

APPENDIX 1

DESCRIPTION OF MEASURES ON CANID CRANIA

VARIABLES	MEASURES	DEFINITIONS
V1	Total skull length: prosthion-inion; a measure between two points.	<i>Prosthion</i> , the most rostral point of the intermaxillary suture in the median plane. <i>Inion</i> , the most caudal point on the external occipital protuberance in the median plane, or at the crista of the sagittal and nuchal crests, the latter taking precedence.
V2	Condylobasal length: prosthion to a line drawn across the most caudal margins of the occipital condyles.	<i>Basion</i> , a point most ventro-caudal in the margin of the foramen magnum, in the median plane.
V3	Palate length: prosthion-staphilion; a measure between two points in the median plane.	<i>Staphilion</i> , a point most caudal on the interpalatine suture in the median plane.
V4	Basifacial axis length: prosthion-intersphenoid suture; a measure between prosthion and a point on the suture where it crosses the median plane. Where the suture is fused this measure is not taken.	<i>Intersphenoid suture</i> , where present the suture separates the basisphenoid bone and the presphenoid process. <i>Prebulla notch</i> , a pseudo fossa in the bony shelf immediately ventral to the osseus auditory tube.
V5	Upper tooth-row length: prosthion-posterior margin of M ² alveolus; a measure between two points.	<i>Posterior margin M² alveolus</i> , a point (midpoint) on the posterior rim of the second molar alveolus.
V6	Palatine bone length: palatine/maxilla suture-staphilion; a measure between two points.	
V7	Posterior M ² alveolus-prebulla notch; a measure between two points with internal calipers.	

DEFINITIONS

MEASURES

VARIABLES

- V8 Staphilion-basion; a measure between two points in the median plane.
- V9 Rostral length: prosthion-nasion; a measure between two points.
- V10 Prosthion-bregma; a measure between two points in the median plane.
- V11 Prosthion-rostral end of nasal bone; a measure between two points in the median plane.
- V12 Nasal bone length: nasion-rostral end of nasal bone; a measure between two points in the median plane.
- V13 Nasal bone width: a measure across the median plane between two points where the left and right incisivomaxilla sutures meet the nasomaxilla sutures.
- Nasion*, a point at the junction in the median plane of the left and right nasofrontal sutures. Where the junction is diffuse an estimate is made of its mid-point in the median plane.
- Bregma*, a point at the junction in the median plane of the left and right frontoparietal sutures. Where the junction is diffuse an estimate is made of the mid-point in the median plane. Another point is defined *bregma (-crest)* off the median on either frontoparietal suture, at the base of the sagittal crest (where present).
- Rostral end of nasal bone*, the nasal bones are generally separated at the rostral extremity. The measurement point is taken in the median plane on a line joining the cuspal extremities of the nasals.

VARIABLES

MEASURES

DEFINITIONS

- V14 Nasal aperture width (internal diameter): a measure with internal calipers between the vertical rises of the aperture such that the distance is maximum.
- V15 Least rostral width; a measure between the lateral rises of the maxilla bones such that the distance is minimum. The caliper from dorsal aspect will generally lie between the first and second premolars, at right angles to the median plane.
- V16 Bizygomatic width: a measure between the lateral margins of the two zygomatic bones at right angles to the median plane (RAMP), such that the distance is maximum.
- V17 Width between the posterior alar foramina: a measure RAMP between the medial margins of the crests immediately ventral to the foramina.
- V18 Basicranial width: porion-porion; a measure RAMP between two points.
- V19 Bulla width: a measure between two points, the most caudal point on the tympanico-sphenoid suture to the point external acoustic meatus.
- V20 Bulla length: a measure between two points, the most caudal point on the tympanicomastoid suture to a point in the carotid notch such that the distance is minimum.
- RAMP*, right angles to the median plane.
- Porion*, a point on the ventral margin of the auditory meatus, usually taken above the centre of the meatus.

VARIABLES	MEASURES	DEFINITIONS
V21	Bulla height: a measure made by sighting the caliper arms, one across the line between the most ventral points on the bulla curve, the other with the porion. This is a difficult measure to control.	
V22	Between bulla width: a measure RAMP between two points, the left and right most caudal points on the tympanicosphenoid suture; internal calipers.	
V23	Maximum orbit length; a measure between two points, the postorbital process and a point on the ventral rim of the orbit such that the distance is maximum; internal calipers.	
V24	Orbit width: a measure between two points on the orbit rim, where the temporozygomatrica suture and the fronto-lacrimalis suture cross it.	
V25	Skull height 1: porion-nasion; a measure between two points.	
V26	Skull height 2: porion-bregma (-crest); a measure between two points.	
V27	Skull height 3: porion-inion; a measure between two points.	
V28	Occipital height 1: basion-inion; a measure between two points.	

DEFINITIONS

MEASURES

VARIABLES

- V29 Cranial height: intersphenoid suture-bregma (-crest); a measure between two points.
- V30 Rostral height: staphilion-nasion; a measure between two points.
- V31 Bulla volume: a measure of the internal volume of the bulla with the ossicles removed using no.10 lead shot, the measure being taken as the mass of recoverable shot from the bulla being filled to the 'least height' of the external acoustic meatus.
- V32 M₂ length: a measure of the maximum length of the tooth on the enamel.
- V33 Interorbital width: a measure RAMP between the grooves in the orbit rim for the angularis oculi vein.
- V34 Postorbital width: a measure between the tips of the postorbital processes, calipers RAMP.
- V35 Least cranial width: a measure RAMP between the vertical margins in the posterior frontal fossa.
- V36 Maximum cranial width: a measure RAMP the caliper points resting on the horizontal section of the squamous suture and positioned such that the width is maximum.
- Postorbital process*, a point more or less well defined by the meeting of the frontal crest and the dorsal rim of the orbit. Where the tip is not a 'point', measures are taken from the most caudal clear angle of the crest and rim.

VARIABLES	MEASURES	DEFINITIONS
V37	Frontoparietal cranial width: a measure RAMP, the caliper arms resting on the frontoparietal suture.	<i>Mastoid process</i> , the measurement point is taken as the most lateral point on the process. Sometimes this is not a uniquely defined point, in which case the most lateroventral point is used.
V38	Mastoid width: a measure RAMP between the most lateral points on the left and right mastoid processes.	
V39	Occipital condyle width: a measure RAMP between the most lateral margins of the two condyles.	
V40	Nuchal crest length:inion-mastoid process; a measure between two points.	
V41	Foramen magnum width (diameter): a measure RAMP between two points, the internal caliper arms resting in the two lateral notches immediately caudal to the openings of the condyloid canals and such that the distance is a maximum.	
V42	Foramen magnum height (diameter): a measure in the median plane between the internal bone surfaces immediately dorsal to the basion and ventral to the opisthion.	<i>Opisthion</i> , the central point on the ventral margin of the foramen magnum.
V43	P ¹ -P ¹ : a measure between two points, the left and right most posterior points on the alveolar rim.	
V44	P ² -P ² : as above.	
V45	P ³ -P ³ : as above.	

DEFINITIONS

MEASURES

VARIABLES

- V46 P⁴-P⁴: as above.
- V47 Bi-palatine fissure width: a measure RAMP between two points on the lateral margins of the left and right fissures where the premaxilla-premaxilla suture enters the fissure; internal calipers.
- V48 Palatine fissure length: a measure between two points, the rostral and caudal end-points of the fissure, the caliper arms inserted far enough to establish a clear bearing point within the fissure at the end; internal calipers.
- V49 M²: a measure of the maximum distance between posterior and anterior enamel margins along a line parallel to a line drawn through the metaconid and paraconid cusps.
- V50 M¹: as above.
- V51 P⁴: as above.
- V52 P³: as above.
- V53 P²: as above.
- V54 C : a measure of the distance between the posterior and anterior enamel margins with the calipers held strictly in the AA' plane and the posterior alveolar margin determining the 'level' at which the measure is taken.

DEFINITIONS

MEASURES

VARIABLES

- V55 M^2 : a width measure taken on a line parallel to the line joining the paraconid cusp and the protoconid cusp, such that the distance is maximum.
- V56 M^1 : as above.
- V57 P^4 : a width measure on a line passing through the between-cuspal pit.
- V58 P^3 : a measure of the maximum tooth width perpendicular to the length measure.
- V59 P^2 : as above.
- Composite tooth length:
- V60 $M^2 + M^1$: a measure of in situ teeth on the buccal margin of the maximum distance from the posterior enamel margin of M^2 to the anterior enamel margin of M^1 .
- V61 P^1 : a measure of maximum length between posterior and anterior enamel margins.
- V62 Cheektooth-row length: a measure from posterior M^2 to the most caudal point on posterior P^1 alveolus.
- V63 P^4 cemento-enamel junction length: a tooth length taken from a lateral aspect of an in situ tooth between the posterior and anterior cemento-enamel junctions (below the cingulum bulge).

VARIABLES	MEASURES	DEFINITIONS
V64	M ₁ cemento-enamel junction length: a tooth length taken from the medial aspect of the mandible of an in situ tooth with the caliper points on the cemento-enamel junction.	
V65	Mandible length 1: pogonion-angle; a measure between two points.	<i>Pogonion</i> , a point most rostral on the synchondrosis mandibularis. <i>Angle</i> , a point most caudal on the mandibular angle.
V66	Mandible length 2: pogonion-mandibular condyle; a measure between a point and the most caudal point on the condyle.	
V67	Horizontal ramus depth: a measure of the vertical (dorso-ventral) distance between a point on the anterior alveolus of M ₁ and the ventral margin of the horizontal ramus.	
V68	Horizontal ramus breadth: a measure with the flat arms of the calipers positioned dorso-ventrally on a line passing through a point on the anterior alveolus of M ₁ .	
V69	M ₁ : a measure of the maximum distance between anterior and posterior enamel margins in a line defined by the cheek teeth at that point.	<i>Cheek teeth line</i> , this line in fact curves, but for the purpose of crown length metrication the tooth-row curve may be considered to be made up of two straight-line segments, one from M ₃ to M ₁ paraconid cusp, and two, from P ₄ paraconid cusp to crown apex of P ₁ .
V70	P ₄ : as above.	

VARIABLES	MEASURES	DEFINITIONS
V71	P3: as above.	
V72	P2: as above.	
V73	M1: a measure of the maximum buccolingual width of the tooth taken at right angles to the measure of its length.	<i>Crown widths</i> , all measures taken at right angles to the line of the cheek teeth at that point, between the maximum enamel margins.
V74	P4: as above.	
V75	P3: as above.	
V76	P2: as above.	
V77	M1 talonid length: a measure with one caliper blade resting on and anterior to the metaconid cusp and the other in line with the most posterior point on the M1 cingulum.	
V78	Diastema length: P2-P3; a measure between the posterior alveolar margin of P2 and the anterior alveolar margin of P3.	
V79	C1 length: a measure taken from posterior to anterior tooth margins at the alveolar margins. Anteriorly this may mean the caliper point bears on cementum, not enamel.	
V80	M2 width: measure of maximum buccolingual width of the tooth taken at right angles to the measure of its length.	

APPENDIX 2

CRITERIA FOR THE SUBJECTIVE SEXING OF DINGO

1. From a dorsal view of the skull one expects in males a clear longitudinal development of the frontal bone between the postorbital process and the point of narrowest constriction of the brain capsule. In females, from the dorsal view the curvature of the frontal bones' caudal development is typically greater and the 'pinch' at the narrowest point more abrupt. Where the frontal sinuses are highly inflated, the actual development of the frontals in the postorbital constriction has a greater dorso-ventral component (in the vectorial sense). This tends to disguise the typical male rostro-caudal development of the frontals.
2. The size and shape of the sagittal and nuchal crests are sexually dimorphic in dingo. The general rule is that, in adults, the crests are absolutely bigger in males than in females. The shape differences tend to be more subtle. Males tend to have higher sagittal prominences on the occipito-interparietal bone, and in younger dingoes it is noticeably 'stepped' at the mid-line on the occipito-parietal suture. Dingoes rarely have a high 'comb' sagittal development at the fronto-parietal suture (i.e. viewed laterally, it is usually of concave profile), but where it does occur it is usually in aged males. Females tend to exhibit a more linear profile on the sagittal line, perhaps because the occipital part is less elevated than in males. The nuchal crest is dimorphic at the mastoid prominence and in its development above the auditory meatus. The male crest is more recurved at the mastoid and the lateral development over the meatus is more pronounced.
3. The zygomatic part of the squamous bone is a tabular structure which in its size (both rostrocaudally and laterally) is dimorphic.

4. The auditory bulla is generally more elevated in wild *Canis* than in domesticated *Canis*. The volume of the capsule is generally greater in the wild populations, for reasons one would imagine are obvious. Male bullae are generally larger than female bullae in dingo, but because of the conservative nature of the basicranium in dog (e.g. Nussbauer 1978) the greater size of the bullae in males means that they tend to be set closer together.

5. The dingo face is surprisingly lacking in dimorphism. As far as I am aware there are no proportions or traits in the palate that are demonstrably dimorphic. There is, however, the classic trait, upper canine size, which in dingoes is a reasonably subtle but very effective sex marker. The quality one needs to perceive is the relative size (viewed laterally) of the canine and the premolars: in females the canine is relatively weakly developed.

For a visual check of these five sexual dimorphic characters in dingo, Plates 6. and 6. should be used. These represent two robust individuals from the southwest of Western Australia. In all traits they are, however, admirably dimorphic.

APPENDIX 3

DESCRIPTIVE STATISTICS ON SEXED SAMPLE 0

This appendix provides the basic sample statistics for the male and female dingoes of Sample 0. The cells of the table include two figures which refer to males and females.

The figures reported here were produced by the SPSS release 8 facility in the Joint Schools Computer Services, ANU. All computation was handled by myself.

The t values have been generated on samples that are not independent. The comparison of separated sexed samples does not, therefore, strictly comply with the underlying assumptions of the t test. In this study I have used them largely as a guide to means separation, rather than as a probability test on a null hypothesis. The most useful of the figures presented here are the confidence limits on the sexed sample means.

	Sample #	σ q	Range	Mean \bar{x}	Standard deviation σ	Standard error σ/\sqrt{n}	F ratio sig.*	t sig.*	Confidence limits 95%; $\bar{x} \pm (t \times \sigma/\sqrt{n})$
V1	30 30		188-208 176-197	199.7 188.0	4.79 4.66	0.87 0.85	1.06	9.55*	199.7 \pm 1.7 188.0 \pm 1.7
V2	30 30		175-201 167-191	188.1 198.7	6.51 6.44	1.19 1.17	1.02	5.62*	188.1 \pm 2.4 178.7 \pm 2.3
V3	30 30		90-105 88-97	97.7 92.7	3.08 2.06	0.56 0.37	2.24*	7.28*	97.7 \pm 1.1 92.7 \pm 0.7
V4	30 30		119-137 113-126	128.0 121.1	3.93 2.81	0.71 0.51	1.95	7.86*	128.0 \pm 1.4 121.1 \pm 1.0
V5	30 30		94-104 89-97	98.5 93.5	2.47 2.08	0.45 0.38	1.41	8.47*	98.5 \pm 0.9 93.5 \pm 0.7
V6	30 30		31-39 28-35	34.5 31.9	2.08 1.42	0.38 0.26	2.13*	5.50*	34.5 \pm 0.7 31.9 \pm 0.5
V7	30 30		46-57 45-51	52.4 48.2	2.52 1.63	0.46 0.29	2.39*	7.58*	52.4 \pm 0.9 48.2 \pm 0.5
V8	30 30		74-84 67-77	77.8 72.6	2.70 2.44	0.49 0.44	1.22	7.83*	77.8 \pm 0.9 72.6 \pm 0.9
V9	30 30		91-105 85-101	98.0 92.4	3.85 4.31	0.70 0.78	1.25	5.27*	98.0 \pm 1.4 92.4 \pm 1.5
V10	30 30		146-164 138-153	155.6 147.4	4.00 3.76	0.73 0.68	1.13	8.20*	155.6 \pm 1.4 147.4 \pm 1.3

V11	29	33-40	36.2	1.50	0.27	1.28	7.16*	36.2 ± 0.5
	30	30-36	33.6	1.32	0.24			33.6 ± 0.5
V12	30	59-70	64.4	3.01	0.55	1.44	3.88*	64.4 ± 1.1
	30	55-68	61.0	3.61	0.65			61.0 ± 1.3
V13	30	11-14	12.4	0.77	0.14	1.47	4.06*	12.4 ± 0.2
	30	10-14	11.5	0.93	0.17			11.5 ± 0.3
V14	30	18-23	19.9	1.42	0.26	2.36*	4.29*	19.9 ± 0.5
	30	17-21	18.6	0.92	0.16			18.6 ± 0.3
V15	30	30-35	32.3	1.27	0.23	1.76	6.99*	32.3 ± 0.4
	30	28-32	30.3	0.95	0.17			30.3 ± 0.3
V16	30	99-112	105.2	3.46	0.63	1.16	8.78*	105.2 ± 1.2
	30	93-104	97.6	3.20	0.58			97.6 ± 1.1
V17	30	18-20	19.0	0.86	0.15	1.15	2.01*	19.0 ± 0.3
	30	17-20	18.6	0.93	0.17			18.6 ± 0.3
V18	30	52-58	54.6	1.71	0.31	1.45	4.22*	54.6 ± 0.6
	30	48-56	52.5	2.06	0.37			52.5 ± 0.7
V19	30	18-20	19.2	0.72	0.13	2.13*	2.41*	19.2 ± 0.2
	30	16-21	18.6	1.06	0.19			18.6 ± 0.3
V20	30	25-29	25.8	1.06	0.19	1.01	1.45	25.8 ± 0.3
	30	23-27	25.4	1.07	0.19			25.4 ± 0.3
V21	20	16-18	17.0	0.79	0.17			17.0 ± 0.3
	16	16-18	17.0	0.81	0.20			17.0 ± 0.4
V22	30	13-17	14.9	0.84	0.15	2.26*	3.59*	14.9 ± 0.3
	30	12-16	13.9	1.26	0.23			13.9 ± 0.4

V23	30 30	32-37 32-35	34.4 33.4	1.07 0.93	0.19 0.17	1.30	3.59*	34.4 ± 0.3 33.4 ± 0.3
V24	30 30	27-32 26-30	29.4 28.1	1.10 0.97	0.20 0.17	1.28	4.72*	29.4 ± 0.4 28.1 ± 0.3
V25	30 30	79-90 75-85	84.2 79.9	2.45 2.43	0.44 0.44	1.02	6.81*	84.2 ± 0.9 79.9 ± 0.9
V26	30 30	46-58 43-55	52.9 49.8	1.47 3.09	0.57 0.56	4.42*		52.9 ± 1.0 49.8 ± 1.0
V27	30 30	56-63 53-59	58.8 55.8	1.48 1.84	0.27 0.33	1.54		58.8 ± 0.6 55.8 ± 0.6
V28	30 30	49-66 47-62	55.6 53.8	5.58 6.13	1.02 1.12	1.21	1.23	55.6 ± 2.0 53.8 ± 2.2
V29	30 30	48-52 45-50	50.3 48.3	0.98 1.24	0.18 0.22	1.58	6.79*	50.3 ± 0.3 48.3 ± 0.4
V30	30 30	42-50 41-47	46.4 43.6	1.77 1.49	0.32 0.27	1.40	6.68*	46.4 ± 0.6 43.6 ± 0.5
V31	26 30	13.0-19.3 12.0-19.4	15.5 14.6	1.60 1.43	0.31 0.26	1.26	2.19*	15.5 ± 0.6 14.6 ± 0.5
V33	30 30	33-41 31-37	35.9 33.6	1.86 1.71	0.34 0.31	1.18	4.98*	35.9 ± 0.6 33.6 ± 0.6
V34	30 30	48-59 45-57	53.3 50.4	2.77 3.04	0.50 0.55	1.21	3.85*	53.3 ± 1.0 50.4 ± 1.1
V35	30 30	33-38 31-38	36.5 35.3	1.25 1.51	0.22 0.27	1.46	3.54*	36.5 ± 0.4 35.3 ± 0.5

V36	30 30	54-58 50-57	55.7 54.4	1.26 1.88	0.23 0.34	2.23*	2.97*	55.7 ± 0.4 54.4 ± 0.7
V37	30 30	42-47 40-45	43.7 43.0	1.79 1.36	0.33 0.24	1.73	1.86	43.7 ± 0.6 43.0 ± 0.4
V38	30 30	61-73 59-68	67.0 63.8	2.25 2.14	0.41 0.39	1.11	5.75*	67.0 ± 0.8 63.8 ± 0.8
V39	30 30	34-41 33-39	37.7 35.6	1.62 1.30	0.29 0.23	1.55	5.53*	37.7 ± 0.6 35.6 ± 0.4
V40	30 30	51-57 46-53	53.6 49.9	1.45 1.72	0.26 0.31	1.42	8.97*	53.6 ± 0.5 49.9 ± 0.6
V41	30 30	18-22 18-20	19.9 18.9	1.09 0.64	0.20 0.11	2.92	4.18*	19.9 ± 0.4 18.9 ± 0.2
V42	30 30	13-15 11-14	13.8 13.1	0.69 0.62	0.12 0.11	1.24	4.08*	13.8 ± 0.2 13.1 ± 0.2
V43	30 30	26-31 25-29	28.6 27.2	1.18 1.09	0.21 0.20	1.17	4.98*	28.6 ± 0.4 27.2 ± 0.4
V44	30 30	31-34 29-34	33.0 31.0	1.01 1.37	0.18 0.25	1.83	6.29*	33.0 ± 0.3 31.0 ± 0.5
V45	30 30	43-50 40-46	46.2 42.9	1.59 1.68	0.29 0.30	1.11	7.88*	46.2 ± 0.6 42.9 ± 0.6
V46	30 30	56-61 52-58	58.6 54.8	1.32 1.57	0.24 0.28	1.40	9.94*	58.6 ± 0.4 54.8 ± 0.5
V47	30 30	10-14 9-12	11.2 10.4	1.04 0.68	0.19 0.12	2.33*	3.38*	11.2 ± 0.3 10.4 ± 0.2

V48	30 30	10-15 10-13	12.0 11.3	1.23 0.95	0.22 0.17	1.65	2.23*	12.0 ± 0.4 11.3 ± 0.3
V49	30 30	6.4-8.0 6.7-7.8	7.3 7.1	0.36 0.33	0.06 0.06	1.21	1.58	7.3 ± 0.1 7.1 ± 0.1
V50	29 30	11.8-14.5 11.0-13.1	12.8 12.2	0.54 0.59	0.10 0.10	1.21	3.95*	12.8 ± 0.2 12.2 ± 0.2
V51	30 30	18.5-21.2 17.0-20.1	20.0 18.8	1.01 0.69	0.18 0.12	2.14*	5.50*	20.0 ± 0.3 18.8 ± 0.2
V52	24 23	11.4-13.3 10.5-12.5	12.2 11.7	0.51 0.49	0.10 0.10	1.10	3.37*	12.2 ± 0.2 11.7 ± 0.2
V53	19 23	9.5-12.0 9.4-10.9	10.5 10.2	0.56 0.40	0.13 0.08	2.00	2.22*	10.5 ± 0.2 10.2 ± 0.1
V54	29 30	8.9-11.4 8.6-10.6	10.3 9.6	0.68 0.57	0.12 0.10	1.42	4.06*	10.3 ± 0.2 9.6 ± 0.1
V55	30 30	8.7-10.0 8.2-10.6	9.5 9.3	0.35 0.49	0.06 0.09	1.99	1.65	9.5 ± 0.1 9.3 ± 0.1
V56	30 30	14.0-16.7 12.9-16.1	15.3 14.6	0.59 0.75	0.10 0.13	1.61	4.24*	15.3 ± 0.2 14.6 ± 0.2
V57	30 30	7.0-8.4 6.6-7.7	7.7 7.2	0.34 0.28	0.06 0.05	1.44	5.34*	7.7 ± 0.1 7.2 ± 0.1
V58	28 29	4.5-5.8 4.0-5.5	5.1 4.6	0.24 0.35	0.04 0.06	2.02	5.39*	5.1 ± 0.08 4.6 ± 0.1
V59	26 29	3.9-4.8 3.5-4.4	4.3 4.0	0.20 0.22	0.03 0.04	1.31	5.12*	4.3 ± 0.06 4.0 ± 0.08

