

Improved Trapping and Handling of an Arboreal, Montane Mammal: Red Panda *Ailurus fulgens*

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Simple Summary: Capture and handling is essential to study some biological and ecological properties of free-ranging animals. However, capturing an arboreal and cryptic species such as the red panda is challenging due to the difficult terrain, their elusive nature, and potential risks to human and animal safety. We developed and successfully tested a protocol for tracking, capture, immobilization, and handling of red pandas. This method could also be used, with some modifications, for other arboreal species. This study extends the known range of body weight and length of free-ranging red pandas. We also report some new morphometric data that could serve as a guide for field identification.

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Table S1. Morphometric data of collared red pandas.

Animal	Sex ¹	Age ²	Weight (kg)	Length (cm)				Number of black rings ³	Paw (cm)		Pes (cm)		Temperature (°F)
				Body	Tail	Forelimb	Hindlimb		Length	Width	Length	Width	
Paaru	F	A	4.6	59	41	14	14	9	7	5	11	5	102.4
Dolma	F	A	3.9	55	42	12	10	9	7.2	5	10	5.2	105.1
Chintapukamal	M	A	6.1	60	49	17.5	13.5	9	11.5	9	14	6.5	104.9
Mechhachha	F	S	2.7	44	40	12.5	11.5	7	6	5	11.5	5.6	100.7
Senehaang	M	S	2.3	40	35	12.5	12	7	7	5	11	5.5	101.8
Bhumo	F	S	2.3	46	34	12.5	11.5	7	7	5	10.5	5	101.4
Ngima	M	A	4.6	54	45	13	13	9	8	5	13	6	104.5
Brian	M	A	4.8	55	43	18	12	9	7.5	5.5	13.5	6.5	104.9
Ninaammaa	F	A	4.1	50	43	18	13.5	9	8	5.5	11.5	6	102.7
Prahladevi	F	A	4.9	54	43	15	11.5	9	7.5	5.5	11	5.5	103.8

¹ Male (M) and Female (F) ² Adult (A) and Sub-adult (S) ³ Tail has alternating black and red rings.

Table S2. Details of anesthetics and time taken for capturing, immobilization and processing of captured animals.

Animal	Drugs (mg)			Induction of first effect	Time Taken (min)				
	Ketamine	Medetomidine	Antisedan		Capturing	Immobilization	Collaring	Processing	Recovery
Paaru	50	2	0.25	4	143	35	4	57	35
Dolma	26.5	0.53		5	317	7	2.5	21	56
Chintapukamal	32.5	0.35	3.5	2	90	6	5	53	49
Mechhachha	17.5	0.2	1	3	63	9	2	32	45
Senehaang	15	0.15	0.75	5	185	25	2	38	36
Bhumo	15	0.15	0.75	3	185	6	2	70	54
Ngima	25	0.3	1.5	2	145	3	2	26	45
Brian	25	0.3	1.5	4	50	8	3	35	70
Ninaammaa	20	0.2	1	6	75	8	2	22	70
Prahladevi	25	0.3	1.5	2	104	4	3	31	35