

Appendix 1

Standard statistics of 21 measurements of *C. h. pretoriae* males and females sampled in Johannesburg. The sample size (n), mean, standard errors (S.E.) and coefficient of variation (CV) are indicated. Measurements are defined in Plates 10a-e.

Sex	Age class (n)		Measurements										
			GLS	ITC	BCW	ZMB	ZYW	IOB	WR	NAS	UTR	PAC	NPP
Males	4 (3)	Mean	36.12	31.68	16.89	15.81	22.46	7.94	6.35	4.98	6.64	3.50	23.53
		S.E.	1.99	1.42	0.73	0.67	1.28	0.09	0.26	0.26	0.21	0.34	1.10
		CV	9.52	7.76	7.50	7.39	9.89	1.92	7.09	9.02	5.47	16.69	8.11
	5 (9)	Mean	36.81	32.48	17.94	15.91	23.35	7.94	6.87	5.52	6.65	3.81	23.88
		S.E.	0.53	0.61	0.27	0.24	0.44	0.18	0.16	0.13	0.11	0.17	0.48
		CV	4.29	5.60	4.55	4.46	5.63	6.72	6.80	7.32	4.93	13.27	6.09
	6 (11)	Mean	39.15	34.68	18.16	16.19	25.65	7.84	7.39	6.16	6.99	3.84	25.95
		S.E.	0.77	0.77	0.27	0.30	0.59	0.11	0.18	0.17	0.14	0.20	0.51
		CV	6.52	7.38	5.01	6.10	7.66	4.65	7.87	9.36	6.83	17.61	6.50
	7 (6)	Mean	40.92	36.51	19.27	16.23	26.84	8.09	7.83	6.49	6.93	3.76	27.49
		S.E.	0.55	0.62	0.27	0.21	0.56	0.24	0.18	0.19	0.11	0.18	0.67
		CV	3.29	4.16	3.47	3.10	5.07	7.31	5.78	7.30	3.86	11.49	5.96
	8 (3)	Mean	41.75	36.71	18.58	17.22	28.03	8.41	8.39	7.75	7.11	5.00	26.68
		S.E.	0.28	0.47	0.28	0.49	0.83	0.17	0.04	0.40	0.08	1.07	1.33

	CV	1.16	2.21	2.62	4.88	5.12	3.52	0.89	9.04	1.83	36.96	8.65
9 (2)	Mean	41.74	36.88	20.37	16.80	29.46	8.17	8.25	7.27	7.35	4.17	29.62
	S.E.	1.04	0.69	0.69	0.28	0.38	0.02	0.28	0.28	0.06	0.61	0.26
	CV	3.51	2.65	4.76	2.32	1.80	0.43	4.72	5.55	1.06	20.54	1.22
Females												
3 (2)	Mean	33.39	30.14	17.20	14.81	21.75	8.11	6.13	4.54	5.47	4.09	22.32
	S.E.	2.09	1.22	1.30	0.20	0.84	0.41	0.32	0.34	0.08	0.33	1.16
	CV	8.85	5.70	10.69	1.91	5.43	7.15	7.27	10.59	2.07	11.41	7.35
4 (8)	Mean	35.60	33.01	17.16	15.38	22.15	7.73	6.30	4.96	6.66	3.41	22.95
	S.E.	0.87	1.12	0.50	0.29	0.63	0.12	0.19	0.14	0.20	0.15	0.79
	CV	6.93	9.61	8.21	5.35	8.05	4.49	8.38	8.26	8.35	12.15	9.70
5 (21)	Mean	36.47	32.42	17.88	15.98	23.39	7.65	6.77	5.48	6.82	3.75	24.23
	S.E.	0.44	0.54	0.24	0.45	0.41	0.08	0.11	0.10	0.07	0.09	0.36
	CV	5.57	7.64	6.05	12.87	7.98	4.68	7.48	8.46	4.64	10.51	6.76
6 (20)	Mean	37.50	33.57	18.01	16.09	24.40	7.74	6.84	5.64	6.80	3.63	24.61
	S.E.	0.32	0.33	0.23	0.17	0.30	0.07	0.12	0.11	0.07	0.12	0.30
	CV	3.76	4.35	5.83	4.84	5.41	3.77	7.79	8.70	4.87	14.40	5.46
7 (2)	Mean	37.61	34.27	18.60	16.52	25.39	7.65	6.90	5.71	6.24	2.68	27.52
	S.E.	1.06	0.26	0.94	0.22	0.36	0.03	0.22	0.24	0.00	0.36	2.33
	CV	3.99	1.05	7.15	1.88	1.98	0.55	4.41	5.83	0.00	18.77	11.97
8 (4)	Mean	38.51	34.09	18.31	15.39	24.98	7.39	6.91	5.80	6.55	3.86	25.43
	S.E.	0.68	0.55	0.23	0.28	0.58	0.30	0.19	0.23	0.24	0.13	0.24
	CV	3.55	3.20	2.51	3.70	4.61	8.04	5.55	8.00	7.20	6.81	1.86
9 (4)	Mean	39.86	35.09	19.15	17.19	26.60	8.00	7.02	5.93	6.88	3.68	26.78
	S.E.	0.32	0.85	0.44	1.07	0.61	0.13	0.23	0.19	0.18	0.38	0.56