V60	30	18.8-21.6	19.9	0.67	0.12	1.44	3.94*	19.9 ± 0.2
	30	17.1-20.6	19.2	0.80	0.14			19.2 ± 0.2
V61	16	5.5-6.5	6.03	0.26	0.06	1.37	2.41*	6.0 ± 0.1
	18	5.0-6.3	5.7	0.31	0.07			5.7 ± 0.1
V62	30	58-65	61.7	1.95	0.35	1.36	6.25*	61.7 ± 0.7
	30	55-62	58.7	1.67	0.30			58.7 ± 0.6
V63	30	17.5-20.2	18.8	0.70	0.12	1.22	6.19*	18.8 ± 0.2
	29	15.8-19.0	17.6	0.77	0.14			17.6 ± 0.2
V64	29	18.2-21.8	19.8	0.82	0.15	1.08	3.55*	19.8 ± 0.3
	29	17.2-20.7	19.0	0.85	0.15			19.0 ± 0.3
V65	30	139-154	146.7	4.17	0.76	1.55	8.47*	146.7 ± 1.5
	30	128-144	138.4	3.35	0.61			138.4 ± 1.2
V66	30	139-155	147.3	4.31	0.78	1.84	8.92*	147.3 ± 1.6
	30	130-143	138.6	3.18	0.58			138.6 ± 1.1
V67	30	22-25	23.2	0.97	0.17	1.32	7.65*	23.2 ± 0.3
	30	19-24	21.6	1.11	0.20			21.6 ± 0.3
V68	30	9-11	9.8	0.61	0.11	1.61	4.94*	9.8 ± 0.2
	30	8-10	9.1	0.48	0.08			9.1 ± 0.1
V69	29	19.2-22.5	21.0	0.76	0.14	1.49	4.32*	21.0 ± 0.2
	30	18.1-22.0	20.1	0.93	0.17			20.1 ± 0.2
V70	22	11.1-13.1	12.3	0.53	0.11	1.03	3.74*	12.3 ± 0.2
	23	10.5-12.6	11.7	0.52	0.10			11.7 ± 0.2
V71	17	9.6-11.3	10.5	0.49	0.12	1.95	3.04*	10.5 ± 0.2
	16	9.5-10.6	10.0	0.35	0.08			10.0 ± 0.1

V72	14	8.0-9.4	8.6	0.37	0.10	2.00	2.42*	8.6 ± 0.2
	14	7.2-9.2	8.2	0.53	0.14			8.2 ± 0.2
V73	30	7.8-9.5	8.3	0.35	0.06	1.16	5.73*	8.3 ± 0.1
	30	7.2-8.5	7.8	0.33	0.06			7.8 ± 0.1
V74	27	5.7-7.4	6.4	0.41	0.08	1.62	4.51*	6.4 ± 0.1
	29	5.4-6.9	6.0	0.32	0.06			6.0 ± 0.1
V75	27	4.9-6.0	5.3	0.25	0.04	1.13	5.32*	5.3 ± 0.08
	26	4.4-5.5	4.9	0.26	0.05			4.9 ± 0.1
V76	22	4.1-4.9	4.5	0.22	0.04	1.05	4.53*	4.5 ± 0.08
	24	3.9-4.7	4.2	0.21	0.04			4.2 ± 0.08
V77	30	8.5-10.2	9.5	0.38	0.07	1.00	4.06*	9.5 ± 0.1
	30	8.2-9.9	9.1	0.38	0.07			9.1 ± 0.1
V78	30	2.7-7.8	5.3	1.16	0.21	1.43	1.03	5.3 ± 0.4
	30	3.4-7.0	5.0	0.97	0.17			5.0 ± 0.3
V79	30	9.1-11.7	10.6	0.59	0.10	1.03	5.26*	10.6 ± 0.2
	30	8.7-11.4	9.8	0.58	0.10			9.8 ± 0.2
V80	28	6.2-7.4	6.8	0.28	0.05	1.30	3.54*	6.8 ± 0.1
	30	6.2-7.1	6.5	0.24	0.04			6.5 ± 0.08

APPENDIX 4

INFORMATION CONCERNING PRINCIPAL COMPONENTS ANALYSIS OF SAMPLE 0 DINGOES

1. Eigenvectors and eigenvalues.
2. Means, standard deviations and eigenvectors for input to program which calculates the score rosters on the combined-sex Sample 0.

Solution generated on the Male Central Australian dingoes
Principal Components

	1	2	3	4	5	6	7
V3	0.8890935	0.1959420	0.1497939	-0.1668057	-0.0742409	0.3376749	0.0363466
V4	0.9181995	0.2232123	0.0878831	-0.1907687	0.0459332	-0.1251701	-0.2125853
V5	0.9104642	0.2027856	0.1570220	-0.0902912	-0.1320194	-0.2229843	0.1731282
V24	-0.1901708	0.8559707	0.3357286	0.2250271	0.2594548	0.0091260	0.0199524
V26	0.7315580	-0.5095725	-0.1507226	0.0127265	0.4232131	0.0040498	0.0561585
V37	-0.1763722	-0.5591252	0.8097880	0.0115837	-0.0033030	-0.0075206	-0.0177072
V40	0.8063197	-0.1573134	-0.0494913	0.5471811	-0.1448762	0.0188165	-0.0436040

Component	Eigenvalue	% of var	Cum %
1	3.71512	53.1	53.1
2	1.45906	20.8	73.9
3	0.84845	12.1	86.0
4	0.42271	6.0	92.1
5	0.29248	4.2	96.3
6	0.17992	2.6	98.8
7	0.08225	1.2	100.0

Solution generated on the Female Central Australian dingoes
Principal Components

	1	2	3	4	5	6	7
V3	0.8585487	0.0575696	-0.3699021	-0.2903589	0.0698663	0.1452214	0.1116851
V4	0.9631042	-0.0260702	-0.0329900	-0.0539670	-0.0697577	-0.2433221	0.0606472
V5	0.9433992	0.1627450	-0.2038536	-0.0583703	0.0491267	0.0148011	-0.1895154
V24	0.0900359	0.8748049	-0.1744580	0.4129938	0.1537873	-0.0188751	0.0400454
V26	0.4128719	-0.8168766	0.2037578	0.2359764	0.2547425	-0.0006466	0.0123808
V37	0.2204063	0.4837066	0.7935129	-0.2752893	0.1093817	0.0051281	0.0033856
V40	0.8333130	-0.0311550	0.3580329	0.3388796	-0.2187372	0.1158480	0.0180347

Component	Eigenvalue	% of var	Cum %
1	3.47624	49.7	49.7
2	1.69799	24.3	73.9
3	1.00928	14.4	88.3
4	0.50750	7.3	95.6
5	0.16052	2.3	97.9
6	0.09432	1.3	99.2
7	0.05416	0.8	100.0

Means and standard deviations; V3 V4 V5 V24 V26 V37 V40
Sample 0 male dingoes

97.7000	128.0667	98.5000	29.4000	52.9000	43.9333	53.6000
3.0867	3.9298	2.4740	1.1017	3.1661	1.3113	1.4527

Correlation matrix; V3 V4 V5 V24 V26 V37 V40

1.0000000	0.8516838	0.8286017	-0.0040600	0.4978656	-0.1499363	0.6029076
0.8516838	1.0000000	0.8973187	0.0095589	0.5492937	-0.2132376	0.5967733
0.8286017	0.8973187	1.0000000	0.0000000	0.4908548	-0.1488071	0.6524291
-0.0040600	0.0095589	0.0000000	1.0000000	-0.5120760	-0.1718573	-0.2197663
0.4978656	0.5492937	0.4908548	-0.5120760	1.0000000	0.0315597	0.6207693
-0.1499363	-0.2132376	-0.1488071	-0.1718573	0.0315597	1.0000000	-0.0868844
0.6029076	0.5967733	0.6524291	-0.2197663	0.6207693	-0.0868844	1.0000000

Principal component loadings

0.8890935	0.1959420	0.1497939	-0.1668057	-0.0742409	0.3376749	0.0363466
0.9181995	0.2232123	0.0878831	-0.1907687	0.0459332	-0.1251701	-0.2125853
0.9104642	0.2027856	0.1570220	-0.0902912	-0.1320194	-0.2229843	0.1731282
-0.1901708	0.8559707	0.3357286	0.2250271	0.2594548	0.0091260	0.0199524
0.7315580	-0.5095725	-0.1507226	0.0127265	0.4232131	0.0040498	0.0561585
-0.1763722	-0.5591252	0.8097880	0.0115837	-0.0033030	-0.0075206	-0.0177072
0.8063197	-0.1573134	-0.0494913	0.5471811	-0.1448762	0.0188165	-0.0436040

Means and standard deviations; V3 V4 V5 V24 V26 V37 V40
Sample 0 female dingoes

92.7667	121.1333	93.5000	28.1333	49.8333	43.0000	49.9000
2.0625	2.8129	2.0803	0.9732	3.0971	1.3646	1.7291

Correlation matrix; V3 V4 V5 V24 V26 V37 V40

1.0000000	0.8198080	0.8960932	0.0847542	0.1826419	0.0122519	0.4863679
0.8198080	1.0000000	0.8957022	0.0436685	0.3826158	0.1796698	0.7614436
0.8960932	0.8957022	1.0000000	0.2384537	0.2114085	0.1457681	0.6758607
0.0847542	0.0436685	0.2384537	1.0000000	-0.5758405	0.2077261	0.0901635
0.1826419	0.3826158	0.2114085	-0.5758405	1.0000000	-0.1795035	0.4668476
0.0122519	0.1796698	0.1457681	0.2077261	-0.1795035	1.0000000	0.3361406
0.4863679	0.7614436	0.6758607	0.0901635	0.4668476	0.3361406	1.0000000

Principal component loadings

0.8585487	0.0575696	-0.3699021	-0.2903589	0.0698663	0.1452214	0.1116851
0.9631042	-0.0260702	-0.0329900	-0.0539670	-0.0697577	-0.2433221	0.0606472
0.9433992	0.1627450	-0.2038536	-0.0583703	0.0491267	0.0148011	-0.1895154
0.0900359	0.8748049	-0.1744580	0.4129938	0.1537873	-0.0188751	0.0400454
0.4128719	-0.8168766	0.2037578	0.2359764	0.2547425	-0.0006466	0.0123808
0.2204063	0.4837066	0.7935129	-0.2752893	0.1093817	0.0051281	0.0033856
0.8333130	-0.0311550	0.3580329	0.3388796	-0.2187372	0.1158480	0.0180347

APPENDIX 5

SCORE ROSTERS FOR SEXING DINGOES USING PRINCIPAL COMPONENTS ANALYSIS

1. Sample AC
2. Sample AP
3. Sample NA
4. Group A fossil dingoes

Sample A C dingoes

MALE SOLUTION COMPONENTS							FEMALE SOLUTION COMPONENTS							SUM	SIGN	RATIO	SEX	CASE
1	2	3	4	5	6	7	1	2	3	4	5	6	7					
-1.73	-0.09	-1.36	-0.53	-0.17	0.16	0.01	5.75	-0.27	0.64	0.01	0.20	-0.05	0.06	3.00	M/F	3/3	M	1
-0.13	1.63	0.02	-0.66	0.15	0.04	0.12	6.09	2.34	1.56	0.23	0.62	-0.24	0.05	6.73	M/F	4/2	M	2
2.49	1.04	0.46	-0.36	0.20	-0.19	0.13	10.65	2.21	0.35	0.54	0.61	-0.21	-0.03	14.33	M/F	5/1	M	3
11.36	2.09	0.69	0.44	0.36	0.15	-0.09	19.50	1.66	0.95	1.73	0.62	-0.09	0.29	34.67	M/F	6/0	M	4
-1.32	2.04	-1.10	0.04	-0.23	0.23	0.06	6.72	2.01	1.97	1.10	0.15	0.03	0.12	7.41	M/F	4/2	M	5
-2.06	2.32	-0.47	0.93	0.57	0.20	-0.06	6.60	3.63	0.99	2.47	0.56	-0.05	0.30	6.44	M/F	4/2	M	6
2.16	1.21	-0.74	-0.15	-1.25	-0.13	-0.16	10.39	1.07	1.07	-0.05	-0.57	-0.10	-0.04	12.70	M/F	3/3	M	7
-2.33	-0.56	0.13	0.11	0.00	-0.05	-0.06	6.33	1.79	-1.26	0.27	0.44	-0.09	0.05	3.25	M/F	4/2	M	8
4.65	-0.70	0.45	-1.00	0.05	0.06	0.06	12.51	0.04	-0.40	-0.79	0.75	-0.15	0.04	15.46	M/F	3/3	M	9
-0.63	-0.90	-1.63	-1.06	-0.05	-0.17	0.13	6.13	-1.73	0.76	-0.47	0.33	-0.21	-0.16	2.66	M/F	2/4	F	10
-3.13	0.63	0.05	-1.00	-0.19	-0.15	0.14	5.31	2.20	0.46	-0.47	0.65	-0.25	-0.11	1.22	M/F	3/3	M	11
-3.20	-1.45	2.10	0.12	-0.36	0.06	-0.07	6.75	3.67	-3.43	-0.62	0.64	0.04	0.07	1.52	M/F	3/3	M	12
1.05	-0.25	0.47	0.35	0.54	-0.10	0.20	9.46	1.65	-1.07	1.01	0.52	0.02	0.00	11.25	M/F	5/1	M	13
-2.13	0.06	-0.70	0.10	0.00	-0.05	-0.04	5.99	1.05	-0.05	0.69	0.27	-0.10	0.04	3.62	M/F	3/3	M	14
0.84	-0.12	1.07	0.23	0.26	0.03	-0.03	5.61	2.73	-1.47	0.53	0.75	-0.07	0.14	11.01	M/F	5/1	M	15
-0.59	0.35	0.56	0.36	0.06	-0.11	-0.15	6.40	2.63	-1.05	0.60	0.46	-0.16	0.12	6.46	M/F	4/2	M	16
-3.63	0.40	-0.65	-0.13	-0.25	0.01	0.06	4.66	1.66	0.31	0.34	0.27	-0.04	-0.01	0.66	M/F	3/3	M	17
-0.66	0.22	-0.09	1.19	-0.07	0.11	-0.10	6.15	2.36	-1.00	1.50	0.14	0.16	0.16	9.09	M/F	3/3	M	18
-1.15	0.51	0.59	0.76	-0.35	-0.63	-0.11	6.12	3.40	-1.15	0.67	0.16	0.03	0.09	6.06	M/F	4/2	M	19
3.93	0.54	-0.26	0.00	-0.17	0.16	0.03	11.66	0.77	0.46	0.53	0.30	0.05	0.10	16.54	M/F	4/2	M	20
3.53	-0.29	-0.63	-0.72	-0.63	-0.12	-0.02	11.16	-0.61	0.41	-0.74	-0.12	-0.09	-0.11	13.01	M/F	3/3	M	21
0.37	-1.44	1.06	0.53	0.09	-0.11	-0.17	9.45	1.96	-2.64	0.26	0.49	-0.07	0.10	6.65	M/F	5/1	M	22
0.42	-2.69	-0.03	-0.06	0.01	0.09	0.05	6.36	-0.92	-2.45	-0.56	0.45	0.14	-0.01	5.66	M/F	2/4	F	23
-4.06	-1.21	-0.16	0.16	-0.52	0.16	0.04	4.54	1.32	-1.43	-0.25	0.14	0.15	0.00	-1.26	M/F	2/4	F	24
-6.16	1.01	-1.14	-0.59	-0.34	0.03	0.11	1.96	1.63	1.29	0.11	0.26	-0.11	-0.04	-4.55	M/F	3/3	F	25
-9.90	0.45	-1.63	-0.32	-0.96	-0.33	-0.06	-1.45	1.76	0.56	-0.12	-0.36	-0.22	-0.19	-12.66	M/F	1/5	F	26
-6.69	0.77	-2.06	-0.16	-1.00	0.15	-0.26	-0.66	1.30	1.16	0.03	-0.59	-0.06	0.10	-10.56	M/F	2/4	F	27
-4.50	-0.26	-0.43	-0.32	0.32	0.03	-0.09	3.69	-0.05	-0.76	-0.43	0.35	-0.20	0.05	-2.75	M/F	1/5	F	28
-4.53	-0.52	-1.14	-0.16	-0.33	0.06	-0.11	3.53	0.50	-0.16	0.01	0.03	-0.06	0.05	-2.49	M/F	2/4	F	29
-3.55	-0.31	-1.52	-0.58	-0.07	0.03	0.16	3.65	-0.27	0.79	0.04	0.34	-0.03	-0.06	-0.93	M/F	3/3	F	30
-7.64	0.74	-1.92	-0.59	-0.60	0.06	0.09	0.22	0.96	1.61	-0.17	-0.17	-0.02	-0.10	-6.49	M/F	2/4	F	31
-6.60	0.57	-1.34	-0.60	0.14	-0.01	0.09	1.07	1.19	1.17	0.16	0.55	-0.24	-0.01	-6.52	M/F	3/3	F	32
-17.21	-2.56	-3.72	-0.63	0.01	-0.11	0.07	-10.26	-2.17	-0.01	-0.46	0.01	-0.16	-0.20	-32.51	M/F	0/6	F	33
-9.44	-0.06	-2.96	0.16	-0.30	0.16	-0.09	-1.96	-0.30	1.14	0.64	-0.32	0.01	0.06	-12.26	M/F	3/3	F	34
-6.66	-1.57	-2.25	-0.50	0.76	0.25	0.07	-1.53	-1.22	0.07	0.39	0.66	-0.06	0.11	-12.52	M/F	2/4	F	35
-4.17	-1.06	-0.17	0.33	1.14	-0.10	-0.13	4.25	1.43	-1.75	1.25	1.00	-0.29	0.16	-0.26	M/F	3/3	F	36
-1.42	-2.10	-0.95	-0.27	0.79	0.01	0.20	5.66	-1.26	-1.07	0.32	0.69	-0.01	-0.02	2.49	M/F	2/4	F	37
-11.06	-1.02	-2.25	0.42	-0.26	0.22	-0.03	-3.06	0.36	-0.31	0.59	-0.14	0.16	0.05	-15.69	M/F	2/4	F	38
-9.36	-1.34	-2.27	0.65	-0.11	0.26	0.07	-1.61	-0.13	-0.47	0.64	-0.06	0.29	0.04	-12.22	M/F	2/4	F	39
-5.60	2.95	-1.65	-0.05	0.26	0.02	-0.43	0.34	2.65	2.29	1.90	0.29	0.01	0.19	-2.97	M/F	3/3	F	40
-3.40	-2.27	-1.17	-0.33	0.09	0.06	-0.06	4.16	-1.26	-1.27	-0.34	0.25	-0.05	0.02	-2.33	M/F	1/5	F	41
-10.16	-1.51	-1.17	-0.45	0.14	0.27	0.03	-2.04	0.67	-0.66	-0.35	0.51	-0.01	0.06	-15.05	M/F	0/6	F	42
-4.61	-2.65	-0.65	-0.14	0.10	0.25	0.03	3.21	-0.95	-1.96	-0.49	0.42	0.14	0.05	-4.66	M/F	1/5	F	43
-12.16	-2.09	-2.15	0.02	-0.31	0.17	-0.11	-4.20	-0.52	-1.10	-0.15	-0.14	0.05	0.03	-19.76	M/F	1/5	F	44
-5.46	-2.25	-1.25	-0.11	-0.11	0.19	-0.14	2.35	-0.64	-1.43	-0.33	0.09	0.02	0.09	-6.29	M/F	1/5	F	45
-7.21	0.14	-2.73	-0.50	-0.07	0.25	0.04	-0.09	-0.62	1.76	0.42	0.07	-0.03	0.06	-6.33	M/F	2/4	F	46
-6.66	0.06	-2.19	0.06	-0.54	0.23	-0.12	1.11	0.22	0.67	0.46	-0.32	0.05	0.09	-6.35	M/F	4/2	M	47
-3.57	-0.14	-2.12	-0.16	-1.01	0.10	-0.09	3.95	-0.60	0.96	-0.11	-0.55	0.07	-0.03	-1.01	M/F	2/4	F	48
-4.64	-0.32	-1.05	0.14	0.16	-0.22	0.05	3.44	0.97	-0.31	0.65	0.37	-0.13	-0.06	-1.57	M/F	3/3	F	49
-5.65	-2.04	-1.20	0.34	-0.63	-0.01	0.09	2.23	-0.16	-1.51	-0.16	-0.16	0.25	-0.14	-6.17	M/F	2/4	F	50
-13.64	-1.93	-2.73	-0.09	-0.19	-0.01	0.01	-6.01	-0.69	-0.54	0.03	-0.09	0.01	-0.09	-22.96	M/F	1/5	F	51
-9.93	-0.92	-0.96	0.05	0.30	0.14	-0.05	-1.44	1.63	-1.01	0.43	0.51	-0.07	0.11	-12.66	M/F	2/4	F	52
-10.19	-0.64	-2.14	-0.40	-0.77	0.24	-0.13	-2.27	0.05	0.22	-0.54	-0.35	0.02	0.04	-15.32	M/F	1/5	F	53
-5.96	-2.76	-1.55	0.13	-0.70	0.10	-0.16	1.93	-1.30	-1.65	-0.64	-0.41	0.13	-0.01	-7.94	M/F	2/4	F	54
-10.14	-1.06	-2.20	-0.63	-1.36	0.29	-0.05	-2.27	-0.29	0.36	-1.26	-0.64	0.16	-0.07	-16.16	M/F	1/5	F	55

