845	0.073
	Overall adult	12.76 ± 0.06	12.61 ± 0.06	12.64 ± 0.02	1.762*	0.040
EW	6 to 12	6.95 ± 0.06	6.94 ± 0.08	6.95 ± 0.05	0.097	0.923
	13 to 24	6.99 ± 0.05	7.02 ± 0.04	7.006 ± 0.03	-0.573	0.568
	25 to 36	7.04 ± 0.03	7.01 ± 0.02	7.020 ± 0.02	0.677	0.500
	37 and above	7.27 ± 0.12	7.33 ± 0.13	7.29 ± 0.09	-0.350	0.728
	Overall adult	7.05 ± 0.03	7.05 ± 0.03	7.05 ± 0.02	0.037	0.485
NL	6 to 12	21.26 ± 0.24	21.37 ± 0.27	21.23 ± 0.18	-0.304	0.762
	13 to 24	23.09 ± 0.11	22.52 ± 0.15	22.83 ± 0.09	3.127*	0.002
	25 to 36	23.84 ± 0.13	23.13 ± 0.13	23.43 ± 0.10	3.770*	0.000
	37 and above	24.31 ± 0.21	23.07 ± 0.07	23.85 ± 0.19	3.584*	0.001
	Overall adult	23.52 ± 0.09	22.84 ± 0.10	23.19 ± 0.07	5.214**	0.000
NG	6 to 12	33.83 ± 0.36	31.97 ± 0.54	32.99 ± 0.33	2.954*	0.004
	13 to 24	36.20 ± 0.20	34.84 ± 0.31	35.58 ± 0.19	3.775**	0.000
	25 to 36	37.47 ± 0.20	36.27 ± 0.24	36.77 ± 0.17	3.623**	0.000
	37 and above	36.62 ± 0.31	35.87 ± 0.58	36.34 ± 0.29	1.246	0.220
	Overall adult	36.66 ± 0.14	35.57 ± 0.19	36.12 ± 0.12	4.543**	0.000
HFL	6 to 12	17.95 ± 0.24	17.74 ± 0.22	17.86 ± 0.16	0.638	0.526
	13 to 24	18.93 ± 0.15	18.42 ± 0.15	18.70 ± 0.11	2.325*	0.021
	25 to 36	19.35 ± 0.16	18.92 ± 0.15	19.10 ± 0.11	1.940	0.055
	37 and above	19.81 ± 0.21	18.87 ± 0.29	19.46 ± 0.19	2.622*	0.012
	Overall adult	19.20 ± 0.10	18.69 ± 0.10	18.95 ± 0.07	3.533**	0.000
LHLL	6 to 12	23.26 ± 0.37	22.91 ± 0.34	23.10 ± 0.25	0.685	0.496
	13 to 24	24.33 ± 0.22	24.03 ± 0.26	24.19 ± 0.17	0.898	0.370
	25 to 36	24.61 ± 0.25	24.73 ± 0.22	24.68 ± 0.17	-0.368	0.714
	37 and above	25.58 ± 0.38	25.47 ± 0.32	25.54 ± 0.26	0.199	0.843
	Overall adult	24.62 ± 0.16	24.48 ± 0.16	24.55 ± 0.11	0.612	0.270