CV 1.62 4.87 4.63 12.43 4.60 3.31 6.64 6.37 5.27 20.71 4.20

			GHS	MLT	MDL	MTR	AFL	MAF	AFA	MRH	UJI	LJI
Males	4 (3)	Mean	14.22	33.10	25.55	6.39	7.14	7.96	9.94	14.48	9.19	13.73
		S.E.	0.38	2.37	1.93	0.48	1.00	0.35	0.50	1.40	0.65	0.59
		CV	4.63	12.43	13.06	13.06	24.17	7.53	8.72	16.80	12.29	7.43
	5 (9)	Mean	14.41	34.01	25.75	6.45	7.34	7.67	9.59	15.08	8.81	14.22
		S.E.	0.59	0.50	0.55	0.10	0.14	0.20	0.21	0.33	0.25	0.26
		CV	12.35	4.41	6.36	4.61	5.69	7.71	6.45	6.56	8.65	5.54
	6 (11)	Mean	16.88	36.45	27.69	6.65	8.10	8.33	10.77	16.91	9.74	15.37
		S.E.	2.33	1.03	0.61	0.08	0.22	0.30	0.25	0.48	0.37	0.45
		CV	45.78	9.34	7.30	3.87	8.96	12.05	7.69	9.45	12.72	9.76
	7 (6)	Mean	15.09	38.96	30.02	6.58	8.26	8.38	10.97	17.64	9.66	16.36
		S.E.	0.26	0.69	1.01	0.15	0.26	0.43	0.52	0.41	0.20	0.44
		CV	4.30	4.34	8.24	5.44	7.81	12.61	11.57	5.69	5.04	6.53
	8 (3)	Mean	15.53	40.58	31.55	6.94	9.33	8.81	11.14	18.34	10.16	16.44
		S.E.	0.21	1.18	0.60	0.21	0.29	0.27	0.35	0.72	0.65	1.22
		CV	2.39	5.05	3.31	5.26	5.38	5.40	5.50	6.78	11.07	12.81
	9 (2)	Mean	16.12	41.64	32.23	6.67	9.65	8.70	11.34	19.60	9.49	16.85
		S.E.	0.02	0.50	0.57	0.01	0.37	0.23	0.72	0.52	0.96	1.46
		CV	0.13	1.70	2.50	0.11	5.42	3.82	8.98	3.72	14.24	12.22

Females

3 (2)	Mean	13.49	30.77	23.29	5.79	6.90	6.94	9.07	13.28	7.14	12.83
	S.E.	0.40	1.26	0.37	0.41	0.16	0.55	0.70	0.58	0.38	0.01
	CV	4.19	5.77	2.25	9.90	3.28	11.11	10.91	6.18	7.53	0.11
4 (8)	Mean	13.69	32.33	24.75	6.35	6.82	7.80	9.87	13.99	9.18	13.62
	S.E.	0.20	1.07	0.62	0.26	0.29	0.26	0.22	0.44	0.37	0.97
	CV	4.10	9.38	7.09	11.68	12.02	9.29	6.17	8.94	11.27	20.05
5 (21)	Mean	13.73	33.58	25.96	6.76	7.42	7.81	9.78	14.84	8.89	13.74
	S.E.	0.15	0.51	0.40	0.05	0.18	0.15	0.16	0.32	0.20	0.23
	CV	4.88	7.00	7.06	3.51	11.05	9.07	7.71	9.76	10.31	7.83
6 (20)	Mean	14.18	34.71	26.62	6.61	7.45	8.22	10.17	15.30	8.97	13.94
	S.E.	0.16	0.40	0.36	0.06	0.18	0.20	0.18	0.24	0.31	0.29
	CV	5.00	5.09	6.05	3.93	10.53	11.10	7.93	7.15	15.70	9.21
7 (2)	Mean	14.33	35.99	27.82	5.89	7.21	8.57	10.80	16.08	9.70	14.24
	S.E.	0.46	1.38	0.85	0.03	0.33	0.05	0.16	0.10	1.30	1.91
	CV	4.49	5.42	4.30	0.84	6.38	0.74	2.03	0.88	18.95	18.97
8 (4)	Mean	14.26	36.26	27.64	6.37	7.50	8.10	9.88	15.89	9.18	16.15
	S.E.	0.21	0.61	1.04	0.10	0.23	0.17	0.13	0.50	0.47	0.38
	CV	2.96	3.38	7.56	3.18	6.18	4.18	2.68	6.24	10.16	4.65
9 (4)	Mean	14.87	37.64	28.31	6.33	7.36	9.73	11.40	16.62	10.45	15.20
	S.E.	0.44	0.42	0.37	0.20	0.13	0.35	0.46	0.25	0.40	0.89
	CV	5.85	2.22	2.63	6.35	3.66	7.21	7.99	3.02	7.62	11.73