Sample Aø dingoes

MALE SOLUTION COMPONENTS							FEMALE SOLUTION COMPONENTS							SUM	SIGN RATIO	SEX CASE	
1	2	3	4	5	6	7	1	2	3	4	5	6	7				
-3.96	1.24	-1.17	0.52	-0.47	0.04	-0.15	3.59	1.00	0.47	0.89	-0.35	0.10	0.05	0.14	M/F	4/2	1
1.55	2.37	-1.84	-1.57	-0.63	0.03	-0.05	7.77	-0.63	3.05	-0.33	-0.02	-0.14	0.01	8.63	M/F	3/3	2
2.66	1.30	-0.78	0.07	-0.18	-0.07	0.01	9.77	-0.41	0.71	1.06	0.09	0.14	0.01	13.49	M/F	5/1	3
3.32	1.50	0.76	0.41	0.01	-0.03	-0.11	11.28	1.05	-0.25	1.12	0.27	0.12	0.13	16.64	M/F	5/1	4
2.50	1.97	0.22	-0.02	0.13	-0.01	-0.01	10.10	0.76	0.64	0.99	0.42	0.06	0.09	14.43	M/F	5/1	5
-4.83	-1.39	-1.52	0.51	0.10	-0.20	-0.02	2.59	-1.35	-1.26	1.26	0.07	0.10	-0.07	-3.45	M/F	3/3	6
4.43	0.56	-0.19	-0.03	0.13	-0.02	0.28	11.54	-1.08	0.27	0.99	0.63	0.31	-0.05	17.01	M/F	4/2	7
0.76	-0.46	0.62	-0.52	-0.53	0.01	-0.06	8.46	0.32	-0.66	-0.35	0.20	0.11	0.01	8.31	M/F	3/3	8
1.05	-0.60	-1.61	0.00	0.24	-0.12	0.06	7.65	-2.54	-0.10	1.21	0.36	0.12	-0.03	8.20	M/F	3/3	9
0.76	1.01	1.19	0.24	0.33	-0.08	0.02	8.23	1.36	0.43	0.52	0.75	-0.03	0.05	9.43	M/F	4/2	10
-2.52	-1.20	0.13	-0.02	-0.29	0.19	-0.16	5.33	0.04	-1.36	0.07	0.12	0.17	0.13	1.63	M/F	3/3	11
1.56	0.32	0.24	0.23	-0.16	0.07	0.02	9.27	0.20	-0.46	0.73	0.25	0.26	0.06	11.57	M/F	5/1	12
0.16	0.00	0.04	0.47	-0.08	0.02	0.04	7.92	0.11	-0.79	0.97	0.22	0.27	0.03	8.77	M/F	5/1	13
4.61	-1.50	2.58	0.42	0.07	0.00	0.00	13.20	0.46	-2.85	0.38	0.74	0.32	0.08	18.34	M/F	5/1	14
3.29	-0.53	-1.50	-0.16	-0.74	0.11	-0.11	9.94	-2.10	0.26	0.38	-0.30	0.28	0.05	12.21	M/F	4/2	15
1.00	-0.55	0.58	-0.30	-0.56	0.21	-0.14	8.79	0.26	-0.79	-0.26	0.10	0.21	0.13	9.02	M/F	3/3	16
2.45	-0.72	1.30	-0.23	-0.71	-0.03	-0.14	10.49	0.68	-1.34	-0.35	0.07	0.17	0.03	12.32	M/F	3/3	17
-1.31	1.95	0.76	0.22	0.67	-0.12	0.07	6.81	1.76	-0.06	1.53	0.79	-0.04	0.05	7.75	M/F	4/2	18
1.55	2.37	-1.84	-1.57	-0.63	0.03	-0.05	7.77	-0.63	3.05	-0.33	-0.02	-0.14	0.01	8.63	M/F	3/3	19
-4.19	-2.22	-1.09	-0.43	-0.05	-0.12	-0.16	2.88	-1.78	-1.35	0.13	0.21	-0.07	-0.01	-4.05	M/F	2/4	20
-1.08	0.87	-1.86	-1.42	-1.00	-0.02	-0.12	5.33	0.69	1.96	-0.70	-0.32	-0.11	-0.05	2.23	M/F	2/4	21
-7.93	1.22	-1.33	-0.84	0.07	0.23	-0.13	-0.62	0.90	1.15	0.08	0.25	-0.19	0.15	-9.49	M/F	2/4	22
-6.70	2.85	-2.07	-0.78	-0.65	-0.26	0.03	0.23	1.61	2.54	0.28	-0.34	-0.22	-0.17	-6.50	M/F	3/3	23
-7.33	-0.42	-2.67	-0.67	-0.65	0.13	0.03	-0.73	-1.03	0.95	-0.06	-0.28	0.08	-0.06	-10.51	M/F	1/5	24
-9.62	-1.92	0.25	-0.67	0.09	-0.12	-0.05	-1.61	0.77	-1.63	-0.47	0.54	-0.18	-0.06	-13.95	M/F	1/5	25
-7.69	-2.55	-2.62	-0.70	-0.31	0.23	-0.04	-1.28	-2.81	-0.32	-0.15	-0.03	0.10	0.01	-12.96	M/F	0/6	26
-10.62	-1.73	-1.16	0.11	0.02	0.25	0.07	-2.90	-0.01	-1.29	0.34	0.22	0.20	0.02	-15.52	M/F	2/4	27
-10.85	-2.42	-2.20	-1.22	-0.52	0.12	-0.10	-4.07	-1.36	-0.36	-0.94	-0.05	-0.11	-0.05	-19.66	M/F	0/6	28
-6.76	-0.36	0.33	-1.49	-0.35	0.13	0.06	0.95	1.31	0.01	-1.29	0.53	-0.10	-0.03	-8.27	M/F	3/3	29
-10.93	-0.74	-1.56	-0.53	-0.02	0.01	-0.14	-3.55	0.23	-0.34	0.08	0.09	-0.19	0.01	-16.83	M/F	1/5	30
-8.15	0.89	-0.75	-0.25	-0.35	0.10	-0.04	-0.33	1.84	0.34	0.15	-0.05	0.00	0.02	-8.99	M/F	2/4	31
-5.25	-0.72	-1.30	0.38	-0.36	0.07	-0.19	2.24	-0.21	-0.79	0.74	-0.29	0.15	0.07	-3.98	M/F	3/3	32
-10.52	-1.27	-2.48	-0.58	-1.52	0.18	-0.10	-3.47	0.09	0.26	-0.87	-0.93	0.17	-0.10	-17.66	M/F	1/5	33
-9.37	-2.28	-2.13	-0.39	-1.02	0.22	-0.25	-2.23	-0.83	-0.80	-0.56	-0.65	0.11	0.03	-15.46	M/F	0/6	34
-6.86	0.27	-0.92	0.02	0.03	-0.08	0.06	0.73	0.70	-0.17	0.73	0.21	0.01	-0.06	-6.47	M/F	3/3	35
-5.73	0.66	-0.54	0.11	-0.63	0.10	-0.07	2.10	0.80	-0.62	0.11	-0.23	0.19	0.00	-4.77	M/F	3/3	36
-11.59	-0.35	-0.65	-0.18	-0.15	0.02	0.10	-3.64	1.45	-0.67	0.29	0.58	-0.03	-0.06	-16.44	M/F	1/5	37
-6.91	-0.65	-1.32	-0.24	-0.13	0.17	-0.15	0.45	-0.22	-0.35	0.28	0.03	0.01	0.09	-8.09	M/F	2/4	38
-6.01	-0.99	-1.39	0.02	-0.02	0.12	-0.01	1.28	-0.75	-0.60	0.60	0.14	0.13	0.03	-6.10	M/F	3/3	39
-10.78	-1.32	-0.97	-0.14	0.92	0.45	0.15	-3.11	-0.37	-1.02	0.66	0.94	0.11	0.16	-15.36	M/F	1/5	40
-4.62	0.12	-0.15	-0.40	-0.97	-0.15	0.03	3.17	1.58	-0.14	-0.40	-0.26	0.08	-0.16	-2.54	M/F	1/5	41
-4.81	-1.42	-0.65	-0.22	1.17	0.10	0.43	2.41	-1.75	-0.95	1.03	1.39	0.17	-0.05	-3.19	M/F	2/4	42
-3.89	0.81	-0.60	-0.24	-0.06	-0.05	-0.16	3.66	0.77	0.14	0.51	0.09	-0.12	0.07	-0.42	M/F	3/3	43
-7.45	-1.23	-0.80	-0.63	0.19	-0.02	0.03	-0.07	-0.40	-0.74	0.01	0.51	-0.08	-0.03	-9.68	M/F	1/5	44

Sample NA Dingoes

MALE SOLUTION COMPONENTS										FEMALE SOLUTION COMPONENTS										SUM	SIGN RATIO	SEX CASE	
1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6				7
2.61	-0.05	0.58	0.25	0.35	-0.06	-0.03	11.47	1.76	-0.87	0.29	0.31	0.02	0.03	14.53	M/F	5/1	M	1					
1.08	-0.40	0.36	0.19	-0.54	-0.07	0.02	9.83	2.31	-0.83	-0.26	-0.16	0.17	-0.09	10.37	M/F	4/2	M	2					
0.11	0.31	-0.16	0.65	-0.48	-0.04	-0.13	6.43	0.91	-0.11	0.15	-0.75	0.15	-0.06	9.07	M/F	4/2	M	3					
-3.21	-0.77	-0.31	0.74	0.49	-0.03	0.21	3.04	1.45	-0.37	0.36	0.67	-0.10	-0.16	0.27	M/F	3/3	M	4					
-3.04	-0.46	-0.51	0.25	0.12	0.25	0.23	4.48	0.42	0.15	-0.36	-0.13	0.26	-0.08	1.17	M/F	3/3	M	5					
2.92	1.18	0.44	-0.61	0.04	0.03	0.15	11.30	1.81	1.73	-0.30	0.38	0.05	-0.02	15.48	M/F	4/2	M	6					
-1.44	1.03	-0.90	0.18	1.12	-0.02	0.20	5.45	-0.04	2.40	1.78	0.44	-0.13	-0.02	7.47	M/F	4/2	M	7					
-5.21	0.74	-0.49	0.51	1.82	-0.09	0.24	1.74	0.93	0.56	2.04	0.94	-0.29	-0.04	-0.85	M/F	4/2	M	8					
-5.45	-1.21	-1.63	-0.38	0.79	-0.02	0.23	0.65	-0.90	1.24	0.87	0.43	-0.20	-0.14	-4.70	M/F	3/3	F	9					
2.35	-1.13	-0.61	-0.32	0.82	-0.06	-0.26	9.59	-0.85	0.01	0.58	0.38	-0.31	0.16	11.60	M/F	4/2	M	10					
-3.50	-0.84	-1.14	0.06	-0.85	0.08	-0.14	3.99	0.99	1.42	0.65	-0.10	-0.76	0.04	0.16	M/F	4/2	M	11					
-0.25	1.30	0.30	-0.49	-0.19	-0.12	0.05	7.99	2.55	1.42	-0.23	0.09	-0.14	-0.09	8.74	M/F	3/3	M	12					
1.83	1.07	-0.42	-0.25	-0.86	-0.23	0.05	9.79	1.44	2.44	0.16	-0.59	0.03	-0.20	13.55	M/F	4/2	M	13					
1.89	0.45	0.36	1.04	-0.45	-0.04	0.00	10.93	2.55	-0.55	0.79	-0.45	0.31	-0.04	14.46	M/F	5/1	M	14					
3.19	-0.42	0.43	0.40	-0.53	-0.16	-0.08	12.09	2.03	-1.05	0.01	-0.29	0.15	-0.07	15.07	M/F	5/1	M	15					
-1.24	-0.27	-0.76	0.27	-0.28	0.17	-0.10	6.51	0.84	0.80	0.55	-0.41	0.10	0.07	6.11	M/F	4/2	M	16					
2.06	-0.45	0.73	-0.23	-0.34	-0.03	-0.09	10.97	2.44	-1.16	-0.78	0.12	0.03	0.01	11.59	M/F	3/3	M	17					
2.79	1.00	1.05	-0.22	-0.35	0.52	0.02	12.26	3.16	0.49	-0.90	0.22	0.37	0.26	15.47	M/F	4/2	M	18					
0.49	1.16	-0.14	-0.10	-0.04	0.00	-0.19	8.53	1.68	1.52	0.43	-0.19	-0.16	0.09	10.73	M/F	4/2	M	19					
-1.89	-2.96	-1.50	-0.12	-0.25	0.18	0.01	5.06	-1.12	-0.52	0.00	-0.16	0.16	-0.02	1.03	M/F	1/5	F	20					
-10.80	-3.98	-2.71	-0.66	-0.32	0.37	-0.12	-5.17	-1.49	-0.30	-0.39	-0.34	-0.13	0.02	-20.03	M/F	0/6	F	21					
-5.72	-1.84	-1.23	-0.23	-0.16	0.20	0.04	1.30	0.39	-0.13	-0.09	0.08	0.01	-0.03	-6.10	M/F	1/5	F	22					
-10.62	-1.66	-0.66	-0.36	0.36	0.44	0.09	-3.34	2.00	-1.22	-0.56	0.51	-0.08	0.07	-16.76	M/F	0/6	F	23					
-11.93	-3.17	-0.96	1.36	1.45	0.74	0.25	-4.56	0.93	-3.70	1.25	0.83	0.35	0.22	-18.44	M/F	2/4	F	24					
-5.78	-3.31	-1.84	-0.42	-1.04	0.22	0.00	1.02	-0.39	-0.44	-0.75	-0.60	0.16	-0.11	-8.21	M/F	1/5	F	25					
-7.03	-2.31	-1.81	-0.18	0.27	0.38	0.13	-0.62	-0.74	0.27	0.32	0.12	0.07	0.03	-9.05	M/F	2/4	F	26					
-7.10	-1.75	-1.92	-0.95	0.41	0.22	0.14	-1.21	-1.05	1.55	0.01	0.33	-0.21	-0.04	-9.62	M/F	2/4	F	27					
-5.11	-1.25	-0.94	-0.55	0.66	0.21	0.05	1.74	0.20	0.25	0.06	0.53	-0.19	0.06	-4.55	M/F	3/3	F	28					
-4.27	-2.72	-1.51	0.25	0.33	0.15	0.07	2.47	-0.89	-0.90	0.68	0.07	0.08	-0.03	-3.28	M/F	3/3	F	29					
-8.16	-1.50	-1.90	0.23	0.58	0.14	0.16	-1.99	-0.51	0.63	1.24	0.08	-0.06	-0.09	-9.95	M/F	3/3	F	30					
-4.63	-1.85	-1.53	-0.82	0.42	0.17	-0.02	1.71	-0.91	0.79	-0.05	0.30	-0.23	0.04	-4.53	M/F	2/4	F	31					
-6.84	-1.30	-1.73	-0.22	0.71	0.20	0.19	-0.66	-0.70	1.15	0.85	0.33	-0.10	-0.04	-7.45	M/F	2/4	F	32					
-5.76	0.38	-0.29	-0.40	1.14	0.36	0.21	1.68	1.61	0.62	0.65	0.83	-0.06	0.13	-5.14	M/F	3/3	F	33					
-5.75	-1.23	-1.28	-0.40	0.63	0.31	0.22	0.87	-0.19	0.89	0.33	0.49	-0.02	0.01	-5.34	M/F	3/3	F	34					
-14.17	-2.90	-2.39	-0.51	-0.44	0.41	0.18	-8.27	0.16	0.15	-0.40	-0.24	0.00	-0.13	-25.59	M/F	1/5	F	35					
-2.95	-1.86	-1.13	-0.96	-0.65	0.13	-0.17	4.17	0.15	0.45	-0.97	-0.26	-0.14	0.01	-1.39	M/F	2/4	F	36					
-7.83	-1.31	-1.50	-0.30	-0.44	0.31	-0.08	-0.94	0.79	0.67	-0.15	-0.39	-0.04	0.03	-10.05	M/F	1/5	F	37					
-5.46	-2.51	-1.15	-0.27	-0.82	0.11	0.02	1.86	0.76	-0.88	-0.69	-0.39	0.10	-0.13	-6.59	M/F	1/5	F	38					
-6.49	-1.27	-1.42	0.01	-0.64	0.39	-0.03	0.73	0.85	0.62	-0.01	-0.54	0.16	0.05	-6.56	M/F	3/3	F	39					
-3.32	-1.99	-1.18	-0.38	-0.98	0.34	0.00	4.16	0.47	0.25	-0.77	-0.50	0.25	0.00	-1.24	M/F	2/4	F	40					
-4.32	-3.17	1.82	-0.30	-0.48	0.14	-0.07	5.55	4.89	-6.39	-2.67	0.69	0.08	0.00	-6.31	M/F	2/4	F	41					
-8.35	-3.81	-2.55	-0.26	-0.60	0.31	-0.14	-2.29	-1.39	-0.43	-0.13	-0.62	0.02	0.00	-14.01	M/F	0/6	F	42					
-5.00	-1.20	-0.97	-0.45	-0.46	0.09	-0.09	2.26	1.06	0.23	-0.42	-0.28	-0.11	-0.04	-4.33	M/F	2/4	F	43					
-5.94	-1.66	-0.11	0.43	0.51	0.33	0.06	1.99	0.89	-2.55	-0.42	0.28	0.14	0.05	-6.60	M/F	2/4	F	44					
-9.44	-2.06	0.99	0.05	0.31	0.48	0.06	-0.59	3.36	-4.74	-1.94	0.67	0.10	0.08	-15.67	M/F	2/4	F	45					

Group A fossil dingoes

MALE SOLUTION COMPONENTS							FEMALE SOLUTION COMPONENTS							SUM	SIGN RATIO	SEX	CASE			
1	2	3	4	5	6	7	1	2	3	4	5	6	7							
7.51	-0.31	1.87	1.11	-0.25	-0.36	0.08	18.43	1.98	-0.74	0.52	0.25	0.06	-0.13	28.70	M/F	5/1	M	1	76.9.385	WAM
4.08	-3.29	0.52	0.18	-0.37	0.06	-0.04	13.27	-1.33	-1.64	-0.72	0.06	0.23	0.04	15.69	M/F	4/2	M	2	76.9.384	WAM
5.86	-1.09	2.27	0.26	-0.07	-0.25	-0.08	16.89	0.53	-1.42	-0.83	0.22	-0.13	-0.02	23.03	M/F	4/2	M	3	60.8.3	WAM
-1.69	-1.70	-0.66	0.14	0.76	0.20	0.18	5.94	-0.81	-0.76	0.83	0.62	0.28	0.09	3.80	M/F	3/3	M	4	71.10.63	WAM
-4.63	-0.71	-2.08	0.41	0.48	0.38	-0.11	2.10	-0.82	-0.09	1.35	-0.01	0.19	0.30	-2.94	M/F	3/3	F	5	64.2.4B	WAM
-2.95	-2.10	-0.12	-0.49	0.14	-0.01	-0.01	5.27	-0.33	-1.20	-0.19	0.26	-0.01	0.01	0.32	M/F	1/5	F	6	62.3.1	WAM
-1.34	-0.42	-0.20	0.00	0.32	-0.37	-0.04	4.77	-0.41	-0.84	0.42	0.18	0.33	-0.29	2.81	M/F	2/4	F	7	66.2.99	WAM
-21.05	-2.15	-4.10	-1.27	1.23	-0.04	0.47	-18.40	-1.88	-1.05	1.66	0.48	0.21	-0.38	-44.21	M/F	1/5	F	8	65.12.61	WAM
-7.27	-0.38	-0.50	-0.01	0.73	-0.02	-0.19	0.38	1.26	-1.06	1.23	0.27	-0.26	0.18	-7.23	M/F	2/4	F	9	65.12.104	WAM
-9.09	-2.82	-2.28	-1.05	0.51	0.08	0.06	-3.34	-2.35	-1.07	0.18	0.20	0.02	-0.03	-16.65	M/F	1/5	F	10	64.2.4C	WAM
-14.05	-2.25	-1.45	-0.82	1.34	0.20	0.22	-8.62	-0.42	-1.78	1.06	0.83	0.14	0.02	-25.66	M/F	1/5	F	11	63.3.25	WAM
-5.25	-1.21	-0.86	0.74	0.62	-0.28	-0.63	-2.12	-0.78	-1.71	0.64	0.15	-0.28	0.04	-8.56	M/F	2/4	F	12	60.8.4	WAM
-2.92	-1.25	0.26	-0.66	0.49	-0.50	0.24	5.54	0.51	-0.95	0.31	0.62	-0.22	-0.33	1.58	M/F	3/3	M	13	60.8.2	WAM
-0.32	-0.59	-2.62	0.08	0.08	0.09	-0.10	6.82	-2.03	0.84	0.91	-0.25	0.01	0.13	5.71	M/F	4/2	M	14	67.12.41	WAM
-15.85	-2.85	-1.78	-0.78	0.72	0.06	0.29	-10.97	-0.56	-2.16	0.74	0.43	0.28	-0.21	-30.80	M/F	1/5	F	15	67.9.138	WAM
-3.98	0.03	-1.70	0.61	0.70	0.04	0.17	2.93	0.03	0.12	1.92	0.29	0.21	0.00	-0.10	M/F	4/2	M	16	68.4.1	WAM
-3.59	1.13	-1.97	-0.62	0.21	0.40	0.25	1.93	-1.11	1.05	0.70	-0.08	0.01	-0.19	-2.50	M/F	3/3	F	17	62.9.5	WAM
-8.27	-3.94	2.13	-0.19	1.22	0.04	0.25	-0.40	0.18	-4.40	-0.30	1.09	0.26	-0.09	-11.43	M/F	1/5	F	18	FC 02	NMV
7.31	-1.98	2.80	0.77	0.63	0.11	-0.02	18.41	1.21	-1.96	0.10	0.94	0.12	0.27	27.43	M/F	5/1	M	19	FC 01	NMV
-7.51	-1.37	-0.04	0.37	0.21	0.50	0.10	-0.09	0.32	-1.65	0.04	0.10	0.58	0.15	-8.88	M/F	2/4	F	20	McE 01	NMV

APPENDIX 6

PROVENANCE AND METRICAL DATA ON MODERN DINGOES

1. Sample O
2. Sample AC
3. Sample AP
4. Sample NA

CENTRAL AUSTRALIAN DINGO, ALICE
SPRINGS DISTRICT (CSIRO)

SAMPLE 0

Males, whole ginger coat, personal age greater than 1½ years

Identification	Location	Identification	Location
M490	Tieyon	M105	Jinka
M238	Manners Crk	M117	Plenty River
M293	Napperby	M116	Plenty River
M234	Peterman Rng	M242	Peterman Rng
M90	Undoolya	M130	Erlunda
M497	Tieyon	M108	Jinka
M249	Peterman Rng	M270	Erlunda
M516	Tempe Downs	M148	Erlunda
M518	Charlotte Wtrs	M112	Plenty River Downs
M200	Rockhampton Downs	M125	Erlunda
M155	Erlunda	M150	Erlunda
M275	Erlunda	M147	Erlunda
M226	Lucky Crk	M152	Erlunda
M154	Erlunda	M102	Jinka
M145	Erlunda	M149	Erlunda

Females, whole coat ginger, personal age greater than 1½ years

Identification	Location	Identification	Location
F455	Erldunda	F217	Erldunda
F468	Mt Dare	F102	Jinka
F244	Napperby	F204	Peterman Rng
F470	Mt Dare	F245	Napperby
F480	Mt Dare	F266	Umbeara
F202	Peterman Rng	F252	Umbeara
F462	Erldunda	F257	Umbeara
F304	Erldunda	F271	Umbeara
F238	Peterman Rng	F267	Umbeara
F249	Napperby	F299	Mt Wedge
F254	Umbeara	F205	Peterman Rng
F239	Peterman Rng	F236	Peterman Rng
F399	Mt Wedge	F103	Jinka
F610	Erldunda	F285	Tobermory
F295	Bond Spring	F286	Tobermory

