
Article

Measures of Adrenal and Gonadal Hormones in Relation to Biological and Management Factors among Captive Red Pandas in Indian Zoos

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Supplementary Table S1: Red pandas sampled in three zoos, their demographic and enclosures details.

Place	Red Panda ID	Age	Age class/sex	Sociality	Breeding history	Enclosure area (m ²)	Enclosure type*	Nest No.	Individuals sampled for fGCM/fAM or fPM
Zoo 1	RP1	4	AF	Paired	No	3068	Open	2	Yes / Yes
Zoo 1	RP2	6	AF	Paired	No	192	Open	3	Yes / Yes
Zoo 1	RP3	17	AM	Paired	Yes	192	Open	3	Yes / Yes
Zoo 1	RP4	3	AM	Paired	Yes	1560	Open	2	Yes / Yes
Zoo 1	RP5	5	AF	Paired	Yes	1560	Open	2	Yes / Yes
Zoo 1	RP6	5	AM	Paired	Yes	1560	Open	2	Yes / Yes
Zoo 1	RP7	8	AF	Paired	Yes	495	Open	3	Yes / Yes
Zoo 1	RP8	3	AF	Paired	Yes	2925	Open	3	Yes / Yes
Zoo 1	RP9	7	AF	Female with one cub	Yes	2925	Open	3	Yes / Yes
Zoo 1	RP10	0.6	CF	Female with one cub	-	2925	Open	3	Yes / No
Zoo 1	RP11	3	AM	Solitary	No	350	Open	1	Yes / Yes
Zoo 1	RP12	11	AF	Female with two cubs	Yes	322	Open	3	Yes / Yes
Zoo 1	RP13	0.8	CF	Female with two cubs	-	322	Open	3	Yes / No
Zoo 1	RP14	0.8	CM	Female with two cubs	-	322	Open	3	Yes / No
Zoo 1	RP15	8	AF	Paired	No	462	Open	2	Yes / Yes
Zoo 1	RP16	8	AM	Paired	Yes	462	Open	2	Yes / Yes
Zoo 1	RP17	3	AM	Paired	Yes	400	Open	3	Yes / Yes
Zoo 2	RP18	7	AF	Female with two cubs	Yes	2463	Open	1	Yes / Yes
Zoo 3	RP19	16	AM	Paired	Yes	224	Closed	4	Yes / Yes
Zoo 3	RP20	4	AF	Paired	Yes	224	Closed	4	Yes / Yes

*Open – enclosures were only fenced with open top, closed – enclosures were netted from all sides.

Supplementary Table S2: Details of female's breeding rate since age of maturity and their fGCM and fPM concentration during the study

ID (Age)	Mean fGCM ng/g	Mean fPM µg/g	Breeding rate (a/b*100) [#]
RP1 (4)	47	0.573	0
RP2 (6)	62	0.069	0
RP5 (5)	32	0.262	25
RP7 (8)	41	0.310	42.9
RP8 (3)	17	0.362	100
RP9 (7)	27	0.554	33.3
RP12 (11)	27	0.756	33.3
RP15 (8)	53	1.303	0
RP20 (4)	38	17.986	75

[#]a – Number of liters produced since age of maturity, b – Total breeding age