Appendix 2

Standard statistics of 21 measurements of *C. h. pretoriae* males and females sampled in Pretoria. The sample size (n), mean, standard errors (S.E.) and coefficient of variation (CV) are indicated. Measurements are defined in Plates 10a-e.

			Measurements										
Sex	Age class (n)		GLS	ITC	BCW	ZMB	ZYW	IOB	WR	NAS	UTR	PAC	NPP
Males	3 (2)	Mean	4.57	30.57	16.88	14.93	21.04	7.35	6.06	4.89	5.98	3.70	22.37
		S.E.	0.52	0.49	0.21	0.32	0.46	0.05	0.00	0.14	0.24	0.05	0.66
		CV	2.15	2.24	1.80	2.98	3.09	0.96	0.12	4.05	5.68	1.91	4.17
	5 (2)	Mean	34.57	30.89	16.22	14.78	22.32	7.61	6.14	4.81	6.40	3.63	21.95
		S.E.	0.00	0.21	0.28	0.21	0.78	0.13	0.03	0.09	0.25	0.38	0.21
		CV	0.00	0.96	2.44	1.96	4.94	2.32	0.58	2.80	5.52	15.02	1.39
	6 (5)	Mean	37.11	33.83	18.40	15.58	23.99	7.77	6.77	5.52	6.46	3.97	23.68
		S.E.	0.68	0.88	0.47	0.38	0.81	0.17	0.19	0.21	0.18	0.23	0.72
		CV	4.08	5.81	5.70	5.48	7.55	4.82	6.26	8.33	6.28	13.23	6.81
	8 (11)	Mean	39.69	36.42	19.08	15.89	26.98	7.97	7.71	6.46	6.51	3.97	27.01
		S.E.	0.62	0.66	0.36	0.36	0.51	0.14	0.21	0.17	0.13	0.16	0.55
		CV	5.14	5.98	10.00	7.49	6.22	5.61	8.94	8.92	6.66	13.02	6.75
9 (6)	Mean	40.08	36.19	18.78	16.18	27.24	7.92	7.62	6.67	6.81	4.23	27.21	
	S.E.	1.05	0.92	0.47	0.16	0.71	0.14	0.30	0.30	0.11	0.20	0.59	