ARID CENTRAL DINGOES

SAMPLE AOF

A = sex assessed by Principal Components analysis

R = sex recorded in museum registration data

Identification		Location		Sex	
				A	R
M3412	WAM	Kalgoorlie, WA	1959	♂	
M3413	WAM	Kalgoorlie, WA	1959	♂	♂
S1796	AM	Rawlinna, SA	1927	♂	
M6109	SAM	Zoo Garden	1957	♂	
25.10.8.36	BMNH	Mt Eba, SA	1922	♂	
M8278	SAM	Hawick Stn, SA	1970	♂	♂
M6159	SAM	Mt Davies	1957	♂	
25.10.8.35	BMNH	Mt Eba, SA	1922	♂	
M1966	SAM	Winninnie Stn, SA	1922	♂	
M1965	SAM	Winninnie Stn, SA	1922	♂	
M2933	SAM	MacDonnell Downs, NT		♂	
M6299	SAM	Lake Albert, SA	1959	♂	
C18	MAC	Edjudina, WA	1953	♂	♂
C32	MAC	Edjudina, WA	1953	♂	
C9	MAC	Edjudina, WA	1953	♂	♂
C17	MAC	Edjudina, WA	1953	♂	
C30	MAC	Edjudina, WA	1953	♂	♂
25(B)	MAC	Edjudina, WA	1953	♂	♂
26	MAC	Edjudina, WA	1953	♂	♂
123	MAC	Nullarbor (?), WA	1955	♂	
141	MAC	Ooldea, SA	1933	♂	
118	MAC	Lake Grace, WA	1953	♂	♂
C45	MAC	Edjudina, WA	1953	♂	
112	MAC	Kalgoorlie, WA	1953	♂	
M3835	WAM	Forrest, WA		♀	♂
S1798	AM	Rawlinna, SA		♀	
M7467	SAM	Lake Torrens, SA		♀	
C16968	NMV	Simpson Desert, NT	1977	♀	
M3834	WAM	Forrest, WA	1959	♀	
M3838	WAM	Forrest, WA	1959	♀	
M4975	WAM	Balladonia, WA	1961	♀	
S1797	AM	Rawlinna, SA	1927	♀	
S1898	AM	(South of WA)	1912	♀	
M7468	SAM	Lake Torrens, SA		♀	
M6158	SAM	Mt Davies, SA	1957	♀	
M7470	SAM	Cowangie, SA	1968	♀	
M9039	SAM	Mt Eba, SA	1922	♀	
M1968	SAM	Teatree Crk, SA	1891	♀	
M1966(2)	SAM	Winninnie Stn, SA	1922	♀	
M61	SAM	Swanport, SA	1911	♀	
C16	MAC	Edjudina, WA	1953	♀	
115	MAC	Kalgoorlie, WA	1953	♀	

Identification		Location		Sex	
				A	R
126	MAC	Madura, WA	1955	♀	
142	MAC	Ooldea, SA	1933	♀	
127A	MAC	Madura, WA	1955	♀	
113	MAC	Kalgoorlie, WA		♀	
9	MAC	Edjudina, WA	1953	♀	
4	MAC	Edjudina, WA	1953	♀	
116	MAC	Kalgoorlie, WA		♀	
3	MAC	Edjudina, WA	1953	♀	♂
109	MAC	Kalgoorlie, WA		♀	
111	MAC	Lake Grace, WA	1953	♀	♀
107	MAC	Lake Grace, WA	1953	♀	
117	MAC	Kalgoorlie, WA		♀	
C19	MAC	Edjudina, WA	1953	♀	

ARID PERIPHERAL DINGOES

SAMPLE ANF

77	MAC	Lorna Glen, WA		♂	
M4199	WAM	Kimberley, WA		♂	♂
S1807	AM			♂	
M4207	WAM	Rundall River, WA	1958	♂	
M6150	WAM	Beyondie, WA	1964	♂	♂
C88	MAC	Lorna Glen, WA	1953	♂	
C50	MAC	Carnegie, WA	1953	♂	♂
C90	MAC	Lorna Glen, WA	1953	♂	
C39	MAC	Peron Vale, WA	1953	♂	♂
74	MAC	Lorna Glen, WA	1953	♂	
91(A)	MAC	Lorna Glen, WA	1953	♂	
91	MAC	Lorna Glen, WA	1953	♂	
108	MAC	Lake Grace, WA	1953	♂	♂
91(B)	MAC	Lorna Glen, WA	1953	♂	
75	MAC	Lorna Glen, WA	1953	♂	
110	MAC	Lake Grace, WA	1953	♂	♀
M4684	SAM	Warburton Range, NT	1935	♂	
M4210	WAM	Rundall River, WA		♀	
M7420	WAM	Kimberley, WA	1960	♀	
M4568	WAM	Meekathara, WA	1961	♀	♀
M4017	WAM	Boorabie, WA	1960	♀	
M4242	WAM	Tambourah, WA	1959	♀	♀
M4203	WAM	Lake Mingawol, WA	1959	♀	
M3826	WAM	Lake Mingawol, WA	1959	♀	
M3824	WAM	Lake Mingawol, WA	1959	♀	
M4213	WAM	Newdgate, WA	1960	♀	
M6639	WAM	Fletcher River, WA	1965	♀	♀
M4212	WAM	Rundall River, WA	1959	♀	
M4211	WAM	Rundall River, WA	1959	♀	
C101	MAC	Windidda Stn, WA		♀	
C71	MAC	Lorna Glen, WA		♀	

Identification		Location		Sex	
				A	R
C60	MAC	Glenayle, WA		♀	♀
79	MAC	Lorna Glen, WA		♀	
102	MAC	Windidda Stn, WA		♀	♀
106	MAC	Lake Grace, WA		♀	♀
M4686	SAM	Warburton Rng, WA	1935	♀	
M3889	SAM	Musgrave Rng, SA	1933	♀	
M5153	SAM	Newcastle Mts, NT	1944	♀	
M1962	SAM	Sliding Rock, SA	1922	♀	
M3041	SAM	Central Australia, NT	1931	♀	
M4629	SAM	Cape Banks, SA	1934	♀	
M3889(2)	SAM	Musgrave Rng, SA	1933	♀	
M4685	SAM	Warburton Rng, WA	1935	♀	

NON-ARID DINGO

SAMPLE NA

M3841	WAM	Holyoake, WA	1959	♂	
7.9.1.56	BMNH	Margaret River, WA	1956	♂	
Dargo	NMV	Dargo, Vic	1922	♂	
M1749	AM	Dubbo, NSW	1904	♂	
M7243	AM	Moss Vale, NSW	1947	♂	
M5389	AM	Armidale, NSW		♂	
M601	CSIRO	Brunett Downs, NT		♂	♂
M326	CSIRO	Brunett Downs, NT		♂	♂
M371	CSIRO	Brunett Downs, NT		♂	♂
M365	CSIRO	Brunett Downs, NT		♂	♂
153663	AMNH	Cape York, Qld	1948	♂	
7017	BERL	South Queensland	1912	♂	
8.8.8.20	BMNH	Inkerman, Qld	1920	♂	
Q01	ANU	South-central Qld	1978	♂	
Q03	ANU	South-central Qld	1978	♂	
Q06	ANU	South-central Qld	1978	♂	
Q08	ANU	South-central Qld	1978	♂	
S1918	AM	Clermont, Qld	1932	♂	
4.1.3.104A	BMNH	Arnhem Land, NT		♂	
C120	MAC	Perth, WA		♀	
M3847	WAM	Augusta, WA	1959	♀	
A116.16	BERL	Port Jackson, NSW	1910	♀	
167.D	BMNH	Australia (?)		♀	
M1036	MACL	Sydney, NSW		♀	
M7386	AM	Blue Mts, NSW		♀	
F312	CSIRO	Brunett Downs, NT		♀	♀
F278	CSIRO	Brunett Downs, NT		♀	♀
F325	CSIRO	Brunett Downs, NT		♀	♀
F446	CSIRO	Brunett Downs, NT		♀	♀
F150	CSIRO	Banka Banka, NT		♀	♀
F321	CSIRO	Brunett Downs, NT		♀	♀
F315	CSIRO	Brunett Downs, NT		♀	♀

Identification		Location	Sex	
			A	R
F362	CSIRO	Banka Banka, NT	♀	♀
F316	CSIRO	Brunett Downs, NT	♀	♀
153629	AMNH	Cape York, Qld	♀	
154465	AMNH	Cape York, Qld	♀	
153664	AMNH	Cape York, Qld	♀	
Q02	ANU	South-central Qld	♀	
Q04	ANU	South-central Qld	♀	
Q05	ANU	South-central Qld	♀	
Q07	ANU	South-central Qld	♀	
Q09	ANU	South-central Qld	♀	
4.1.3.104	BMNH	Arnhem Land, NT	♀	
R6957	NMV	Mirboo North, Vic	♀	
C17229	NMV	Mt Hotham, Vic	♀	

Canis familiaris (dingo)
Central Australian : sample 0 (males)

Variables V1 to V16

Id.	198	194	97	126	98	32	53	77	98	158	36	65	15	21	34	110
M490	CSIRO	198	97	126	98	32	53	77	98	158	36	65	15	21	34	110
M238	CSIRO	195	93	119	95	31	49	74	94	149	35	62	15	20	32	105
M293	CSIRO	197	98	127	97	34	54	78	96	155		62	12	20	33	106
M234	CSIRO	197	94	123	95	34	52	79	91	152	33	61	12	18	31	105
M90	CSIRO	195	97	128	101	31	50	77	96	152	36	62	13	20	33	101
M497	CSIRO	206	100	132	101	34	56	81	104	156	39	69	12	21	34	110
M249	CSIRO	203	99	131	97	36	55	76	102	161	40	66	13	19	31	106
M516	CSIRO	200	99	130	100	38	55	81	97	154	36	64	13	21	34	105
M518	CSIRO	188	94	123	95	35	52	75	91	146	35	63	13	20	34	102
M200	CSIRO	200	99	129	99	36	56	81	101	155	36	67	12	19	32	108
M155	CSIRO	196	93	127	97	33	51	78	98	156	33	68	12	20	32	101
M275	CSIRO	195	96	125	96	35	49	74	93	152	36	59	12	19	30	99
M226	CSIRO	205	98	131	102	35	52	81	100	156	37	66	12	21	31	106
M105	CSIRO	205	99	136	102	33	54	83	103	159	38	67	13	22	33	109
M117	CSIRO	203	100	129	100	36	53	77	99	157	37	65	14	20	33	106
M116	CSIRO	194	90	122	94	32	46	75	93	150	35	62	13	20	32	103
M242	CSIRO	206	100	132	100	37	55	79	104	160	37	69	13	19	32	109
M130	CSIRO	200	97	127	97	33	53	78	98	155	37	62	11	21	31	101
M108	CSIRO	208	105	137	104	39	57	84	105	164	37	70	13	23	34	110
M270	CSIRO	201	102	130	99	39	55	77	96	155	38	61	12	21	33	112
M148	CSIRO	197	96	126	98	34	50	76	97	156	37	64	12	20	33	101
M112	CSIRO	204	99	129	100	36	51	79	100	158	36	67	13	21	32	104
M125	CSIRO	195	97	128	98	32	50	76	94	151	35	60	12	19	30	105
M150	CSIRO	198	97	127	98	35	51	76	95	155	35	61	13	20	33	108
M147	CSIRO	206	102	132	102	34	53	78	103	162	37	69	11	19	32	102
M152	CSIRO	204	100	130	100	35	54	78	101	159	36	67	12	21	32	106
M154	CSIRO	196	96	124	96	33	50	74	98	152	36	64	12	20	31	102
M102	CSIRO	204	99	129	99	35	54	82	101	158	37	65	14	21	35	110
M145	CSIRO	201	100	129	99	35	52	77	96	159	35	62	11	19	33	103
M149	CSIRO	197	95	124	96	33	50	75	97	158	36	63	12	19	31	102

Canis familiaris (dingo)
Central Australian : sample 0 (males)

Id.	Variables V17 to V32														
	19	20	26	15	35	31	83	48	60	63	51	48	17.9	9.0	
M490	CSIRO	54	20	26	15	35	31	83	48	60	63	51	48	17.9	9.0
M238	CSIRO	19	19	25	14	33	29	80	49	59	63	50	45	15.5	8.1
M293	CSIRO	19	19	25	17	35	31	83	48	59	63	50	47	15.5	9.2
M234	CSIRO	20	20	27	15	34	30	84	47	58	63	49	45	15.2	8.1
M90	CSIRO	20	20	25	15	33	31	83	47	59	60	49	43	15.6	9.1
M497	CSIRO	20	19	25	16	35	29	83	52	60	66	49	48	14.4	8.5
M249	CSIRO	20	20	25	15	34	30	82	51	57	63	50	46	13.8	8.8
M516	CSIRO	19	20	26	15	37	30	85	52	61	65	51	47	15.5	9.0
M518	CSIRO	18	19	25	16	33	31	79	46	58	61	48	42	15.6	9.3
M200	CSIRO	19	20	27	16	35	32	84	54	59	64	51	48	19.3	8.3
M155	CSIRO	18	18	25	15	34	30	81	54	56	50	51	46		6.8
M275	CSIRO	18	18	25	16	33	27	84	54	57	51	49	44		
M226	CSIRO	20	20	27	17	32	29	87	57	59	52	51	47		9.3
M105	CSIRO	20	19	27	17	35	30	86	55	60	52	51	49		9.0
M117	CSIRO	18	18	26	16	35	28	85	55	59	53	51	46	13.1	9.2
M116	CSIRO	18	19	25	18	35	28	82	52	58	51	44	44	14.3	7.8
M242	CSIRO	20	20	27	18	35	28	87	58	60	53	51	48	16.5	8.3
M130	CSIRO	18	19	25	16	35	29	84	53	59	52	49	46	15.5	8.7
M108	CSIRO	20	20	28	17	36	29	90	56	63	56	51	49	18.6	8.6
M270	CSIRO	20	20	26	17	35	30	88	56	59	52	51	47	16.5	8.8
M148	CSIRO	18	18	25	17	35	29	84	54	57	53	51	47	13.8	8.4
M112	CSIRO	18	19	26	17	33	29	86	54	61	54	50	47	15.3	8.5
M125	CSIRO	20	19	25	16	34	29	84	53	56	49	49	45	13.8	
M150	CSIRO	18	19	25	18	34	29	84	54	58	50	51	47	15.0	9.0
M147	CSIRO	19	18	25	16	34	29	85	54	59	52	51	47	13.0	9.0
M152	CSIRO	19	20	26	18	34	28	85	55	59	50	51	47	16.3	8.9
M154	CSIRO	18	19	25	17	34	29	80	54	58	51	50	46	14.8	8.2
M102	CSIRO	19	20	29	18	36	30	87	56	60	53	51	50	18.1	8.5
M145	CSIRO	20	19	26	17	35	29	86	56	59	52	52	47	14.7	8.2
M149	CSIRO	20	19	25	18	34	29	86	53	58	53	51	45	16.3	8.7

Canis familiaris (dingo)
 Central Australian : sample 0 (males)

Id.	Variables V33 to V48																
	CSIRO	34	51	38	58	47	68	38	52	21	14	29	34	46	60	12	11
M490	CSIRO	34	51	38	58	47	68	38	52	21	14	29	34	46	60	12	11
M238	CSIRO	37	54	38	54	45	66	35	53	19	14	26	31	44	57	14	12
M293	CSIRO	36	56	36	56	44	67	37	51	19	13	30	34	46	59	11	12
M234	CSIRO	36	54	38	57	43	66	37	52	19	15	28	33	46	57	11	13
M90	CSIRO	37	54	37	54	43	67	34	52	18	13	29	34	47	59	10	12
M497	CSIRO	34	48	33	55	43	67	40	56	20	15	30	34	48	61	11	12
M249	CSIRO	39	56	37	56	44	67	37	53	20	13	28	33	45	57	13	11
M516	CSIRO	36	55	38	54	43	69	40	54	22	14	30	33	48	60	11	11
M518	CSIRO	33	49	36	55	43	68	35	52	18	13	30	34	47	59	11	12
M200	CSIRO	35	53	37	56	43	68	40	55	21	15	29	34	50	61	13	15
M155	CSIRO	34	53	37	54	46	65	36	53	19	13	28	32	45	58	10	10
M275	CSIRO	34	53	36	54	45	64	37	52	18	13	27	32	44	56	10	11
M226	CSIRO	41	59	38	55	44	67	38	54	19	14	27	32	47	59	10	11
M105	CSIRO	35	53	35	55	43	68	39	54	21	13	29	34	49	60	12	15
M117	CSIRO	36	52	35	56	44	67	37	55	20	14	30	33	47	59	11	11
M116	CSIRO	35	54	34	54	43	61	37	52	20	14	28	32	45	56	10	11
M242	CSIRO	37	58	36	56	44	70	38	55	20	14	29	34	46	59	11	12
M130	CSIRO	35	53	36	56	43	65	36	53	20	15	27	32	44	58	11	12
M108	CSIRO	38	55	37	57	43	73	41	57	22	14	31	34	47	60	13	14
M270	CSIRO	37	57	37	55	42	68	37	53	19	13	30	34	48	59	12	12
M148	CSIRO	37	55	38	57	45	67	38	55	20	14	29	34	47	59	12	13
M112	CSIRO	36	53	37	56	43	68	38	56	20	14	28	32	46	57	11	14
M125	CSIRO	36	53	35	55	42	65	37	52	21	14	27	32	43	57	10	11
M150	CSIRO	35	50	36	57	44	67	39	53	21	14	29	34	47	59	10	10
M147	CSIRO	33	50	37	55	44	67	38	54	20	13	29	32	47	58	11	12
M152	CSIRO	38	57	38	58	46	68	38	54	20	14	28	33	47	60	11	12
M154	CSIRO	35	50	37	56	44	63	36	53	19	13	28	32	45	58	11	12
M102	CSIRO	39	56	37	57	43	71	40	55	21	14	30	34	46	59	11	12
M145	CSIRO	35	50	37	58	47	68	39	54	21	15	29	33	47	59	11	12
M149	CSIRO	34	50	36	55	45	67	37	54	19	14	28	31	44	58	12	12

Canis familiaris (dingo)
Central Australian : sample 0 (males)

Id.	CSIRO	Variables V49 to V64															
		7.3	13.0	21.1	12.7	10.6	10.8	9.8	16.0	8.2	5.1	4.4	20.5	5.8	62	20.0	20.8
M490	CSIRO	7.0	12.6	19.2	11.6	10.2	10.3	9.1	14.5	7.5	4.5	4.0	19.3	5.5	60	18.2	19.6
M238	CSIRO	8.0	12.7	21.0	13.2	12.0	11.4	10.0	16.3	7.9	5.3	4.5	20.7	6.3	59	20.2	21.4
M293	CSIRO	6.9	12.1	18.5	11.4		10.4	9.1	14.2	7.0	4.9	4.0	18.8		59	17.5	18.4
M234	CSIRO	7.6	14.5	20.6	12.8	11.1	11.0	9.8	16.7	8.2	5.4	4.6	21.6	6.0	63	19.4	21.0
M90	CSIRO	7.5	12.9	19.1	12.3	10.6	10.0	9.8	16.0	7.4	5.1	4.2	20.4	6.1	62	19.1	20.1
M497	CSIRO	7.1	11.8	18.9	11.8	10.3	10.5	9.7	14.7	7.5	5.0	4.4	19.0	5.9	61	17.7	18.4
M249	CSIRO	7.6	13.5	20.0	12.4	10.9	10.4	9.6	15.1	7.7	5.0	4.2	20.7	6.2	64	18.9	19.5
M516	CSIRO	7.4	13.2	20.0	12.1	10.3	10.4	9.5	15.8	7.5	5.0	3.9	20.4	6.1	59	18.8	20.3
M518	CSIRO	7.2	13.1	20.0	12.1	9.5	10.9	8.8	15.3	7.2	5.3	4.3	20.0	5.8	62	18.7	19.2
M200	CSIRO	7.6	13.1	19.5	12.0	11.0	8.9	9.5	14.9	7.4	4.9	4.2	20.6	6.0	62	18.1	19.8
M155	CSIRO	6.4		19.2				9.0	14.0	7.5		18.9			59	18.4	18.8
M275	CSIRO	7.6	13.3	21.2	13.3	11.4	10.5	9.3	15.7	8.1	5.1	4.4	20.7	6.5	65	20.1	21.8
M226	CSIRO	7.0	13.0	19.8			10.3	9.5	15.5	8.3	5.0	4.5	19.9		65	18.3	20.1
M105	CSIRO	7.9	13.8	19.8			9.6	10.0	15.7	8.1	5.1	4.4	20.3		63	18.8	19.3
M117	CSIRO	7.8	12.7	19.5			10.5	9.1	14.8	7.6	5.0	4.4	19.9		60	18.3	19.4
M116	CSIRO	6.7	12.6	19.4			10.0	9.4	15.0	7.7	4.8	19.0			60	18.3	19.5
M242	CSIRO	7.3	12.4	19.2	12.4	10.4	9.8	9.5	15.4	7.7	5.1	4.4	19.7	6.1	61	17.9	18.2
M130	CSIRO	7.5	13.0	20.1	12.0		10.3	9.7	15.8	8.4	5.4	4.8	20.2		65	18.8	19.9
M108	CSIRO	7.0	12.7	19.2	11.9		10.4	9.2	15.3	7.6	4.9	4.2	19.5		61	18.4	19.5
M270	CSIRO	7.5	13.0	20.4	13.0	10.6	10.0	9.3	15.8	8.0	5.8	4.4	20.0	6.4	62	19.2	20.3
M148	CSIRO	7.6	13.0	20.3	12.4	11.0	10.0	9.7	15.4	7.6	5.0	4.3	20.5		63	19.5	19.9
M112	CSIRO	7.2	12.0	20.0	12.1	10.2	10.1	8.7	15.1	7.8	5.2	4.3	19.1	6.3	61	18.9	
M125	CSIRO	7.2	12.6	20.8			9.9	9.9	15.6	8.0		20.0			62	19.9	20.2
M150	CSIRO	7.4	12.8	19.9	13.0		10.3	9.9	15.7	7.6	5.4	4.6	20.1		65	18.9	20.0
M147	CSIRO	7.2	12.2	19.1	11.7	10.1	10.0	9.4	15.2	7.7	5.0	4.3	19.2		62	18.1	19.6
M152	CSIRO	7.0	13.0	20.0	12.0	10.7	9.3	9.5	15.2	7.3	5.0	4.2	19.9	5.7	58	19.1	19.7
M154	CSIRO	7.8	12.6	20.7	12.1	10.2	10.8	9.7	15.4	8.1	5.3	4.4	20.5		62	19.5	20.6
M102	CSIRO	7.0	12.7	20.1	11.9		10.0	9.7	15.3	8.0	5.4	19.5			63	19.1	19.7
M145	CSIRO	7.7	13.3	20.2	11.8	10.0	9.5	10.0	16.1	7.4	4.9	4.1	20.5	5.9	61	19.0	20.0

Canis familiaris (dingo)
Central Australian : sample 0 (males)