UHLL	6 to 12	19.74 ± 0.24	19.71 ± 0.22	19.73 ± 0.16	0.071	0.943
	13 to 24	20.82 ± 0.17	20.59 ± 0.24	20.71 ± 0.14	0.794	0.428
	25 to 36	21.37 ± 0.20	21.28 ± 0.20	21.32 ± 0.14	0.311	0.756
	37 and above	21.96 ± 0.39	22.00 ± 0.39	21.98 ± 0.28	-0.065	0.948
	Overall adult	21.17 ± 0.13	21.10 ± 0.15	21.10 ± 0.10	0.705	0.241
TL	6 to 12	43.71 ± 0.68	42.06 ± 0.59	42.96 ± 0.46	1.802	0.076
	13 to 24	46.56 ± 0.47	45.59 ± 0.41	46.12 ± 0.32	1.540	0.126
	25 to 36	46.84 ± 0.49	45.21 ± 0.39	45.89 ± 0.31	2.660*	0.009
	37 and above	48.15 ± 0.75	46.40 ± 0.96	47.51 ± 0.60	1.437	0.159
	Overall adult	46.90 ± 0.31	45.50 ± 0.27	46.21 ± 0.21	3.392**	0.000
FFL	6 to 12	13.67 ± 0.25	13.74 ± 0.30	13.70 ± 0.19	-0.197	0.844
	13 to 24	14.68 ± 0.20	13.78 ± 0.20	14.24 ± 0.15	3.100*	0.002
	25 to 36	15.63 ± 0.25	14.45 ± 0.22	14.94 ± 0.17	3.522*	0.001
	37 and above	14.69 ± 0.33	13.47 ± 0.58	14.24 ± 0.31	1.986	0.054
	Overall adult	14.98 ± 0.15	14.05 ± 0.15	14.52 ± 0.11	4.456**	0.000
LFLL	6 to 12	21.83 ± 0.32	21.63 ± 0.25	21.74 ± 0.21	0.488	0.627
	13 to 24	22.52 ± 0.24	22.21 ± 0.23	22.38 ± 0.17	0.928	0.355
	25 to 36	22.59 ± 0.24	22.93 ± 0.22	22.79 ± 0.16	-1.049	0.296
	37 and above	23.11 ± 0.37	22.47 ± 0.38	22.79 ± 0.27	-0.280	0.781
	Overall adult	22.66 ± 0.16	22.65 ± 0.15	22.66 ± 0.11	0.077	0.469
UFLL	6 to 12	18.55 ± 0.18	18.34 ± 0.21	18.45 ± 0.14	0.752	0.455
	13 to 24	19.11 ± 0.14	19.16 ± 0.22	19.14 ± 0.13	-0.192	0.848
	25 to 36	19.45 ± 0.20	19.75 ± 0.24	19.62 ± 0.17	-0.877	0.382
	37 and above	20.00 ± 0.42	19.67 ± 0.36	19.88 ± 0.29	0.544	0.590
	Overall adult	19.36 ± 0.12	19.47 ± 0.15	19.41 ± 0.10	-0.571	0.284

**Table 1:** Average means and standard errors for body measurements (cm) and body weight (BW) in Caravan dogs.

\*\*Highly significance at 1% level; \*Significant at 5% level; HW: Height at Withers; BL: Body Length; CG: Chest Girth; PG: Paunch Girth; BW: Body Weight; HBT: Height at Base of Tail; EYW: Eye Width; SL: Snout Length; EL: Ear Length; EW: Ear Width; NL: Neck Length; NG: Neck Girth; HFL: Hind Foot Length; LHLL: Lower Hind Leg Length; UHLL: Upper Hind Leg Length; TL: Tail Length; FFL: Fore Foot Length; LFLL: Lower Fore Leg Length; UFLL: Upper Fore Leg Length; Overall adult: 13 months and above age group.

Caravan dogs classified as per different coat coloured pattern, whereas, significant differences were observed for chest girth, paunch girth, height at base of tail and lower foreleg length of Caravan dogs of different coat coloured pattern. Average body weight was found to be higher in grey coat coloured Caravan dog followed by brown, black, creamy white, fawn and lowest in brindle coat coloured Caravan dogs, respectively, but non-significantly different. Most of the body measurements i.e. height at wither, height at base of tail, body length, chest girth, snout length, neck length, neck girth

and upper foreleg length were found to be higher in fawn body coat coloured Caravan dogs than other coat coloured Caravan dogs, whereas, most of the body measurements were found to be lowest in brindle coat coloured Caravan dogs

### Conclusions

Live body weights were found to be higher in male Caravan dogs than female Caravan dogs in all age groups. The adult Caravan live body weight (18.60 and 17.65 kgs) found to be comparatively

- less than other indigenous dog breeds (Rajapalayam, Mudhol Hound and Kanni dog) may be due to slender athletic body structure of Caravan dog which enhances high speed endurance in Caravan dogs for hunting and chasing purposes.
  - Most of the morphometric body characters i.e., height at wither, body length, chest girth, paunch girth, height at base of tail, snout length, neck length, neck girth, hind foot length, tail length and forefoot length were found to be significantly higher in male Caravan than female Caravan dog.
  - Height at wither, height at base of tail, chest girth and tail length were comparatively higher in Caravan hound than other indigenous dog breeds (Mudhol hound, Chippiparai, Kanni and Rajapalayam dog breeds) which intensifies hounding capacities for speed and endurance for enhancing fast running and chasing abilities in Caravan dogs.
  - Long tail length in the Caravan dogs indicates good hounding behaviour than other indigenous dog breeds as tail length is a measure for maintaining balance while racing and chasing.
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