		CV	6.41	6.21	6.08	2.44	6.41	4.33	9.75	11.06	3.75	11.68	5.32
Females	3 (4)	Mean	30.13	26.47	15.18	13.53	19.43	7.35	5.07	3.69	5.48	2.95	18.61
		S.E.	0.59	0.36	0.05	0.09	0.30	0.13	0.09	0.19	0.34	0.11	0.29
		CV	3.87	2.73	0.67	1.35	3.02	3.39	3.46	9.93	12.18	7.58	3.08
	4 (6)	Mean	33.74	30.16	16.68	14.86	21.35	7.72	5.81	4.57	6.07	3.47	21.53
		S.E.	0.64	0.59	0.45	0.22	0.55	0.06	0.17	0.18	0.26	0.17	0.61
		CV	4.65	4.76	6.67	3.54	6.32	1.99	7.07	9.52	10.37	11.79	6.92
	5 (3)	Mean	34.62	31.62	17.23	15.20	21.96	7.30	6.14	5.13	6.43	3.77	22.46
		S.E.	0.90	1.29	0.33	0.14	0.75	0.21	0.36	0.37	0.16	0.09	0.92
		CV	4.50	7.04	3.39	1.57	5.90	4.95	10.15	12.50	4.37	3.94	7.13
	6 (19)	Mean	35.74	31.99	17.58	15.32	23.01	7.60	6.33	5.17	6.28	3.74	23.45
		S.E.	0.34	0.47	0.23	0.15	0.22	0.09	0.08	0.06	0.08	0.11	0.31
		CV	4.11	6.36	5.79	4.38	4.16	5.26	5.55	5.09	5.72	13.20	5.80
	7 (13)	Mean	37.93	34.13	18.47	15.69	24.96	7.81	6.91	5.79	6.45	3.75	25.27
		S.E.	0.41	0.41	0.28	0.19	0.41	0.08	0.11	0.11	0.11	0.09	0.40
		CV	3.91	4.35	5.41	4.38	5.92	3.83	5.53	7.04	5.82	9.06	5.64
	8 (15)	Mean	38.40	34.62	18.38	15.73	24.89	7.84	7.01	5.73	6.60	3.89	25.52
		S.E.	0.43	0.44	0.24	0.17	0.36	0.08	0.09	0.10	0.09	0.11	0.35
		CV	4.38	4.94	5.13	4.22	5.57	3.80	5.16	6.44	5.06	11.30	5.24
	9 (4)	Mean	40.02	36.86	19.53	16.32	27.12	7.90	7.05	5.90	6.92	3.88	27.21
		S.E.	0.53	0.66	0.60	0.30	0.79	0.21	0.18	0.23	0.20	0.16	0.79
		CV	2.63	3.56	6.15	3.64	5.81	5.26	4.96	7.71	5.79	7.89	5.78
			GHS	MLT	MDL	MTR	AFL	MAF	AFA	MRH	UJI	LJI	

Males	3 (2)	Mean	13.45	30.19	23.16	5.59	6.33	6.93	8.25	12.73	8.93	12.41
		S.E.	0.10	1.39	1.06	0.19	0.64	0.24	0.08	1.03	0.35	0.13
		CV	1.05	6.49	6.47	4.81	14.30	4.90	1.46	11.39	5.63	1.48
	5 (2)	Mean	12.75	30.96	23.59	6.25	6.97	7.25	9.14	13.60	8.04	12.82
		S.E.	0.42	0.93	0.11	0.32	0.17	0.42	0.69	0.62	0.37	0.25
		CV	4.66	4.25	0.69	7.24	3.45	8.30	10.68	6.45	6.42	2.81
	6 (5)	Mean	14.65	35.02	26.95	6.23	7.08	8.18	9.84	15.45	8.63	13.93
		S.E.	0.47	0.89	0.84	0.15	0.28	0.43	0.26	0.51	0.47	0.22
		CV	7.18	5.64	6.93	5.33	8.86	11.75	5.99	7.35	12.12	3.55
	8 (11)	Mean	15.30	38.23	29.23	6.23	7.97	8.99	11.06	16.76	9.17	15.18
		S.E.	0.28	0.56	0.45	0.09	0.36	0.18	0.19	0.82	0.36	0.36
		CV	6.15	4.86	5.13	4.96	14.76	6.81	5.83	16.25	13.07	7.84
	9 (6)	Mean	15.36	39.71	30.78	6.41	8.73	8.42	11.14	18.24	9.28	15.83
		S.E.	0.32	1.33	1.08	0.16	0.55	0.30	0.70	0.80	0.44	0.51
		CV	5.08	8.23	8.60	6.16	15.38	8.64	15.45	10.71	11.60	7.92
Females	3 (4)	Mean	11.92	26.83	20.39	4.62	5.46	6.72	8.57	11.62	6.67	9.88
		S.E.	0.08	0.22	0.44	0.08	0.25	0.11	0.12	0.08	0.39	0.16
		CV	1.32	1.62	4.25	3.46	9.14	3.10	2.75	1.28	11.56	3.18
	4 (6)	Mean	13.14	30.37	23.37	5.56	6.18	7.24	9.04	12.95	7.43	12.30
		S.E.	0.37	0.81	0.67	0.29	0.18	0.13	0.22	0.38	0.51	0.86
		CV	6.86	6.55	7.01	12.95	7.30	4.49	5.96	7.22	16.89	17.11
	5 (3)	Mean	13.34	31.14	23.88	6.36	6.00	7.73	8.99	13.85	7.19	12.26
		S.E.	0.29	1.17	0.62	0.10	0.25	0.32	0.25	0.67	0.70	0.51
		CV	3.71	6.53	4.54	2.82	7.11	7.21	4.89	8.46	16.95	7.17
	6 (19)	Mean	13.78	31.27	25.26	6.19	7.00	7.66	9.65	14.53	7.96	12.87
		S.E.	0.16	1.31	0.59	0.07	0.13	0.12	0.13	0.19	0.22	0.29
		CV	4.95	18.34	10.17	5.00	7.87	6.86	5.73	5.81	11.98	9.86