Id.		Variables V65 to V80															
M490	CSIRO	147	149	24	10	22.5	12.1	10.6	8.9	8.8	6.6	5.5	4.5	10.1	4.8	11.5	6.7
M238	CSIRO	140	140	25	10	20.5	11.5	9.9	8.0	8.4	6.0	4.9	4.1	9.8	6.5	10.9	6.4
M293	CSIRO	147	147	22	10	22.2	12.5	11.0	9.4	8.7	6.5	5.4	4.6	9.6	2.7	10.6	7.3
M234	CSIRO	143	143	22	9	19.8	11.1	9.6		8.0	5.8	4.9		8.5	6.1	9.1	6.6
M90	CSIRO	144	146	22	10	22.3		11.0	8.6	9.5	7.4	5.5	4.8	9.6	3.4	11.5	7.2
M497	CSIRO	153	153	24	10	21.8	12.3	10.8	8.9	8.6	6.6	5.4	4.9	9.6	5.1	10.8	6.5
M249	CSIRO	147	148	25	10	20.0				8.7			4.4	9.1	5.6	10.9	6.6
M516	CSIRO	151	151	24	10	21.0	12.5	10.8	8.8	8.4	7.4	5.1	4.5	10.0	6.5	11.5	6.9
M518	CSIRO	139	139	22	11	21.5	12.1	9.8	8.7	8.3	6.3	5.4	4.4	9.2	2.9	11.7	6.4
M200	CSIRO	150	151	23	10	21.3	11.5	10.0	8.0	8.3	6.2	5.4	4.7	9.5	6.5	10.5	6.6
M155	CSIRO	145	145	23	9	21.4	12.4	10.9	8.8	8.2	6.1	5.0	4.3	10.0	5.6	9.5	6.8
M275	CSIRO	140	141	22	9	19.2				7.8	5.7	5.0	4.1	9.0	4.8	10.9	6.2
M226	CSIRO	151	151	24	9	22.3	13.1	11.3		8.6	6.9	5.5	4.9	10.1	5.0	11.5	7.1
M105	CSIRO	153	154	25	10	21.2	12.5			8.6	6.8	5.5		10.2	6.9	10.9	6.8
M117	CSIRO	147	149	22	10	20.5	12.9			8.0	6.3	5.3	4.7	9.7	4.6	10.9	7.0
M116	CSIRO	140	141	24	10	20.4	13.0			8.5	6.5		4.5	9.4	3.8	10.4	6.6
M242	CSIRO	151	152	24	10	21.1				8.1	6.3	5.0		9.1	5.0	10.5	6.6
M130	CSIRO	146	146	23	9	20.3	12.2	10.3	8.8	8.2	6.4	5.2	4.5	9.4	5.2	10.4	7.0
M108	CSIRO	154	155	24	10	21.0	12.6			8.9	7.0	6.0		9.6	5.7	11.0	7.4
M270	CSIRO	151	151	23	10	20.8				8.3		5.0		9.0	5.5	10.8	
M148	CSIRO	145	145	24	10	21.3	12.5	10.7	8.5	8.0	6.6	5.5	4.8	9.6	4.4	10.5	6.8
M112	CSIRO	148	149	25	9	21.5	13.0	11.1		8.4	6.8	5.4		9.8	6.1	10.2	6.8
M125	CSIRO	143	144	22	9		12.1	10.3	8.7	8.1	6.5	5.4	4.5	9.3	6.0	10.1	
M150	CSIRO	148	146	25	11	21.0				8.9				10.0	5.0	10.8	6.9
M147	CSIRO	149	150	23	9	21.0	13.0	10.8	8.7	8.4	6.5	5.5	4.7	9.3	6.5	11.0	7.1
M152	CSIRO	148	149	24	10	21.0	12.2	10.4	8.2	8.0	6.6	5.4	4.6	9.5	6.8	10.2	6.9
M154	CSIRO	142	142	22	10	20.7				7.9	5.8	5.1	4.5	9.5	5.0	10.0	6.7
M102	CSIRO	149	152	25	11	21.6				8.5	6.5	5.5	4.8	9.8	5.1	11.0	7.1
M145	CSIRO	147	147	23	10	20.5	12.0			8.3	6.7	5.5		9.5	7.8	10.9	7.0
M149	CSIRO	143	144	25	9	21.1	11.8			8.3	6.5	5.2	4.5	9.6	5.2	10.1	6.9

Canis familiaris (dingo)
Central Australian : sample 0 (females)

Id.	Variables V1 to V16																
	CSIRO	192	187	96	123	97	35	49	73	95	150	36	61	11	18	31	96
F455	CSIRO	192	187	96	123	97	35	49	73	95	150	36	61	11	18	31	96
F468	CSIRO	176	171	88	113	89	28	45	68	85	138	32	56	11	18	30	94
F244	CSIRO	190	186	92	122	94	32	48	74	100	148	33	68	11	19	32	95
F470	CSIRO	190	185	94	123	95	33	49	74	93	149	34	62	12	18	30	97
F480	CSIRO	183	178	93	118	92	32	46	67	89	144	32	59	11	18	31	94
F202	CSIRO	188	183	92	120	92	32	49	72	91	147	34	60	11	18	31	100
F462	CSIRO	186	183	94	121	94	32	48	70	92	151	33	60	11	18	29	99
F304	CSIRO	189	184	93	121	95	34	48	72	93	150	35	60	10	19	30	95
F238	CSIRO	195	191	95	126	96	32	50	76	99	153	35	66	11	19	31	103
F249	CSIRO	187	182	92	120	93	33	47	72	92	146	34	62	12	19	30	99
F254	CSIRO	187	182	92	121	93	32	48	71	90	147	34	58	10	18	30	94
F239	CSIRO	195	189	94	125	96	33	50	75	101	153	35	68	12	18	30	103
F399	CSIRO	185	181	90	118	91	32	49	73	89	146	33	59	13	19	30	97
F610	CSIRO	192	189	93	123	95	32	49	74	97	152	35	66	11	18	31	98
F295	CSIRO	187	174	92	121	93	30	49	75	86	146	34	55	12	20	29	99
F217	CSIRO	189	177	94	122	94	32	50	73	92	147	34	59	12	20	30	102
F102	CSIRO	186	174	91	121	92	32	48	73	91	144	32	62	11	18	30	98
F204	CSIRO	192	181	97	124	97	33	51	75	96	152	34	64	13	19	32	98
F245	CSIRO	184	170	90	118	91	28	45	70	90	142	33	60	11	18	31	97
F266	CSIRO	184	171	93	120	92	31	47	70	89	144	33	57	11	19	29	94
F252	CSIRO	190	174	95	122	94	32	48	72	95	148	34	64	11	19	31	100
F257	CSIRO	190	176	94	122	95	32	48	73	93	151	34	61	11	19	31	94
F271	CSIRO	184	167	91	118	91	31	46	68	90	145	32	59	11	18	29	93
F267	CSIRO	185	171	91	118	92	32	46	73	90	144	33	59	11	19	30	98
F299	CSIRO	182	173	92	120	92	31	47	73	86	144	32	55	13	18	30	95
F205	CSIRO	191	177	92	123	93	33	51	76	94	149	33	62	12	18	31	102
F236	CSIRO	181	170	90	118	91	32	47	72	86	141	30	57	11	17	28	95
F103	CSIRO	194	179	93	124	96	32	50	77	96	151	36	64	12	21	31	102
F285	CSIRO	197	180	97	126	97	33	49	74	100	151	35	67	14	21	32	104
F286	CSIRO	191	177	93	123	93	35	50	75	94	150	34	62	13	18	30	95

Canis familiaris (dingo)
Central Australian : sample 0 (females)

Id.	Variables V17 to V32															
	V17	V18	V19	V20	V21	V22	V23	V24	V25	V26	V27	V28	V29	V30	V31	V32
F455	CSIRO	18	53	19	26	12	33	29	82	49	58	60	49	46	19.4	8.8
F468	CSIRO	18	49	18	24	12	32	29	77	43	57	57	43	42	13.5	8.7
F244	CSIRO	18	52	19	26	13	34	29	75	51	57	62	50	45	15.5	8.8
F470	CSIRO	19	51	19	26	14	34	28	80	46	58	60	48	43	15.8	8.6
F480	CSIRO	18	48	16	25	13	32	29	76	45	55	57	47	42	12.0	9.4
F202	CSIRO	16	53	19	25	14	33	29	78	46	57	60	48	43	15.7	8.5
F462	CSIRO	19	53	19	24	14	34	29	79	43	58	57	50	44	15.2	8.3
F304	CSIRO	18	55	19	27	14	35	30	79	48	56	61	48	44	16.0	8.8
F238	CSIRO	20	56	21	25	15	34	29	80	49	59	62	50	45	13.0	8.8
F249	CSIRO	19	54	19	24	16	34	28	79	48	58	61	48	43	14.4	8.1
F254	CSIRO	18	50	18	25	13	34	29	77	48	56	60	48	42	14.0	8.6
F239	CSIRO	20	56	21	26	15	34	29	81	48	59	62	50	47	16.0	9.0
F399	CSIRO	17	51	19	23	16	32	29	79	48	57	60	50	41	13.7	8.0
F610	CSIRO	20	55	20	24	14	34	29	79	49	57	62	50	45	15.4	8.8
F295	CSIRO	19	53	17	24	16	32	28	84	53	55	48	49	43	12.8	7.9
F217	CSIRO	18	53	18	26	13	33	28	81	53	55	49	48	44	15.0	9.0
F102	CSIRO	17	52	19	25	17	34	27	80	53	56	48	48	43	15.8	7.7
F204	CSIRO	19	55	18	26	18	33	28	85	54	54	50	49	45	15.6	8.8
F245	CSIRO	19	52	19	24	17	33	27	76	50	53	47	47	42	14.6	8.5
F266	CSIRO	18	50	18	27	12	33	27	80	50	53	48	45	44	13.3	8.1
F252	CSIRO	18	53	18	25	15	35	28	79	51	54	48	48	43	15.1	8.0
F257	CSIRO	18	52	17	26	14	34	28	83	52	53	49	50	44	14.3	8.7
F271	CSIRO	17	50	18	25	18	33	26	80	51	53	48	48	44	14.3	8.0
F267	CSIRO	18	52	18	26	18	33	28	79	51	54	47	46	42	13.6	8.0
F299	CSIRO	19	51	19	26	16	32	26	81	52	54	47	48	42	14.1	8.1
F205	CSIRO	20	55	19	27	17	33	27	83	55	56	50	49	44	15.8	8.1
F236	CSIRO	19	51	19	26	17	33	28	79	52	55	48	48	41	13.6	8.0
F103	CSIRO	20	55	18	26	16	35	28	83	53	56	48	48	44	13.1	8.0
F285	CSIRO	20	54	20	27	18	34	27	81	52	57	50	48	46	15.5	8.3
F286	CSIRO	19	52	19	26	17	35	28	83	52	54	48	48	45	13.3	8.5

Canis familiaris (dingo)
 Central Australian : sample 0 (females)

Id.	Variables V33 to V46															
	V33	V34	V35	V36	V37	V38	V39	V40	V41	V42	V43	V44	V45	V46		
F455	34	52	35	55	43	63	37	51	19	13	28	31	41	54	10	12
F468	32	49	36	53	44	60	33	46	18	13	27	31	41	53	9	12
F244	34	50	37	53	41	64	34	51	19	13	28	32	45	55	11	13
F470	34	53	34	56	44	65	36	50	19	13	27	30	43	56	10	11
F480	33	48	35	54	42	62	34	47	19	13	26	30	41	55	11	10
F202	34	53	35	55	44	64	35	51	19	14	28	33	42	55	10	10
F462	34	50	35	55	44	66	36	48	19	14	26	30	43	55	10	10
F304	32	49	36	55	44	64	36	52	19	13	29	31	44	55	11	13
F238	36	55	37	56	45	68	37	52	20	13	29	34	46	56	11	11
F249	32	46	35	56	43	65	35	50	18	15	27	30	43	56	11	12
F254	32	50	35	52	44	61	34	49	18	14	27	30	40	53	10	10
F239	37	57	38	56	44	67	37	52	19	13	28	32	43	55	11	11
F399	32	46	36	56	43	66	36	49	20	14	28	32	43	54	10	11
F610	35	50	36	55	43	65	36	50	18	13	28	32	45	56	11	12
F295	35	50	37	57	45	63	36	51	19	13	25	29	43	53	11	11
F217	34	52	36	55	42	64	37	49	19	14	27	32	46	58	11	11
F102	31	45	31	53	41	64	36	50	20	13	27	31	43	55	10	13
F204	35	51	36	56	44	66	37	52	19	13	28	31	45	57	11	12
F245	33	51	35	54	43	62	35	47	18	11	28	32	43	56	11	11
F266	32	47	34	52	42	61	34	48	18	13	26	29	40	53	10	10
F252	31	46	32	52	40	64	36	49	19	13	27	32	43	57	10	11
F257	32	50	37	55	42	63	35	49	19	13	27	31	43	56	11	12
F271	33	51	35	50	42	59	34	49	18	13	26	29	41	53	10	11
F267	33	47	33	50	40	62	35	49	19	12	27	31	42	55	9	11
F299	33	51	36	54	44	62	34	49	19	13	26	31	43	53	11	11
F205	35	53	37	57	45	66	36	55	19	13	28	32	44	55	10	10
F236	34	52	35	55	43	62	35	50	19	14	25	29	42	52	10	12
F103	37	56	36	57	44	66	39	52	20	13	28	31	43	56	11	12
F285	37	55	35	56	42	66	37	52	20	14	29	34	46	57	12	13
F286	32	49	34	54	43	64	36	50	19	13	26	29	41	52	10	11

Canis Familiaris (dingo)
Central Australian : sample 0 (females)

Variables V49 to V64

Id.	V49	V50	V51	V52	V53	V54	V55	V56	V57	V58	V59	V60	V61	V62	V63	V64
F455	7.5	13.0	19.7	12.1	10.4	10.6	9.8	14.9	7.4	5.1	4.2	20.1	5.8	62		
F468	7.0	12.1	17.5	10.5	10.1	9.0	10.6	16.1	7.1	4.3	3.8	19.5	5.4	55	16.1	17.3
F244	7.5	12.6	19.3	12.0	10.5	10.1	9.2	15.1	7.6	4.7	4.2	19.7	5.8	60	17.8	19.9
F470	7.8	13.0	20.1	12.5	10.5	10.5	9.9	15.7	7.7	4.6	4.0	20.6	6.3	59	19.0	20.7
F480	7.8	12.8	19.0	12.1	10.5	9.3	9.9	15.1	7.7	5.2	4.2	20.3	6.0	59	18.0	19.4
F202	6.9	11.7	18.6	12.2	10.9	10.4	9.5	14.9	7.5	4.6	4.4	18.5	6.2	59	18.1	19.2
F462	7.4	12.7	18.6	11.4	9.6	9.2	9.5	14.9	7.6	5.0	4.0	19.5	5.0	59	17.4	18.1
F304	7.3	12.5	19.1	12.3	10.2	9.8	9.5	15.3	7.5	5.0	4.2	19.2	6.0	59	17.9	19.3
F238	7.0	12.1	18.9	11.4	10.5	9.9	9.0	14.8	7.3	4.4	4.0	18.8	6.1	58	17.2	19.5
F249	6.7	12.6	18.8	10.1	10.0	9.2	14.8	7.2	4.8	4.1	19.1	19.1	5.6	59	17.5	19.2
F254	7.3	12.5	19.2	10.5	10.5	9.0	14.8	7.5	4.4	4.0	19.2	19.2	5.6	58	17.6	19.7
F239	7.5	12.5	19.1	11.7	10.4	9.6	15.2	7.6	4.7	4.2	19.8	19.8	6.1	60	18.3	20.0
F399	6.9	11.5	18.4	11.6	10.7	9.8	9.1	14.0	7.0	4.5	4.0	18.4	5.7	56	16.5	17.7
F610	7.5	12.5	19.2	12.0	10.6	10.3	9.6	15.0	7.2	5.2	4.3	19.8	5.6	60	18.2	19.6
F295	6.7	11.0	17.6	11.6	10.0	8.9	8.5	13.2	7.1	4.9	3.9	17.1	5.6	59	16.5	18.2
F217	7.6	13.1	19.0	11.7	10.7	9.3	10.1	15.6	7.5	4.7	4.3	19.9		60	17.7	19.6
F102	7.7	12.5	19.0			9.3	8.9	13.9	7.5			19.2		57	17.7	18.6
F204	7.3	13.0	19.5			10.4	9.4	15.5	7.3	5.5	4.4	20.0		62	18.8	19.9
F245	7.3	12.3	18.4			9.0	9.5	14.5	7.2	4.4	3.9	19.7		56	17.3	18.5
F266	7.0	11.5	18.7	12.1	10.0	9.7	9.3	14.3	7.2	4.5	3.9	18.5	5.7	58	17.2	19.3
F252	7.2	12.9	19.4			9.7	9.6	14.6	7.2	4.6	3.9	20.0		60	18.2	20.1
F257	7.3	13.0	19.8	12.1	10.5	9.8	9.5	14.8	7.7	5.1	4.2	20.1	5.9	60	18.6	19.7
F271	6.9	11.5	18.7			9.4	9.0	14.1	7.0	4.4	3.9	18.5		57	18.1	18.6
F267	7.3	12.4	19.2	11.7	10.2	9.7	9.2	14.6	7.2	4.4	3.8	19.5		59	18.5	19.7
F299	7.1	11.9	18.1	11.6	9.8	9.0	9.3	12.9	6.9	4.4	3.6	18.4		57	16.9	18.1
F205	6.8	12.0	17.9	11.5	10.1	9.2	8.8	14.5	7.0	4.5	4.0	18.4		59	17.5	18.9
F236	6.7	11.0	17.0	10.7	9.4	8.6	8.2	12.9	6.6	4.0	3.6	17.6		58	15.8	17.2
F103	6.9	11.6	19.5	12.4	10.4	9.3	9.3	14.5	7.3	4.8	4.2	18.8		61	18.4	18.7
F285	7.1	12.2	18.6	11.8	10.6	9.3	9.3	14.7	7.5	4.6	4.0	19.5	5.9	60	17.4	19.1
F286	6.7	12.5	18.8	11.4	9.5	8.9	8.4	14.0	6.7	4.0	3.5	19.1		57	17.6	18.4

Canis familiaris (dingo)
Central Australian : sample 0 (females)

Id.	CSIRO				Variables V65 to V80										
F455	143	21	9	20.3	12.5	9.7	8.5	7.7	6.4	5.2	4.7	9.9	5.5	11.4	6.7
F468	128	19	9	18.9	11.4	9.5	7.7	7.3	5.8	4.8	4.2	8.8	4.0	9.6	6.6
F244	140	21	10	21.3	12.0	10.5	7.4	8.1	6.1	5.2	4.3	9.1	5.9	10.0	6.9
F470	141	21	9	22.0	12.4	10.6	9.2	8.1	6.2	5.1	4.3	9.1	4.1	11.2	6.9
F480	135	20	10	20.7	11.9	10.4	8.0	8.5	6.3	5.5	4.4	9.3	5.8	10.2	6.7
F202	139	22	10	20.4	12.0	9.8		7.9	6.1	5.1	4.4	9.1	4.5	10.5	6.7
F462	138	21	9	19.3	11.1			8.1	6.1	5.2	4.3	9.0	7.0	9.6	6.6
F304	139	22	9	20.4	12.6	10.6	8.2	8.0	6.2	5.2	4.3	9.1	5.8	9.8	6.3
F238	144	22	10	20.5	12.0	10.2		7.9	6.0	4.8	4.1	9.9	6.1	10.1	6.2
F249	138	20	9	20.1	11.1	10.2		8.1	6.0	5.0	4.4	9.7	6.3	9.3	6.2
F254	138	21	9	21.3	12.0			7.9	6.0	4.8	4.2	9.2	4.6	10.1	6.3
F239	143	22	9	21.0	12.2			8.0	6.0	5.0	4.2	9.2	5.6	10.0	6.7
F399	134	21	9	18.7	11.3	10.0	8.7	7.5	5.6	4.8	4.5	8.8	3.4	9.0	6.5
F610	141	23	9	20.2	12.2	9.9	8.1	7.5	6.5	5.2	4.5	9.2	6.0	10.4	6.6
F295	137	22	9	19.0	11.4	9.6	8.1	7.7	5.9	4.9	4.3	8.8	6.1	9.4	6.3
F217	141	21	9	21.1	11.8	10.5	8.5	8.3	6.1	5.0	4.4	9.7	3.6	9.7	7.1
F102	137	19	9	19.9				8.3	6.3			9.4	4.5	10.1	6.9
F204	141	22	9	20.9	11.9			8.1	6.1	5.1		9.3	4.5	10.1	6.8
F245	135	21	9	19.5				7.7	5.9	4.7		8.9	4.5	9.6	6.3
F266	137	20	8	20.3				8.1	6.0	5.0		9.1	5.4	9.8	6.4
F252	140	22	9	20.9				8.0	6.9		4.0	8.8	3.4	10.1	6.6
F257	138	21	9	20.9	11.6	10.0	8.5	8.2	6.6	5.2	4.5	9.3	5.3	10.5	6.7
F271	136	21	9	19.8				7.4		4.7	3.9	9.1	3.7	9.7	6.5
F267	136	21	9	20.7	11.7	9.9	7.2	8.0	5.9	4.7	3.9	9.5	4.5	10.3	6.4
F299	138	21	9	18.6	11.1			7.3	5.6	4.5		8.3	4.3	9.3	6.4
F205	141	21	9	19.5	11.8	10.0	8.4	7.7	5.6	4.5	4.0	9.1	5.0	9.4	6.5
F236	134	19	8	18.1	10.5			7.2	5.5			8.2	6.6	8.7	6.5
F103	140	22	9	19.7				8.0	6.1		4.5	9.2	5.0	9.9	6.4
F285	143	24	10	20.1			8.6	8.2	6.0	4.7	4.2	9.3	4.7	9.8	7.1
F286	138	22	9	19.0	11.2			7.5	5.4	4.4	3.9	8.9	5.8	9.1	6.3

Canis familiaris (dingo) ; males ; sample AP

Id.	Variables V1 to V16															
	179	94	123	95	34	49	76	95	150	36	61	11	20	33	98	
77	193	179	94	123	95	34	49	76	95	150	36	61	11	20	33	98
M4199	205	198	99	129	100	38	56	81	102	158	37	69	14	21	34	109
S1807	204	198	100	131	100	34	54	82	100	156	35	67	14	21	32	105
M4207	205		100	130	100	38	54	78	101	158	37	67	13	21	32	107
M6150	186		90	120	94	32	48	73	88	148	34	55	13	18	34	93
C88	201	185	101	128	102	35	49	75	102	155	37	66	13	20	34	106
C50	200	184	99	128	99	34	52	78	100	155	39	66	13	20	32	106
C90	197	179	96	126	98	34	48	72	94	152	35	62	13	20	32	100
C39	200	182	98	128	99	34	49	76	100	155	37	65	13	20	33	104
74	194	180	96	124	95	33	51	76	94	150	35	60	12	19	32	99
91 (A)	201	186	99	127	99	35	51	77	93	155	35	59	13	21	32	108
91	201	182	97	125	98	34	50	77	98	155	38	63	13	20	33	102
108	208	191	101	130	101	35	54	79	102	159	36	68	13	20	35	108
91(B)	202	188	100	129	99	36	52	78	97	153	38	63	12	19	32	101
75	200	185	100	128	98	33	54	75	100	155	34	68	12	19	32	106
110	205	188	100	130	100	35	53	79	102	161	38	65	13	22	34	108
M4684	197	183	96	126	98	34	52	78	100	156	35	67	12	20	31	104

Canis familiaris (dingo) ; males ; sample AP

Variables V17 to V32

Id.

77	MAC	17	51	19	28	18	14	35	29	81	52	56	52	49	45	16.2	8.9
M4199	WAM	20	55	20	28	16	16	35	29	85	55	59	53	51	46	14.5	8.7
S1807	AM	20	65	22	24	18	36	30	30	86	55	58	51	50	45		9.1
M4207	WAM	20	55	20	27	17	15	36	30	85	55	60	50	50	48	16.2	9.6
M6150	WAM	20	54	18	27	16	15	35	28	83	55	54	50	51	44	13.5	9.7
C88	MAC	19	54	21	27	18	13	34	29	84	57	59	53	53	48	17.6	9.0
C50	MAC	20	54	19	26	17	16	34	28	86	54	57	52	50	49	15.5	9.0
C90	MAC	19	53	18	25	18	14	33	28	83	57	57	52	50	47	13.6	9.1
C39	MAC	19	55	18	25	16	17	35	30	82	55	58	50	50	46	12.7	8.7
74	MAC	19	52	20	28	18	14	34	28	82	54	58	51	51	46	17.5	8.5
91 (A)	MAC	20	58	21	27	18	16	32	29	87	55	60	53	52	47	17.3	
91	MAC	19	53	18	26	18	14	36	29	86	55	58	52	51	48	15.2	8.3
108	MAC	21	58	19	26	20	19	36	29	88	57	62	56	52	48		9.6
91(B)	MAC	18	56	21	27	18	14	33	27	86	55	60	54	50	48	18.6	
75	MAC	20	53	20	27	19	15	37	28	85	54	57	52	49	48	15.4	9.3
110	MAC	20	55	21	27	19	15	33	28	86	54	59	54	53	49	16.8	8.9
M4684	SAM	19	53	19	28	17	14	34	31	82	55	58	51	52	48		

Canis familiaris (dingo) ; males ; sample AP

Id.	Variables V33 to V48																
77	MAC	32	46	35	54	42	64	38	53	20	14	28	34	43	56	10	12
M4199	WAM	39	59	37	54	42	70	39	55	20	12	28	33	48	59	11	11
S1807	AM	35	50	36	59	44	71	41	56	20	12	22	32			12	12
M4207	WAM	37	57	38	57	43	69	37	54	20	13	28	32	45	59	12	12
M6150	WAM	33	50	38	56	43	69	40	53	20	15	28	31	41	54	12	12
C88	MAC	39	58	36	55	43	65	38	55	20	13	30	34	48	59	11	13
C50	MAC	38	58	39	57	45	66	38	53	19	13	29	35	46	59	12	12
C90	MAC	35	52	35	54	42	66	36	54	19	13	28	32	44	57	10	12
C39	MAC	38	54	40	58	45	65	37	52	20	13	29	33	47	59	11	12
74	MAC	34	49	37	55	45	64	36	53	20	13	28	32	44	57	11	11
91 (A)	MAC	37	50	37	54	44	68	41	55	20	13	28	34	48	60	11	12
91	MAC	36	55	37	54	44	65	38	55	19	13	28	32	45	56		
108	MAC	36	52	38	59	48	73	39	57	21	15	32	37	50	61	12	11
91(B)	MAC	37	64	37	52	42	67	39	56	20	13	29	34	47	59	11	13
75	MAC	35	51	35	55	45	66	37	54	20	13	27	32	46	58	11	11
110	MAC	41	59	36	58	46	68	39	55	21	13	30	35	48	58	12	12
M4684	SAM	38	55	38	57	44	65	37	52	21	15	27	32	46	58		

Canis familiaris (dingo) ; females ; sample AP

Id.	Variables V1 to V16															
	203	101	131	100	36	55	80	103	156	38	69	13	19	32	103	
M4210	WAM															
M7420	WAM	194	92	123	94	33	50	75	97	153	36	65	13	19	32	
M4568	WAM	197	98	128	98	34	51	75	100	155	37	66	12	19	33	
M401	WAM	186	93	121	92	33	51	73	96	145	33	65	12	18	31	
M4242	WAM	190	92	122	96	32	49	76	95	149	34	63	11	18	29	
M4203	WAM	184	92	118	93	31	46	71	91	144	33	61	12	18	30	
M3826	WAM	182	89	118	92	29	47	71	88	142	33	58	12	19	32	
M3824	WAM	181	91	117	91	33	48	71	87	139	32	57	11	16	29	
M4213	WAM	177	89	113	90	29	46	69	83	140			11	18	30	
M6639	WAM	178	89	116	90	32	46	68	86	140	32	56	12	19	30	
M4212	WAM	189	95	121	95	36	48	69	93	147	33	61	11	18	29	
M4211	WAM	182	88	117	90	29	46	72	88	144	31	59	10	18	29	
C101	MAC	183	92	119	93	31	48	72	87	145	32	58	12	17	30	
C71	MAC	190	92	121	93	31	50	76	95	146	35	60	12	19	31	
C60	MAC	181	90	115	91	32	46	69	92	142	32	61	12	19	29	
79	MAC	183	90	117	90	33	47	71	92	146	33	62	11	17	29	
102	MAC	186	91	119	94	31	47	74	92	145	33	61	12	18	31	
106	MAC	192	93	120	94	30	50	74	93	150	34	62	11	17	29	
M4686	SAM	179	88	114	91	33	45	71	86	138	29	58	10	17	30	
M3889	SAM	187	92	120	92	33	48	73	90	146	33	59	12	20	31	
M5153	SAM	185	92	119	93	31	48	71	92	147	34	61	12	18	30	
M1962	SAM	179	90	113	89	32	49	70	83	136	31	55	13	18	31	
M3041	SAM	192	94	122	97	32	50	75	94	155	35	61	11	18	30	
M4629	SAM	183	93	117	95	33	48	72	92	144	33	61	11	21	34	
M3889(2)	SAM	186	94	125	95	32	52	75	92	144	33	61	10	20	30	
M4685	SAM	188	91	119	93	33	49	74	88	144	33	58	13	19	30	

Canis familiaris (dingo) ; females ; sample AP

Id.	Variables V33 to V48															
	38	53	34	54	40	65	38	50	20	13	28	33	46	57	11	13
M4210	WAM	53	34	54	40	65	38	50	20	13	28	33	46	57	11	13
M7420	WAM	36	33	55	44	64	37	51	19	13	29	32	45	55		
M4568	WAM	34	35	53	41	64	40	50	20	13	30	33	45	56	12	11
M401	WAM	37	37	53	42	64	36	47	19	13	26	30	43	55	10	12
M4242	WAM	33	35	53	40	62	36	48	19	13	26	30	41	53	11	12
M4203	WAM	33	32	54	41	61	36	49	20	12	27	31	41	53	10	12
M3826	WAM	33	35	57	46	61	34	47	18	13	29	33	43	55	10	11
M3824	WAM	33	35	55	42	63	34	49	19	15	26	30	41	54	10	11
M4213	WAM	30	35	54	44	63	34	49	19	13	27	30	42	55	10	12
M6639	WAM	32	33	55	43	62	35	46	18	12	27	31	42	53	11	11
M4212	WAM	33	36	56	45	61	34	46	19	12	27	31	42	54	11	11
M4211	WAM	32	34	52	43	62	35	47	19	12	26	29	39	52	10	11
C101	MAC	32	34	55	43	64	36	49	19	13	26	29	42	54	11	11
C71	MAC	36	35	54	43	64	36	53	19	13	27	31	42	56	11	11
C60	MAC	32	32	53	42	62	35	49	20	13	26	30	42	53	10	11
79	MAC	34	35	53	43	62	33	50	18	13	25	29	42	52	9	10
102	MAC	34	37	54	43	62	34	50	18	14	27	31	43	55	11	11
106	MAC	32	35	55	44	66	35	52	19	14	27	32	43	55	10	11
M4686	SAM	32	36	54	44	61	36	47	19	13	27	31	42	55		
M3889	SAM	33	35	53	43	64	35	50	19	13	28	31	42	54		
M5153	SAM	33	35	55	43	63	35	51	19	24	27	31	44	55		
M1962	SAM	37	38	55	44	66	35	47	19	14	28	32	45	60		
M3041	SAM	36	37	54	44	66	37	51	21	14		32	45	57		
M4629	SAM	34	36	55	44	63	37	49	18	15	30	36	48	62		
M3889(2)	SAM	34	48	54	43	66	35	51	20	13	27	32	46	60		
M4685	SAM	35	52	40	44	63	36	48	20	14	26	31	42	56		

Canis familiaris (dingo) ; males ; sample AC

Variables V1 to V16

M3412	WAM	193	97	125	97	34	51	75	94	149	36	60	12	20	32	102
M3413	WAM	195	99	128	100	35	52	77	101	153	35	68	11	18	29	102
S1796	AM	201	99	130	102	35	51	79	95	156	37	62	11	19	32	104
M6109	SAM	213	106	139	105	37	62	86	104	160	39	68	13	23	37	123
25.10.8.36BMNH		197	98	125	98	34	50	74	94	155	35	60	11	19	31	97
M8278	SAM	193	96	125	96	36	53	74	94	148	33	63	11	19	34	107
M6159	SAM	205	99	131	101	35	55	81	103	160	37	67	11	20	31	106
25.10.8.35BMNH		194	95	125	97	32	50	77	95	149	35	63	13	20	31	105
M1966	SAM	205	102	132	102	35	57	79	106	163	40	69	12	19	33	109
M1965	SAM	197	96	126	99	34	53	78	92	155	34	59	12	20	34	108
M2933	SAM	194	96	125	99	33	51	77	97	153	36	63	13	22	33	103
M6299	SAM	195	96	124	97	36	55	78	92	153	32	61	13	16	34	108
C18	MAC	199	97	126	100	34	51	77	100	155	35	67	13	21	33	103
C32	MAC	195	95	125	97	34	53	79	94	149	35	66	12	20	32	106
C9	MAC	200	98	128	99	34	52	76	97	155	35	66	12	20	33	105
C17	MAC	199	96	128	98	32	51	79	98	158	35	66	12	20	33	102
C30	MAC	193	95	123	97	34	49	76	98	152	35	65	13	20	31	104
25(B)	MAC	196	96	125	97	33	51	77	95	152	36	62	12	19	33	100
26	MAC	198	96	126	98	34	51	78	99	157	36	65	11	19	33	101
123	MAC	203	101	130	101	37	52	76	101	159	36	67	11	20	34	102
141	MAC	203	100	131	102	35	52	79	101	160	39	65	13	21	35	109
118	MAC	205	96	128	98	32	53	80	98	159	35	66	13	19	33	106
C45	MAC	195	97	125	98	35	51	76	98	153	35	65	13	19	32	102
112	MAC	192	95	121	96	31	48	72	92	148	34	60	12	17	32	102

Canis familiaris (dingo); males ; sample AC

Variables V17 to V32

M3412	WAM	20	54	19	25	15	17	33	28	82	54	57	51	49	46	10.5	7.8
M3413	WAM	19	52	19	26	17	13	33	30	81	54	54	49	48	45	13.9	8.6
S1796	AM	24	58	20	23	15	15	33	30	86	55	56	50	50	41		9.5
M6109	SAM	20	60	22	29		17	37	31	90	57	60	52	53	50		9.2
25.10.8.36BNH		18	52	19	26	16	13	34	30	84	53	57	49	48	44	10.3	
M8278	SAM	19	53	19	25	16	16	36	32	81	54	57	49	49	45		8.3
M6159	SAM	18	54	19	25	15	15	34	28	84	52	58	50	49	46		8.5
25.10.8.35BNH		18	55	20	27	17	16	33	29	83	54	58	52	49	44	10.5	
M1966	SAM	20	55	21	25	16	17	34	28	85	56	57	49	52	50		
M1965	SAM	19	55	18	24		17	31	27	91	55	54	48	51	48		
M2933	SAM	19	55	19	27		15	33	29	84	53	53	47	50	47		
M6299	SAM	20	54	20	24		15	31	29	84	53	55	49	52	47		
C18	MAC	20	54	18	26	17	16	35	30	85	56	57	51	51	48	12.9	
C32	MAC	19	55	18	26	17	18	35	29	84	54	58	52	48	45	13.0	8.5
C9	MAC	21	55	19	25	18	16	35	30	84	55	58	53	52	45	15.7	8.8
C17	MAC	20	54	20	25	18	15	35	30	84	54	57	51	51	45	14.7	8.9
C30	MAC	19	52	18	26	17	17	33	29	83	53	56	51	50	47	13.7	8.1
25(B)	MAC	19	54	19	25	18	16	35	30	82	54	59	53	49	43	14.9	8.7
26	MAC	20	55	20	28	19	15	34	30	84	53	59	53	50	46	17.3	8.6
123	MAC	19	54	20	29	20	15	35	29	85	55	58	53	51	46	17.1	
141	MAC	21	55	19	26	17	16	34	27	85	54	59	52	54	47	13.0	9.2
118	MAC	20	56	19	26	18	18	34	29	88	55	58	53	53	48	14.8	8.7
C45	MAC	20	55	19	26	18	16	33	27	85	56	57	52	51	47	15.8	8.7
112	MAC	21	55	18	25	16	18	34	28	81	53	57	51	49	43	13.8	

Canis familiaris (dingo) ; males ; sample AC

Variables V33 to V48

M3412	WAM	36	51	37	58	43	65	37	51	21	13	28	32	46	57	11	12
M3413	WAM	33	50	35	55	44	63	37	50	21	13	26	30	45	57	10	10
S1796	AM	36	53	36	60	45	66	37	52	19	14	21	30			11	12
M6109	SAM	40	61	35	56	44	73	43	57	22	13	35	39	55	66	13	13
25.10.8.36BMNH		34	51	36	55	42	64	38	52	20	14	28	32	43	54	11	10
M8278	SAM	33	50	35	54	43	65	37	53	21	15	30	34	49	62	11	12
M6159	SAM	35	53	35	53	43	66	38	54	20	13	27	30	46	58	11	13
25.10.8.35BMNH		37	59	39	56	46	65	36	52	20	14	28	33	47	59	11	12
M1966	SAM	39	58	40	58	46	71	41	52	22	15	30	34	47	59		
M1965	SAM	40	55	36	54	43	66	39	50	20	14	30	32	47	62		
M2933	SAM	38	56	36	57	45	65	38	49	20	14	30	34	46	58		
M6299	SAM	38	59	36	56	50	68	37	52	19	13	32	36	49			
C18	MAC	37	57	39	57	46	68	37	53	20	14	30	33	46	59	11	13
C32	MAC	35	54	37	55	44	68	38	52	21	15	28	32	47	58	10	12
C9	MAC	35	52	38	56	47	69	38	53	20	14	29	34	47	60	13	12
C17	MAC	36	54	37	55	46	67	37	53	20	14	29	33	46	57	12	12
C30	MAC	40	60	36	54	44	66	35	51	18	13	27	30	44	56	11	11
25(B)	MAC	33	50	36	55	45	67	38	55	21	16	29	32	44	55	11	12
26	MAC	35	51	38	56	46	69	36	54	19	14	27	32	45	57	11	11
123	MAC	35	52	37	55	44	65	37	54	19	13	27	32	47	58	12	12
141	MAC	37	54	34	55	44	67	40	53	22	14	31	37	50	59	11	14
118	MAC	38	56	40	58	48	67	38	54	21	15	30	34	47	58	11	15
C45	MAC	35	53	39	58	47	67	38	53	20	16	28	32	46	59	10	12
112	MAC	33	49	36	58	46	67	36	52	19	13	29	32	42	56	11	11

Canis familiaris (dingo) ; males ; sample AC

Variables V49 to V64

M3412	WAM	6.9	12.1	18.7	11.7	10.8	10.0	9.0	14.9	7.4	5.0	4.2	19.0	6.1	61	17.7	19.0
M3413	WAM	7.3	12.2	20.2	12.0	10.6	9.9	9.7	14.7	7.6	4.9	4.1	19.5	6.0	63	19.1	20.4
S1796	AM	7.8	12.4	21.3	12.0	11.1	9.5	10.9	17.3	8.0	5.0	4.5		6.0	64		
M6109	SAM	7.5	13.3	20.4	12.9	11.5	10.5	10.0	14.5	7.6	5.2	4.3	20.5	5.9	62		
25.10.8.36BMNH		7.5	12.8	19.6			10.0	9.5	15.0	7.6		4.5	20.1			18.4	19.7
M8278	SAM	7.6	13.2	20.3			9.5	9.8	15.1	7.5	5.1	4.5	20.8		60		
M6159	SAM	7.4	13.0	20.0	13.2	11.2	10.2	9.6	15.8	7.5	5.3	4.3	20.4	6.9	65		
25.10.8.35BMNH		6.8	12.0	18.9	11.9	10.2	9.7		14.0	7.3	4.8	4.0	19.3	5.4		17.6	19.1
M1966	SAM																
M1965	SAM																
M2933	SAM																
M6299	SAM																
C18	MAC	8.0	13.0	20.0	12.4	11.0	10.5	10.2	15.4	7.9	5.2	4.4	20.7	6.1	63	18.9	19.8
C32	MAC	7.2	12.8	20.2	12.2	10.7	10.1	10.0	15.3	7.6	4.9	4.1	19.8	6.1	62	19.1	19.7
C9	MAC	7.3	13.0	19.8	12.1	10.3	9.8	9.6	16.1	7.3	4.8	4.1	19.8	5.5	63	18.8	20.0
C17	MAC	7.4	13.1	20.0	12.5	11.1	10.3	9.5	16.1	7.9	5.1	4.5	20.3	6.0	62	18.7	20.1
C30	MAC	7.0	12.2	19.6			10.4	9.4		5.0			18.2		61	18.8	19.2
25(B)	MAC	7.5	13.0	19.0	12.2		10.0	9.6	15.8	7.6	5.2		19.9		60	17.6	
26	MAC	7.3	13.1	20.5	12.6	11.1	10.0	9.6	16.2	8.1	5.1	4.5	20.4		62	19.0	19.9
123	MAC	7.4	12.4	19.8				9.6	15.3	7.8	5.0		19.2		63	18.7	
141	MAC	7.7	13.6	20.7	13.0	11.8	10.6	10.6	16.6	8.2	5.7	5.2	21.0	6.9	64	19.8	22.2
118	MAC	7.5	12.2	19.0		10.4	9.9	9.5	15.1	7.4	5.1	4.5	19.5	5.8	60	18.0	20.2
C45	MAC	7.5	12.7	20.1	12.0	10.7	10.8	10.1	16.4	7.7	4.9	4.2	20.3		61	18.8	20.0
112	MAC	7.5	12.1	19.3	11.3	10.3	9.3	9.8	15.1	7.3	4.4	4.3	19.2		59	18.0	

Canis familiaris (dingo) ; females ; sample AC

Variables V1 to V16

Id.

M3835	WAM	186	94	121	96	33	46	73	94	144	33	62	11	19	32	96
S1798	AM	183	179	89	119	94	29	45	72	87	143	33	56	11	17	99
M7467	SAM	188	92	120	92	34	51		88	145	32	59	13	19	30	100
C16968	NMV	192	177	94	124	95	33	49	75	92	149		11	18	30	101
M3834	WAM	191	94	123	95	33	50	75	92	146	35	59	11	19	28	99
M3838	WAM	191	95	122	97	34	50	76	93	148	34	61	12	20	29	100
M4975	WAM	189	93	119	95	35	46	70	92	147	34	60	12	19	32	103
S1797	AM	189	186	93	121	95	31	47	74	95	146	64	11	18	31	96
S1898	AM	169	167	83	109	87	27	41	69	77	131	28	52	10	15	85
M7468	SAM	186	90	117	91	33	50	73	88	143	32	59	13	18	32	102
M6158	SAM	182	91	117	91	32	48	70	86	140	31	57	12	17	30	93
M7470	SAM	192	92	124	94	31	53	79	91	149	28	67	11	19	32	112
M9039	SAM	188	95	123	97	35	47	74	90	146	33	58	12	19	32	96
M1968	SAM	178	166	89	114	90	29	46	69	85	139	29	58	12	19	97
M1966(2)	SAM	182	170	90	114	91	31	45	69	87	142	32	57	12	18	99
M61	SAM	187	174	93		93	35	51	73	87	139	34	56	14	18	105
C16	MAC	189	179	94	123	95	33	50	75	92	146	34	60	12	19	104
115	MAC	183	168	91	116	91	33	46	69	91	145	33	60	11	17	94
126	MAC	188	174	94	120	94	33	48	72	94	147		13	19	32	103
142	MAC	177	164	88	114	89	33	45	68	88	140	30	60	12	20	94
127A	MAC	191	176	93	121	93	30	49	76	93	146	33	61	13	19	104
113	MAC	185	173	93	119	93	33	47	73	90	146	33	60	12	18	92
9	MAC	190	174	93	120	93	32	47	73	95	147	34	63	12	19	95
4	MAC	194	180	95	123	96	35	50	75	97	151	34	64	12	19	102
116	MAC	192	178	92	122	96	32	50	76	91	148	35	59	11	19	102
3	MAC	185	175	92	118	95	32	47	73	90	146	35	60	10	17	97
109	MAC	176	162	86	112	89	29	41	68	83	137	30	56	10	16	91
111	MAC	182	170	90	117	91	31	47	72	90	141	31	61	12	19	94
107	MAC	182	170	91	117	91	31	46	70	89	142	32	59	10	18	91
117	MAC	193	176	92	120	93	31	49	76	92	148	33	60	11	18	104
C19	MAC	181	168	92	116	92	33	46	67	92	142	33	62	11	19	96

canis familiaris (dingo); females; sample AC

Variables V17 to V32

Id.	18	52	19	25	17	14	32	29	77	52	53	47	48	43	13.0	8.4	
M3835	WAM	18	52	19	25	17	14	32	29	77	52	53	47	48	43	13.0	8.4
S1798	AM	20	55	17	21	15	30	28	75	50	54	46	48	38		8.6	
M7467	SAM	17	51	17	25	14	34	28	79	50	56	47	47	42		8.3	
C16968	NMV	19	52	18	25	17	14		82	54	55	49	50	44		8.8	
M3834	WAM	20	55	19	26	17	15	33	80	53	55	47	49	42	16.4	8.3	
M3838	WAM	20	53	17	24	15	34	28	83	54	55	48	48	44	11.5	8.0	
M4975	WAM	19	53	19	25	17	14	32	80	51	54	46	49	44	10.0		
S1797	AM	19	56	19	23	12	33	29	79	53	53	45	50	41		7.6	
S1898	AM	29	55	19	21	14	29	26	74	52	48	42	47	35		8.0	
M7468	SAM	18	51	19	25	13	34	28	78	52	55	47	48	42		7.8	
M6158	SAM	20	52	19	25	13	33	28	78	55	54	47	41	41		8.8	
M7470	SAM	19	55	20	26	15	36	30	84	56	56	48	53	43			
M9039	SAM	20	54	19	26	15	32	28	80	57	56	48	52	43		8.2	
M1968	SAM	19	52	20	26	17	33	28	78	52	53	46	49	44			
M1966(2)	SAM	18	54	20	24	17	33	28	77	53	54	48	50	42			
M61	SAM	19	53	19	25	16	33	31	80	52	54	48	47	44			
C16	MAC	19	55	18	26	17	32	27	83	55	55	50	51	45	15.2	9.0	
115	MAC	20	52	19	25	17	33	28	77	53	53	47	49	43	13.2	7.5	
126	MAC	19	54	19	25	16	31	27	80	55	55	49	50	45		8.8	
142	MAC	18	49	19	24	16	32	27	77	52	51	47	49	42	12.9	8.2	
127A	MAC	20	56	20	25	18	34	27	82	54	56	50	51	46	16.3		
113	MAC	19	50	20	26	16	32	28	78	53	53	48	50	43	13.9	7.9	
9	MAC	18	53	20	25	17	34	28	78	52	56	51	48	44	16.7	8.6	
4	MAC	19	54	20	27	19	34	27	81	52	57	50	49	46	16.4	9.0	
116	MAC	20	53	20	26	17	34	29	80	54	57	51	51	44	15.3	7.8	
3	MAC	18	53	18	25	16	30	27	79	53	56	51	51	42	12.7	8.6	
109	MAC	18	48	18	24	16	30	27	75	52	53	48	49	41	12.2	8.0	
111	MAC	20	51	19	25	17	33	29	76	53	53	48	49	41	12.6	8.7	
107	MAC	18	51	19	25	17	33	27	76	51	53	47	47	40	15.7	8.2	
117	MAC	20	53	20	27	18	32	26	82	53	57	51	51	45	16.3	8.2	
C19	MAC	18	51	18	25	16	32	26	75	50	53	46	47	43	13.1	8.6	