7 (13)	Mean	14.36	35.86	27.22	6.11	7.22	8.57	10.46	16.02	8.71	14.83
	S.E.	0.20	0.58	0.45	0.09	0.22	0.17	0.21	0.29	0.17	0.46
	CV	5.04	5.82	6.00	5.13	10.89	6.98	7.25	6.49	6.88	11.21
8 (15)	Mean	14.47	35.78	27.07	6.33	7.67	8.31	10.20	15.79	8.88	14.85
	S.E.	0.13	0.44	0.40	0.13	0.17	0.14	0.19	0.26	0.21	0.34
	CV	3.61	4.74	5.73	7.73	8.66	6.50	4.52	6.40	9.34	8.77
9 (4)	Mean	15.20	37.32	29.37	6.37	7.65	9.02	11.22	16.97	7.72	13.44
	S.E.	0.66	1.06	0.72	0.16	0.18	0.43	0.53	0.81	0.76	1.24
	CV	8.59	5.65	4.92	4.94	4.67	9.45	9.45	9.50	19.51	18.40

Appendix 3

Standard statistics of 21 measurements of *C. h. pretoriae* males and females sampled in Vanderbijlpark. The sample size (n), mean, standard error (S.E.) and coefficient of variation (CV) are indicated. Measurements are defined in Plates 10a-e.

			Measurements										
Sex	Age class (n)		GLS	ITC	BCW	ZMB	ZYW	IOB	WR	NAS	UTR	PAC	NPP
Females	8 (5)	Mean	39.13	34.55	19.20	16.03	26.13	7.56	6.76	5.95	6.47	4.30	30.27
		S.E.	0.50	0.51	0.15	0.04	0.31	0.11	0.12	0.18	0.17	0.10	2.54
		CV	2.90	3.33	1.78	0.61	2.67	3.34	3.88	6.67	5.68	5.19	18.78
			GHS	MLT	MDL	MTR	AFL	MAF	AFA	MRH	UJI	LJI	
			Mean	14.59	37.01	28.13	5.95	8.73	8.07	10.22	16.57	9.29	15.56
		S.E.	0.16	0.90	0.25	0.15	0.40	0.24	0.13	0.30	0.31	1.50	
		CV	2.49	5.47	2.01	5.61	10.30	6.52	2.96	4.05	7.59	21.60	

Appendix 4

Standard statistics of 21 measurements of *C. h. pretoriae* males and females sampled in Krugersdorp. The sample size (n), mean, standard errors (S.E.) and coefficient of variation (CV) are indicated. Measurements are defined in Plates 10a-e.

			Measurements										
Sex	Age class (n)		GLS	ITC	BCW	ZMB	ZYW	IOB	WR	NAS	UTR	PAC	NPP
Males	9 (2)	Mean	42.08	37.63	18.95	5.88	26.61	7.89	7.84	0.65	7.37	4.41	27.11
		S.E.	1.48	1.74	0.42	0.09	1.18	0.16	0.21	0.42	0.26	0.13	1.39
		CV	4.96	6.54	3.17	0.89	6.27	2.96	3.70	9.05	5.09	4.17	7.28
Females	8 (3)	Mean	38.20	34.17	17.89	15.02	24.44	7.25	6.53	5.43	7.01	3.89	24.86
		S.E.	0.57	0.93	0.20	0.08	0.31	0.24	0.33	0.24	0.35	0.29	1.69
		CV	2.56	4.71	1.90	0.91	2.16	5.60	8.66	7.80	8.62	13.01	4.78
			GHS	MLT	MDL	MTR	AFL	MAF	AFA	MRH	UJI	LJI	
Males	9 (2)	Mean	15.31	39.30	30.08	6.66	8.38	8.64	11.14	17.45	10.11	16.55	
		S.E.	0.32	1.58	0.61	0.04	0.59	0.11	0.20	1.02	0.42	1.53	
		CV	2.96	5.67	2.87	0.74	9.96	1.88	2.54	8.23	5.95	13.12	
Females	8 (3)	Mean	13.83	35.95	26.87	6.01	7.05	7.90	10.45	15.27	8.24	16.77	
		S.E.	0.36	0.42	0.64	0.21	0.05	0.56	0.57	0.41	0.62	1.03	

CV	4.49	2.01	4.08	6.11	1.10	12.25	8.95	4.64	13.17	10.60
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