Canis familiaris (dingo) ; females; sample AC

Id.	Variables V33 to V48															
M3835	WAM	33	36	54	43	63	35	49	18	12	29	33	43	56	10	12
S1798	AM	33	47	34	55	43	35	49	17	13	20	29			10	10
M7467	SAM	31	50	35	53	42	35	50	19	14	28	31	42	55	10	11
C16968	NMV	34	54	38	57	45	35	50	19	12	27	31	42	57	10	10
M3834	WAM	36	53	36	57	44	39	51	20	13	26	31	44	57	11	12
M3838	WAM	34	51	37	57	43	37	50	20	14	27	31	44	57	10	12
M4975	WAM	35	51	36	54	42	35	49	19	13	28	31	43	58	10	10
S1797	AM	33	49	34	57	43	35	48	19	14	20	29	21	33	10	10
S1898	AM	29	42	34	56	42	35	45	18	13	18	27			9	10
M7468	SAM	33	56	37	54	41	34	50	19	15	28	33	44	57	10	11
M6158	SAM	33	49	37	55	43	36	48	19	14	27	31	43	53	10	12
M7470	SAM	37	54	37	55	46	38	51	21	15	28	34	47	60	11	13
M9039	SAM	34	49	36	55	45	37	51	20	14	29	33	46	55	11	11
M1968	SAM	34	51	33	56	43	35	50	19	14	27	31	44	55		
M1966(2)	SAM	33	48	32	55	43	39	51	21	13	27	31	44	56		
M61	SAM	36	55	33	53	41	35	50	19	15	30	35	48	61		
C16	MAC	34	53	38	57	45	37	51	20	14	28	33	44	57	10	11
115	MAC	31	48	35	56	45	35	48	19	13	26	30	41	55	10	11
126	MAC	36	52	38	58	46	36	51	20	13	28	32	45	58	10	11
142	MAC	33	51	36	54	44	33	49	18	13	25	30	39	51	10	11
127A	MAC	36	52	37	56	45	35	51	20	13	28	33	47	58	10	10
113	MAC	32	47	33	53	41	35	49	18	13	28	32	44	55	10	11
9	MAC	33	51	33	54	42	36	51	19	13	26	30	42	54	11	13
4	MAC	34	52	36	54	42	35	52	19	13	28	32	45	57	10	12
116	MAC	34	52	37	57	44	37	51	21	14	28	33	46	60	10	12
3	MAC	34	53	37	55	45	36	52	20	12	27	30	44	54	10	11
109	MAC	31	43	31	55	43	35	48	18	12	24	29	41	51	9	10
111	MAC	34	50	37	55	45	34	49	18	12	27	30	42	54	10	11
107	MAC	31	47	34	54	43	35	49	20	12	26	30	42	52	8	10
117	MAC	38	57	39	55	45	36	52	19	13	27	32	46	58	10	11
C19	MAC	32	49	30	54	43	34	49	20	14	27	31	43	54	10	12

Canis familiaris (dingo) ; females ; sample AC

Id.		Variables V49 to V64															
		V49	V50	V51	V52	V53	V54	V55	V56	V57	V58	V59	V60	V61	V62	V63	V64
M3835	WAM	7.2	13.1	20.5	12.0	10.7	10.0	9.1	14.9	7.5	4.8	4.3	19.9	6.4	60	19.1	19.8
SI798	AM	6.5	11.6	18.7	11.6	10.0	9.3	9.9	16.5	7.5	4.4	4.2		5.2	59		
M7467	SAM	7.2	11.5			10.7	9.4	14.7	7.7				18.5		57		
CI6968	NMV	7.1	12.7	20.0	12.1	10.6	9.5	8.9	14.1	7.5	4.7	3.9	19.4	6.4	60	18.9	19.7
M3834	WAM	6.9	12.0	19.2				8.7	14.9	7.2	4.4		18.3		62	18.0	18.9
M3838	WAM	7.0	12.2	19.8	12.1	10.6	9.5	9.0	14.4	7.5	4.7	4.1	19.4		62	18.8	19.0
M4975	WAM	7.0		19.5				9.5		7.6	5.0	4.4	19.0		60		
SI797	AM	6.2	11.4	19.3	11.8	10.4	9.5	10.1	16.5	7.3	4.7	4.0		5.4	61		
SI898	AM	6.8	12.0	18.8	10.9	9.6	8.5	10.2	16.1	6.4	4.5	3.6			53		
M7468	SAM	7.2	11.9	19.5			10.4	9.0	14.9	7.7	4.7	4.0	18.7	6.0	54		
M6158	SAM	6.8	12.4	17.7	11.4	9.9	9.0	9.3	14.0	6.9	4.5	4.0	19.3	5.9	57		
M7470	SAM		11.8	18.5	11.0	10.0	10.0		14.9	7.6	4.7	4.3	19.3	5.3	60		
M9039	SAM	7.4	12.6	20.1	12.1	10.9	9.5	9.9	15.2	7.7	5.2	4.3	19.7	6.0	60		
M1968	SAM																
M1966(2)	SAM																
M61	SAM																
C16	MAC	7.1	12.7	20.0	12.1	11.1	10.0	9.5	15.0	7.8	4.8	4.1	19.5		60	19.1	19.9
I15	MAC	6.1	12.0	18.8	11.0	9.7	8.6	8.1	13.8	7.2	4.4	3.8	18.2	5.3	57	17.7	18.4
I26	MAC		13.0	19.5	11.9	10.2		15.1		7.5	5.0	4.4		5.8	60	18.6	
I42	MAC	6.6	12.2	17.9	11.1	10.0	9.0	8.9	13.6	6.8	4.3	3.8	18.4	5.8	56	16.9	17.9
I27A	MAC	6.7	12.6	19.8	11.9	10.5	9.4	8.8	14.2	7.2	4.9	4.2	19.1	6.1	57	18.7	19.1
I13	MAC	6.2	11.9	19.1	11.8	10.3	9.6	8.7	15.1	7.5	4.8	4.3	18.5	6.4	57	17.9	19.1
9	MAC	7.2	12.5	18.8	11.7	10.1	9.5	9.3	15.2	7.2	4.7	4.0	19.9	5.6	58	18.0	19.0
4	MAC	6.8	12.7	19.9	11.9	10.3	9.8	9.3	15.4	7.6	4.8	4.0	19.1	5.8	59	18.8	19.4
116	MAC	7.3	12.7	20.8	12.3	11.0	10.2	9.5	16.0	8.5	5.0	4.5	19.9	5.8	61	19.8	20.2
3	MAC	7.2	12.5	18.5	12.2	10.8	9.1	9.3	15.1	7.1	5.0	4.4	19.5		60	17.5	19.2
109	MAC	6.7	11.7	17.5	10.9	9.5	8.1	8.9		6.7	4.4	3.9	18.2	6.0	56	16.1	17.2
111	MAC	7.0	12.4	17.9	11.1	9.4	9.0	9.2	14.8	6.9	4.5	3.7	19.4	5.5	58	16.9	18.7
107	MAC	7.2	12.0	18.7	11.5	10.2	9.0	9.3	14.5	7.2	4.7	4.1	19.2	5.8	57	17.5	18.4
117	MAC		12.5	18.6	11.6		9.2	9.2	14.4	7.2	4.8	4.1			59	17.5	18.7
C19	MAC	7.0	12.0	19.0	11.5	10.2	9.1	9.0	14.9	7.1	4.9	4.1	19.1	6.0	57	17.9	19.2

Canis familiaris (dingo) ; females ; sample AC

Id.	Variables V65 to V80																
M3835	WAM	137	136	22	10	21.3	12.2	10.5	8.7	8.8	6.3	5.0	4.3	9.3	3.8	10.5	6.4
S1798	AM	133	132	20	9	20.4	11.1	10.0	8.2	8.2	6.3	4.5	4.2	9.8	6.1	8.8	5.8
M7467	SAM	137	137	20	9	20.4			8.3	8.3	6.5			8.0	4.5	10.4	6.8
C16968	NMV	140	140	22	9	20.8	11.3	10.1	8.3	8.1	5.6	4.6	4.1	8.7	5.5	10.3	6.6
M3834	WAM	141	142	20	9	20.3	12.6		8.0		6.0	4.6	4.0	9.1	6.5	9.4	6.4
M3838	WAM	141	141	22	9	20.5	11.7	10.1	8.3	8.7	6.3	5.0	4.4	9.3	6.4	10.2	6.5
M4975	WAM																
S1797	AM	138	138	20	9	19.3	11.5	9.2	8.4	8.2	6.2	4.7	3.9	8.8	6.1	9.5	6.4
S1898	AM	125	124	18	9	20.1	10.2	9.6	7.8	7.1	6.7	4.5	4.2		2.8	9.3	6.5
M7468	SAM	137	137	19	10	19.8	11.9	9.7		8.5	6.5	5.0		8.7	3.5	10.4	6.3
M6158	SAM	132	133	19	9	19.6	11.5	10.0	8.1	7.9	5.9	4.6	4.2	8.8	5.1	9.2	6.6
M7470	SAM	144	143	23	10	19.8	10.7	9.6	6.8	8.0	6.2	5.0	4.1	8.9	6.9	10.7	6.5
M9039	SAM	140	140	21	10	20.2	12.2	10.5	8.8	8.7	6.4	5.0	4.3	9.1	7.2	10.3	6.9
M1968	SAM																
M1966(2)	SAM																
M61	SAM																
C16	MAC	143	142	22	10	21.4	12.3			8.7	6.4			9.5	4.9	10.4	6.7
115	MAC	134	134	20	8	19.6	11.4	9.5	7.7	7.7	5.7	4.7	3.9	8.8	6.0	8.7	6.1
126	MAC	136	137	19	8		10.9	9.8	8.3		5.5	4.6	4.0		6.0	9.2	6.2
142	MAC	131	131	20	8	19.1	11.0		8.2	7.9	5.7	4.8	4.4	8.0	4.0	9.5	6.0
127A	MAC	138	138	22	10	19.6	11.7	10.3	8.0	7.9	6.3	5.1	4.2	9.0	5.3		6.7
113	MAC	136	135	20	10	19.9	12.1	10.3	8.7	8.1	6.1	5.0	4.3	9.3	4.4	9.6	6.3
9	MAC	138	137	21	9	21.1	11.3	9.5	7.5	8.0	6.0	4.8	4.4	9.0	5.5	9.5	6.9
4	MAC	145	145	21	10	21.2	11.7	10.1	8.6	8.3	6.3	5.2	4.3	9.5	5.0	9.8	6.9
116	MAC	139	140	20	10	21.5	12.6	10.5	8.9	8.6	6.5	5.4	4.9	9.6	4.3	10.6	6.6
3	MAC	137	139	20	9	20.2	11.8	10.5		7.8	6.4	5.2		9.4	6.3		6.9
109	MAC	128	127	18	9	18.5	10.9	9.5	7.8	7.5	5.6	4.6	4.1	8.9	5.2	8.7	6.0
111	MAC	136	133	21	9	19.9	11.1	9.1	7.7	8.1	5.5	4.8	4.3	9.5	5.5	9.1	6.7
107	MAC	133	132	20	9	19.7	11.8	10.0	7.8	8.1	6.0	4.9	4.1	9.4	5.4	9.2	6.6
117	MAC	139	140	21	10	19.5	11.4	10.2		8.0	6.0	5.0		9.3	5.4	9.4	6.3
C19	MAC	131	133	21	9	20.2	11.2	9.7	7.8	8.0	5.6	5.0	4.2	9.3	3.9	9.7	6.2

Canis familiaris (dingo); males
Non-arid sample; NA

Variables V1 to V16

M3841	WAM	212	104	135	103	37	58	82	101	165	38	66	13	21	36	109
7.9.1.56	BMNH	207	196	103	132	103	30	55	82	107	160	36	75	13	33	107
DARGO	NMV	210	193	101	132	101	35	56	82	104	158	35	72	13	34	115
M1749	AM	196	192	96	125	99	35	49	97	155	35	65	10	21	33	100
M7243	AM	201	198	100	125	99	34	51	76	97	153	32	67	13	35	
M5389	AM	213	210	108	135	105	38	57	81	101	162	37	66	13	34	115
M601	CSIRO	201	197	99	129	100	35	55	81	100	156	37	65	12	34	102
M326	CSIRO	197	193	93	125	97	29	54	80	95	155	37	60	13	34	106
M371	CSIRO	192	187	94	124	97	35	51	77	95	150	35	63	12	33	105
M365	CSIRO	205	201	102	137	100	35	54	71	103	161	39	66	13	36	110
153663	AMNH	202	183	98	128	98	36	52	75	98	159	35	66	12	30	102
7017	BERLIN	207	194	103	133	103	37	54	82	102	160	36	69	12	34	113
8.8.8.20	BMNH	211	195	104	134	105	39	54	82	104	163	39	68	12	34	109
Q01	ANU	211	194	103	132	103	37	55	81	102	165	36	67	15	39	106
Q03	ANU	212	196	104	135	104	39	56	81	104	163	38	68	14	36	107
Q06	ANU	206	190	101	130	99	36	57	79	97	157	36	63	15	35	108
Q08	ANU	213	197	105	135	103	38	58	82	104	167	37	70	13	36	106
S1998	AM	215	212	112	134	103	37	55	80	102	167	35	70	13	34	119
4.1.3.104ABMNH		210	194	103	135	101	37	56	80	104	165	37	70	13	33	105

Canis familiaris (dingo); males
Non-arid sample; NA

Variables V17 to V32

M3841	WAM	21	58	21	26	18	17	39	31	91	59	62	55	52	51	18.4	10.8
7.9.1.56	BMNH	21	57	22	28	20	16	35	30	83	55	60	54	52	47	13.5	
DARGO	NMV	21	58	20	28	17	14			87	54	63	56	51	50		8.4
M1749	AM	22	62	18	24		16	35	31	84	58		54	56	47		9.1
M7243	AM	21					17			83		56	52	52	44		7.2
M5389	AM	21	65	22	24		15	34	31	89	57	57	49	53	46		8.8
M601	CSIRO	20	54	19	26		17	36	32	86	60	63	53	49	48	18.2	9.1
M326	CSIRO	20	52	19	27		14	34	33	84	61	62	50	50	45	19.6	9.3
M371	CSIRO	20	54	20	26		14	35	30	83	59	62	47	50	48	15.6	8.7
M365	CSIRO	20	57	20	25		17	36	30	85	62	66	54	52	50	17.0	9.0
153663	AMNH	18	53	19	25	19	13	35	29	84	52	59	52	51	47	15.2	
7017	BERLN	19	57	21	27	17	15	34	31	87	54	60	53	50	48	14.5	
8.8.8.20	BMNH	20	54	19	26	17	17	36	30	88	53	60	52	51	50	10.0	
Q01	ANU	19	54	19	28	20	15	35	31	89	55	62	58	56	50	18.4	9.4
Q03	ANU	18	55	20	28	19	14	35	30	90	56	62	55	53	51	17.6	8.7
Q06	ANU	19	56	20	29	20	16	36	30	90	55	61	54	53	50	21.2	8.9
Q08	ANU	18	54	20	28	19	17	37	30	92	56	61	54	54	49	18.1	9.5
S1998	AM	20	62	18	23		14	37	31	90	55	60	50	52	45		8.0
4.1.3.104	ABMNH	21	56	20	27	17	16	37	31	88	55	61	54	53	48		

Canis familiaris (dingo); males
Non-arid sample; NA

Variables V33 to V48

M3841	WAM	41	59	40	59	46	70	44	57	22	13	32	36	49	63	12	12
7.9.1.56	BMNH	37	55	37	56	46	70	39	57	21	13	29	33	47	60	11	11
DARGO	NMV	34	55	38	58	44	69	42	58	21	15	31	36	52	64	12	11
M1749	AM	36	53	42	63	45	67					22	32	25	37	12	11
M7243	AM			34	58	44	68	39	54	19	14	23	35	28	39	12	13
M5389	AM	41	62	49	61	44	70	40	54	20	14	25	33	26	41	11	12
M601	CSIRO	35	51	35	52	41	67	38	53	19	15	30	33	44	57	12	12
M326	CSIRO	38	55	39	58	43	65	38	51	19	15	29	33	47	60	12	14
M371	CSIRO	35	53	36	57	42	67	39	50	19	14	30	34	46	61	11	11
M365	CSIRO	38	55	38	56	44	70	37	55	19	15	31	34	50	60	12	13
153663	AMNH	33	48	30	54	43	67	35	55	18	13	27	32	44	56	10	11
7017	BERLN	37	55	36		44	68	41	53	20	13	29	36	50	62	11	11
8.8.8.20	BMNH	37	55	36	55	42	69	40	56	20	14	30	34	49	61	10	12
Q01	ANU	38	56	39	59	45	73	40	60	21	16	33	36	49	59	13	14
Q03	ANU	38	56	39	57	46	72	39	59	21	14	32	36	50	62	12	12
Q06	ANU	40	59	39	58	43	72	38	56	19	13	31	37	49	61	12	15
Q08	ANU	40	59	41	59	47	72	39	56	21	16	30	35	48	59	11	14
S1998	AM	38	60	35	60	46	71	39	56	20	14	23			42	14	13
4.1.3.104ABMNH		37	55	36	56	43	71	41	55	21	14	27	32	47	48	12	13

Canis familiaris (dingo); males
Non-arid sample; NA

Variables V49 to V64

M3841	WAM	8.2	14.7	21.0	11.1	10.8	16.7	7.7	5.5	22.9	63	20.4	23.4
7.9.1.56	BMNH	7.2	13.2	21.4	11.3	11.0	9.4	15.4	5.2	4.2	6.5	20.6	21.1
DARGO	NMV	7.6	13.1	20.3	12.2	11.2	9.0	15.1	5.6	4.4	5.8	19.4	21.1
M1749	AM	7.7	13.5	18.8	12.2	10.0	10.8	10.8	5.6	4.4	5.8	62	
M7243	AM	7.4	12.8	19.6	11.7	10.2	10.9	10.7	4.8	4.1	5.6	59	
M5389	AM	6.8	13.2	19.5	11.5	10.1	9.9	10.3	5.0	4.0	6.0	61	
M601	CSIRO	7.1	12.8	19.6	12.2	10.9	10.2	9.3	4.8	4.4	6.2	60	18.2 20.0
M326	CSIRO	7.2	12.7	24.0	11.7	10.1	11.1	9.8	5.1	4.5	6.1	61	19.0 20.0
M371	CSIRO	13.1	19.9	12.6	11.9	10.4	9.7	15.5	5.1	4.5	5.9	61	18.7 19.6
M365	CSIRO	7.1	13.3	20.3	13.0	11.4	10.8	8.8	5.4	4.8	6.1	62	19.5 21.0
153663	AMNH	7.5	13.2	19.7	11.8	10.3	9.6	9.5	4.8	4.2	5.8		18.7 19.8
7017	BERLN	7.4	13.5	21.5			9.9	16.0	5.6	20.1			20.4 21.2
8.8.8.20	BMNH	7.8	13.6	21.4	13.5	11.5	11.2	10.5	5.4	4.3	6.7	20.5	22.0
Q01	ANU	7.8	13.6	21.1	13.0	10.9	9.7	15.4	5.1	20.9	6.8	65	20.1 20.9
Q03	ANU	8.0	13.3	20.8	13.4	11.5	11.1	10.4	5.3	4.4	6.6	62	19.6 20.8
Q06	ANU	7.6	13.4	20.4	12.5	10.5	10.0	16.2	5.4	4.6	6.0	60	19.3 20.6
Q08	ANU	7.7	13.6	20.4	13.0	11.2	10.3	10.3	5.3	4.3	5.9	62	19.2 20.8
S1998	AM	7.0	12.9	19.8	12.0	10.0	10.1	17.9	4.8		65		
4.1.3.104	BMNH	7.7	13.0	20.3	13.2	11.8	10.6	10.9	4.9	4.3	6.4	19.1	21.2

Canis familiaris (dingo); females
Non-arid sample; NA

Variables V1 to V16

C120	MAC	203	189	99	127	98	34	56	79	105	155	39	69	13	20	33	106
M3847	WAM	186		90	119	90	30	49	74	93	146	32	64	11	19	31	98
A116.16	BERLN	193	182	96	124	96	32	50	77	93	149	34	59	11	19	32	94
167.D	BMNH	183	174	93	119	92		50	73	86	137	35	55	13	19	36	113
M1036	MCLY	179	178	89	112	88	32	47	71	86	139	35	50	11	18	35	105
M7386	AM	192	188	96	123	96	31	49	78	92	145	36	59	12	20	31	101
F312	CSIRO	190	185	95	121	94	34	49	71	94	148	35	62	11	20	31	100
F278	CSIRO	187	183	95	123	95	32	50	74	96	145	35	64	11	20	30	97
F325	CSIRO	194	189	97	126	96	34	54	77	101	153	36	69	12	19	31	96
F446	CSIRO	193	188	95	124	96	29	53	76	92	149	34	61	11	18	30	102
F150	CSIRO	188	183	91	120	94	33	48	75	95	149	33	65	11	18	31	100
F321	CSIRO	196	191	97	127	96	34	53	75	98	153	38	62	12	21	32	102
F315	CSIRO	190	187	94	122	95	32	51	74	95	149	35	63	11	18	30	100
F362	CSIRO	198	194	98	124	96	33	49	72	97	157	35	64	10	19	29	100
F316	CSIRO	189	185	97	123	96	35	48	70	95	148	34	64	12	20	30	100
153629	AMNH	180	166	88	113	90	34	46	71	87	141	30	60	11	18	30	97
154465	AMNH	202	188	100	130	98	37	56	80	96	150	36	60	13	18	33	112
153664	AMNH	191	180	95	123	94	34	53	78	91	146	34	58	10	17	30	97
Q02	ANU	196	181	96	124	97	33	51	76	93	149	32	62	13	20	32	104
Q04	ANU	194	183	97	123	95	34	51	76	94	153	35	60	13	21	32	99
Q05	ANU	196	183	101	126	98	35	52	73	93	149	33	63	11	19	33	103
Q07	ANU	200	187	99	127	98	35	53	78	100	155	36	67	13	20	32	103
Q09	ANU	187	175	92	121	92	31	50	75	94	146	32	64	11	17	30	98
4.1.3.104	BMNH	194	185	97	127	97	35	52	79	98	155	34	67	11	19	30	98
R6957	NMV	196	179	96	123	95	33	52	74	92	148	34	63	12	20	32	109
G17229	NMV	189	177	95	120	93	30	51	75	93	144	34	61	12	20	32	115

Canis familiaris (dingo); females
Non-arid sample; NA

Variables V17 to V32

C120	MAC	20	58	20	26	16	18	37	28	84	58	60	55	52	49	14.3	9.8
M3847	WAM	18	53	19	24	15	14	33	27	76	54	54	47	50	44	13.2	8.8
A116.16	BERLN	19	54	20	26	17	16	32	29	81	55	56	49	50	43	15.8	
167.D	BMNH	18	56	20	25	17	15	30	30	81	54	52	47	50	43	16.3	
M1036	MCLY	21	59	23	20		15	32	31	81	60	52	46	55	42		8.9
M7386	AM	20	59	18	25		15	32	27	83	53	54	46	48	41		9.0
F312	CSIRO	19	54	20	26		15	36	29	77	57	61	50	50	45	17.0	8.2
F278	CSIRO	20	51	18	24		15	33	29	79	57	58	46	47	46	14.3	8.6
F325	CSIRO	20	53	18	25		15	33	30	80	58	59	49	49	46	14.8	9.0
F446	CSIRO	21	54	20	26		15	36	29	82	59	61	50	50	44	17.8	9.3
F150	CSIRO	18	51	19	25		14	34	30	80	57	60	49	48	45	14.4	9.5
F321	CSIRO	21	52	19	24		14	35	29	80	58	60	49	50	45	15.6	8.1
F315	CSIRO	1	53	18	25		16	35	30	80	58	60	46	48	45	13.6	8.4
F362	CSIRO	19	54	19	25		14	36	32	82	58	60	48	48	46	17.2	8.8
F316	CSIRO	19	51	19	25		14	36	30	78	58	60	47	50	47	17.5	7.9
153629	AMNH	18	50	18	25	17	13	34	28	75	51	52	46	48	42	10.0	
154465	AMNH	19	56	20	26	18	16	34	28	87	54	57	50	49	46	10.8	
153664	AMNH	18	53	18	28	17	15	31	29	83	52	56	50	47	42	13.6	
Q02	ANU	18	52	20	25	17	14	33	28	85	53	57	53	50	47	14.5	8.3
Q04	ANU	17	52	20	26	18	15	34	29	83	52	56	51	51	46	15.1	9.5
Q05	ANU	20	54	21	26	19	14	37	28	85	53	58	54	48	47	18.5	9.1
Q07	ANU	19	55	20	27	17	16	34	29	86	54	58	54	48	48	16.1	8.2
Q09	ANU	20	53	19	25	17	15	32	27	80	54	56	51	50	44	14.3	7.9
4.1.3.104	BMNH	21	54	21	26		15	34	29	85	53	55	51	49	46		
R6957	NMV	20	56	20	25	16	16			84	57	59	52	52	45		9.5
C17229	NMV	21	55	17	24	14	17			84	54	55	47	51	47		8.3

Canis familiaris (dingo); females
Non-arid sample; NA

Variables V33 to V48

C120	MAC	38	56	39	57	44	68	41	55	20	15	29	35	47	61	11	11
M3847	WAM	35	52	37	56	43	64	36	49	19	12	27	31	43	54	10	9
A116.16	BERLN	33	51	38	55	44	67	38	52	20	14	28	32	43	56	11	14
167.D	BMNH	35	49	35	55	46	67	37	48	19	13	33	35	47	62	11	10
M1036	MCLY	36	54	38	59	47	62	35	52	19	15	26	35	47	62	11	11
M7386	AM	34	51	38	59	44	65	37	53	21	12	21	31	44	62	12	12
F312	CSIRO	36	54	36	55	43	67	37	51	20	15	28	32	48	57	11	13
F278	CSIRO	32	51	35	54	42	61	35	48	18	13	28	31	44	57	11	13
F325	CSIRO	33	48	30	56	44	64	37	50	20	14	29	33	44	55	11	12
F446	CSIRO	34	53	36	54	44	68	37	54	19	15	27	32	45	57	12	14
F150	CSIRO	34	54	37	55	42	64	35	51	19	13	28	31	45	57	11	14
F321	CSIRO	34	53	31	55	43	64	37	50	20	13	29	33	46	57	12	13
F315	CSIRO	34	49	34	54	42	66	36	50	18	13	28	32	44	57	12	13
F362	CSIRO	32	50	33	54	44	65	37	50	19	14	26	31	43	55	11	13
F316	CSIRO	33	48	35	54	43	63	36	50	19	12	27	30	46	56	10	11
153629	AMNH	33	49	37	52	43	59	33	47	17	11	27	31	43	54	10	12
154465	AMNH	38	59	37	55	44	68	36	52	18	13	29	34	47	60	11	12
153664	AMNH	33	48	33	52	43	65	37	51	20	13	27	30	43	56	10	10
Q02	ANU	36	54	36	57	45	66	37	53	20	13	27	31	45	57	11	12
Q04	ANU	35	52	38	54	43	66	38	53	19	14	28	32	45	55	12	13
Q05	ANU	33	52	33	56	44	67	35	54	20	15	28	32	45	58	11	11
Q07	ANU	37	54	37	56	54	66	39	53	20	13	29	34	47	59	11	11
Q09	ANU	35	52	37	54	43	66	35	52	18	13	27	31	41	53	11	12
4.1.3.104	BMNH	34	49	35	55	44	67	38	52	20	14	26	31	42	55	11	10
R6957	NMV	34	54	37	56	47	67	38	53	19	13	28	31	42	60	11	11
C17229	NMV	39	56	44	58	51	65	33	50	18	15	28	32	41	58	11	11

Canis familiaris (dingo); females
Non-arid sample; NA

Variables V49 to V64

C120	MAC	7.5	13.4	19.9	10.5	10.4	16.5	7.5	20.7	57	19.0	21.1
M3847	WAM	6.7	12.9	20.2	10.7	9.3	9.1	15.0	4.1	55	19.1	
A116.16	BERLN	7.7	13.8	19.9	11.8	10.4	9.5	14.9	5.2		19.0	19.3
167.D	BMNH	7.5	12.5	18.3	11.3	10.4	9.6	9.4	4.3		17.0	19.3
M1036	MCLY	7.0	12.1	17.1	11.1	10.0	9.9	9.8	4.5	53		
M7386	AM	7.5	8.4	18.0	11.0	9.7	10.9	11.0	3.7	60		
F312	CSIRO	6.2	12.0	18.2	11.7	10.1	10.0	8.3	4.4			
F278	CSIRO	6.7	12.0	17.9	11.0	9.8	9.4	9.0	4.0	58	17.1	18.5
F325	CSIRO	6.7	12.7	18.7	11.0	10.1	9.3	8.4	3.9	59	17.5	19.5
F446	CSIRO	7.4	13.5	18.8	12.1	10.4	9.3	9.6	4.0	58	17.0	18.8
F150	CSIRO	7.4	13.1	19.8	12.3	11.0	9.9	9.2	4.0	58	17.9	19.3
F321	CSIRO	6.5	12.5	18.7	11.5	9.8	9.7	8.2	4.8	59	19.1	19.7
F315	CSIRO	6.7	12.9	19.5	12.3	11.0	9.9	8.6	4.1	60	17.1	18.5
F362	CSIRO	7.2	13.4	19.0	12.1	10.7	11.2	8.8	4.3	59	18.4	19.1
F316	CSIRO	7.0	12.6	18.4	10.2	9.0	14.7	7.5	4.2	60	17.2	19.0
153629	AMNH	6.9	11.9	18.0	10.2	9.0	14.7	7.5	4.0	60	17.6	19.7
154465	AMNH	6.5	12.0	18.5	11.8	10.5	9.9	8.4	18.7		17.3	18.2
153664	AMNH	7.1	12.8	18.9	11.7	10.4	8.7	9.2	4.2		17.3	18.6
Q02	ANU	7.7	13.3	19.3	12.1	10.5	9.6	10.0	4.0		17.9	17.8
Q04	ANU	7.0	12.8	19.2	11.9	10.4	9.5	9.0	4.1	60	17.6	19.3
Q05	ANU	7.4	13.3	20.3	12.5	10.0	10.1	15.8	4.9	59	17.8	19.2
Q07	ANU	7.0	13.0	19.3	11.7	10.6	9.3	9.6	5.3	59	18.5	21.4
Q09	ANU	7.5	12.4	18.4	8.7	9.0	14.5	7.3	4.4	62	18.2	19.6
4.1.3.104	BMNH	7.5	12.4	19.4	12.0	10.9	10.2	10.5	19.7	57	17.3	19.0
R6957	NMV	7.6	13.1	19.7	12.1	10.5	9.5	9.8	44.5		18.3	19
C17229	NMV	7.2	12.9	19.2	10.0	10.0	14.1	7.2	4.1	59	18.4	20.4
									21.0	55	18.0	19.3

Canis familiaris (dingo); females
Non-arid sample; NA

Variables V65 to V80

C120	MAC	149	148	22	11	21.8	12.1	10.6	8.5	6.5	5.4	10.4	3.0	11.4	7.0
M3847	WAM	137	136	22	10	20.4	12.3		8.2	6.0		9.6	4.0	9.7	6.6
A116.16	BERLN	141	140	22	10	21.0	12.1	10.5	9.0	6.5	5.3	4.9	3.5	10.0	6.4
167.D	BMNH	139	139	24	11	19.5	12.0	10.2	8.5	7.8	6.1	5.0	2.1	9.9	7.0
M1036	MCLY	133	136	24	10	19.8	11.2	10.3	9.1	7.9	5.5	4.1	1.9	10.1	6.9
M7386	AM	142	141	22	10	19.6	11.5	9.0	6.7	8.0	6.8	5.2	4.1	6.9	7.0
F312	CSIRO	140	139	21	9	19.3	11.7	10.0	8.0	7.7	6.2	4.9	4.2	10.1	6.3
F278	CSIRO	140	139	21	9	20.6	11.4	10.1	7.7	8.0	6.1	5.0	4.3	9.2	6.7
F325	CSIRO	145	144	22	9	20.1	10.7	9.3	7.8	7.5	6.8	4.5	4.2	9.6	6.4
F446	CSIRO	143	143	21	10	21.2	12.2	10.2	8.4	8.5	6.2	4.8	4.2	10.0	6.8
F150	CSIRO	136	138	20	9	21.3	12.1	10.1	8.8	8.1	6.1	5.2	4.5	9.7	6.8
F321	CSIRO	145	143	23	10	20.2		9.8	7.9		4.7	4.3	9.5	7.0	6.3
F315	CSIRO	141	142	22	10	20.6	12.2	10.6	8.6	7.9	6.3	5.0	4.3	10.3	6.5
F362	CSIRO	141	143	22	9	20.6	12.5	10.2	7.7	8.0	6.2	5.1	4.3	10.0	7.0
F316	CSIRO	141	140	22	10	20.8			8.5	6.1	5.1	5.1	4.5	10.1	6.6
153629	AMNH	133	131	20	19	19.0			7.8	5.7	4.6	9.0	4.2		
154465	AMNH	148	149	23	10	19.7	11.3	9.9	8.7	8.1	6.5	5.0	4.7	9.0	6.2
153664	AMNH	141	142	21	9	19.2	11.2	10.0	8.5	7.6	5.9	4.8	4.3	9.1	6.5
Q02	ANU	143	144	23	10	20.9	12.0	10.2	8.4	8.5	6.2	4.9	4.4	9.4	6.3
Q04	ANU	145	144	23	10	20.8	12.3	10.8	8.5	8.5	6.2	5.1	4.5	9.5	7.0
Q05	ANU	145	145	22	11	22.2	12.1		8.8	6.9	5.7	4.9	2.7	10.3	6.9
Q07	ANU	147	148	23	10	20.8	12.2	10.3	9.2	8.3	6.6	5.4	4.8	9.6	6.8
Q09	ANU	138	137	21	9	20.0			8.1	6.1		8.9	4.5	9.1	6.2
4.1.3.104	BMNH	143	145	22	10	20.4	12.5	10.3	8.6	8.1	6.3	4.9	4.5	10.4	6.7
R6957	NMV	146	147	22	11	21.5	12.6	10.4	9.7	8.4	6.4	5.4	4.4	10.4	6.9
C17229	NMV	141	139	21	11	21.3	11.2		8.7	6.3	5.0	8.9	2.2	10.3	6.7

APPENDIX 7

NON-METRICAL DATA ON CANID CRANIA

1. Sample 0 males
2. Sample 0 females
3. Group A and B fossil dingoes
4. Australian working dogs
5. *C. lupus pallipes*
6. *C. aureus*

Key: presence (1), absence (0), missing data (4)

APPENDIX 8

PRINCIPAL COMPONENTS ANALYSIS OF REGIONALLY
DEFINED SAMPLES OF MODERN AUSTRALIAN DINGOES

Principal components analysis on the total Australian sample

Variables:	Labels:	Components	Eigenvalue	% of var	Cum %
V1	TOTAL L.	1	19.34122	56.9	56.9
V2	CONDYLOBASAL L.	2	2.78578	8.2	65.1
V3	PROS-STAPH	3	2.17534	6.4	71.5
V4	PROS-I.S.SUTURE	4	1.12205	3.3	74.8
V5	PROS-M2	5	1.00715	3.0	77.7
V6	PAL. BONE L.	6	0.89098	2.6	80.4
V7	M2-PREBULLA	7	0.79901	2.4	82.7
V8	STAPH-BASION	8	0.69585	2.0	84.8
V9	PROS-NASION	9	0.54186	1.6	86.4
V10	PROS-BREGMA	10	0.52821	1.6	87.9
V11	PROS-ANT.NAS.BONE	11	0.50597	1.5	89.4
V12	NAS.BONE L.	12	0.43401	1.3	90.7
V15	LEAST ROSTRAL W.	13	0.41860	1.2	91.9
V16	BIZYGOMATIC W.	14	0.37931	1.1	93.0
V18	PORION-PORION	15	0.31584	0.9	93.9
V23	ORBIT MAX.L.	16	0.26672	0.8	94.7
V24	ORBIT W.	17	0.23677	0.7	95.4
V25	POR-NASION	18	0.23116	0.7	96.1
V26	POR-BREGMA	19	0.19863	0.6	96.7
V27	POR-INION	20	0.19021	0.6	97.2
V29	BASISPEN-BREGMA	21	0.18289	0.5	97.8
V30	NASION-STAPH	22	0.15012	0.4	98.2
V33	INTERORB.W.	23	0.12276	0.4	98.6
V34	SUPRAORBITAL W.	24	0.09271	0.3	98.9
V35	LEAST CRANIAL W.	25	0.08210	0.2	99.1
V36	MAX. CRANIAL W.	26	0.07611	0.2	99.3
V37	SQUAMOUS CRANIAL W.	27	0.05585	0.2	99.5
V38	MASTOID W.	28	0.05030	0.1	99.6
V39	OCCIP.CONDYLE W.	29	0.03968	0.1	99.8
V40	INION-MASTOID	30	0.03182	0.1	99.9
V43	P1-P1	31	0.02386	0.1	99.9
V44	P2-P2	32	0.01426	0.0	100.0
V45	P3-P3	33	0.00790	0.0	100.0
V46	P4-P4	34	0.00497	0.0	100.0

Principal Components

	1	2	3	4	5	6	7
V1	0.95954	-0.01507	-0.18532	-0.09695	0.01468	0.02688	-0.03191
V2	0.84501	-0.18809	-0.32143	0.21316	0.12284	-0.11234	-0.04929
V3	0.91161	-0.03114	-0.21553	-0.07050	-0.05690	-0.01872	-0.03732
V4	0.93728	0.05468	-0.22706	-0.08391	-0.00964	-0.00797	-0.06790
V5	0.91976	-0.01295	-0.20331	-0.09486	-0.02124	0.01051	-0.05383
V6	0.72739	0.10255	-0.15176	-0.09015	-0.13905	-0.20947	0.08268
V7	0.90374	0.07228	-0.02992	0.01873	-0.01120	-0.09682	-0.10045
V8	0.87380	-0.03434	-0.06201	-0.06360	-0.01098	-0.05094	-0.20159
V9	0.86183	0.07306	-0.32387	-0.17775	0.09999	0.13561	0.14793
V10	0.91100	-0.00209	-0.25031	-0.10378	0.07632	0.12258	0.04144
V11	0.79087	0.06771	-0.19105	-0.10793	0.00580	-0.06094	0.08577
V12	0.74552	0.07859	-0.35475	-0.13856	0.15671	0.25328	0.14733
V15	0.77493	0.00322	0.26599	0.23025	-0.18421	-0.13246	0.14318
V16	0.82696	-0.02915	0.24040	0.03865	0.02677	-0.16295	-0.13695
V18	0.67709	-0.47512	0.05691	0.10581	-0.14659	-0.04243	-0.33169
V23	0.64804	0.14433	-0.26455	0.28251	-0.02764	0.16680	0.25409
V24	0.54861	-0.04548	-0.05480	0.62670	0.18786	-0.21028	0.14269
V25	0.88345	-0.10547	0.06130	-0.11932	-0.13065	-0.02769	-0.10430
V26	0.47594	-0.16300	0.20192	0.00516	-0.57142	0.15340	0.31301
V27	0.71274	0.19019	-0.17474	0.29957	0.35802	0.00865	-0.00732
V29	0.67505	-0.30128	0.26259	0.02824	-0.12312	0.14749	0.21073
V30	0.86848	0.17444	0.00860	-0.14315	0.01400	0.09581	0.22043
V33	0.76217	-0.14703	0.31771	-0.30224	0.11731	-0.25562	0.07476
V34	0.70664	-0.13107	0.28025	-0.33541	0.19033	-0.31792	0.11779
V35	0.45752	-0.44899	0.40137	-0.08172	0.32393	-0.10665	0.18108
V36	0.49459	-0.62677	0.22982	0.14153	0.04593	0.22415	-0.10107
V37	0.31523	-0.35263	0.49462	-0.00068	0.30190	0.49994	-0.04803
V38	0.87857	-0.04558	0.06282	0.09992	-0.02834	0.02263	-0.19875
V39	0.80687	-0.00888	-0.03005	0.04469	-0.26886	0.06553	-0.23954
V40	0.86107	-0.02145	-0.03723	-0.00224	-0.06745	0.15037	-0.07661
V43	0.56798	0.61957	0.42588	0.10027	-0.00148	0.00454	0.13090
V44	0.75532	0.15681	0.36130	0.20481	-0.12787	-0.10600	0.04208
V45	0.48606	0.74187	0.28101	-0.04566	0.05536	0.14294	-0.17403
V46	0.41436	0.74125	0.39582	-0.01683	0.05939	0.09829	-0.15367

Case scores on the first five Principal components

Total Australian sample

M490	CSIRO	0.793614	0.012294	0.339824	2.164575	2.572684
M238	CSIRO	-0.134279	-0.127573	0.225427	0.186830	2.792639
M293	CSIRO	0.668668	0.536976	0.063606	1.597904	2.049807
M234	CSIRO	0.232437	-0.054118	0.104799	1.174453	2.219767
M90	CSIRO	0.268511	0.553225	-0.031467	0.864147	2.284274
M497	CSIRO	1.199576	1.525879	-1.707129	1.151932	0.240069
M249	CSIRO	0.929476	0.122455	-1.002678	-0.391135	2.224714
M516	CSIRO	1.163724	0.874249	-0.522177	1.155930	0.524913
M518	CSIRO	-0.120284	1.111635	0.145832	2.482280	1.687631
M200	CSIRO	1.173409	0.828772	-0.573475	1.665630	0.696205
M155	CSIRO	0.169460	0.220548	0.022149	-0.089198	0.868595
M275	CSIRO	-0.209997	0.127811	-0.095550	-1.346598	-0.307328
M226	CSIRO	0.981542	-0.290929	0.102638	-2.397508	0.350405
M105	CSIRO	1.230344	0.838415	-0.877584	0.127100	-0.385537
M117	CSIRO	0.819575	0.520181	-0.280879	-0.450645	-0.713656
M116	CSIRO	-0.369712	0.653793	-0.020124	-0.285363	0.020395
M242	CSIRO	1.343195	0.038316	-0.385673	-1.302889	-0.766498
M130	CSIRO	0.365654	0.057292	-0.797391	-0.125857	0.125208
M108	CSIRO	2.052445	0.326425	-0.933530	-0.348949	-0.817555
M270	CSIRO	1.076758	0.543169	0.196346	-0.094406	-0.966644
M148	CSIRO	0.623496	0.027316	0.705745	-0.307663	0.136973
M112	CSIRO	0.805909	0.057285	-0.773926	-0.756262	0.132982
M125	CSIRO	0.008478	0.050613	-0.469982	-0.410156	-0.331942
M150	CSIRO	0.540062	0.157746	0.503838	0.654475	-0.939378
M147	CSIRO	0.875207	0.387549	-1.311220	-0.430344	0.088629
M152	CSIRO	1.029888	-0.413736	0.344478	-1.415166	0.618947
M154	CSIRO	0.002223	0.276356	-0.134667	-0.143766	0.543793
M102	CSIRO	1.443659	-0.012433	0.250229	0.348540	-0.784879
M145	CSIRO	0.821773	-0.344150	0.518235	0.606811	-0.589133
M149	CSIRO	0.172539	0.023283	-0.247701	-0.057608	0.186848
F455	CSIRO	-0.217065	0.106856	-1.026635	0.056581	0.872041
F468	CSIRO	-1.841078	0.394964	0.495170	1.120056	2.812613
F244	CSIRO	-0.401191	0.801227	-0.996319	0.712315	1.581432
F470	CSIRO	-0.512267	0.283669	-0.878037	-0.060200	2.079369
F480	CSIRO	-1.412077	0.547034	-0.658266	0.685804	1.929502
F202	CSIRO	-0.621051	0.224831	0.051622	0.971927	2.060183
F462	CSIRO	-0.716965	-0.032377	-0.696593	0.553882	2.430138
F304	CSIRO	-0.431266	0.369923	-0.781293	1.705205	1.605797
F238	CSIRO	0.344072	-0.009812	0.024684	0.458006	2.179565
F249	CSIRO	-0.749079	0.215450	-0.852776	1.087341	1.294386
F254	CSIRO	-1.063465	0.431728	-0.980636	0.861110	1.862930
F239	CSIRO	0.316563	-0.347217	-0.465527	-0.472165	2.702714
F399	CSIRO	-0.887524	0.086653	0.063591	1.718304	1.142732
F610	CSIRO	-0.137146	0.294101	-0.739852	0.744724	1.744860
F295	CSIRO	-0.821254	-1.089411	0.623720	-0.570535	0.221432
F217	CSIRO	-0.534125	0.415641	0.221700	-0.404535	-0.363001
F102	CSIRO	-1.023016	0.972890	-1.068058	0.414097	-1.599554
F204	CSIRO	-0.018331	-0.125608	-0.017418	-0.798042	-0.623379
F245	CSIRO	-1.316841	0.499054	0.579554	-0.202568	0.361822
F266	CSIRO	-1.484699	0.585137	-1.039063	-0.866519	-0.047319
F252	CSIRO	-0.765679	1.234213	-1.489413	0.454209	-1.297777
F257	CSIRO	-0.642215	0.054703	-0.349091	-0.401688	-0.333182
F271	CSIRO	-1.512823	0.610667	-0.536577	-1.962347	-0.120661
F267	CSIRO	-1.270686	1.177146	-0.900613	-0.115666	-0.882991
F299	CSIRO	-1.248861	-0.163280	0.568759	-1.043060	-0.141225

Case scores (cont'd)

F205	CSIRO	-0.189041	-0.532885	0.817478	-0.772893	-0.240555
F236	CSIRO	-1.371734	-0.404903	0.075261	-0.320550	0.222099
F103	CSIRO	0.077351	-0.352712	0.010377	-0.874643	0.146471
F285	CSIRO	-0.180249	0.615191	-0.188961	-1.291265	0.032344
F286	CSIRO	-0.659032	0.021498	-1.398326	-0.427310	-0.441498
77	MAC	1.261994	0.551536	-0.403428	-1.435594	-0.495514
M4210	WAM	1.150519	-1.958676	-1.613060	1.274449	-1.273085
M4199	WAM	1.091098	0.025778	-0.645958	-0.579377	0.430248
S1807	AM	-0.372785	-0.746250	0.704295	1.213182	-2.040635
M4207	WAM	0.949639	0.506125	0.355079	-1.135910	-0.704839
M6150	WAM	0.875904	-0.030538	0.651768	-1.754364	0.563725
C88	MAC	-0.005023	0.428115	-0.239037	-0.790743	-1.359303
C50	MAC	0.641130	-0.267659	0.604009	-0.090451	0.934629
C90	MAC	-0.088332	0.112026	0.236406	0.011633	-0.078322
C39	MAC	0.721812	0.084525	0.660698	0.043401	-1.295909
74	MAC	0.556519	0.194105	-0.302072	-0.608457	-0.335934
91 (A)	MAC	1.665934	0.026607	1.163629	1.149176	-0.275040
91	MAC	0.845013	0.709008	-0.027690	-2.471642	-0.615516
108	MAC	0.496935	0.460082	-0.858998	-0.467233	-0.023293
91(B)	MAC	1.320944	-0.186922	0.994598	-1.738996	0.174564
75	MAC	0.542424	-0.281160	0.070047	-0.318170	1.010761
110	MAC	-0.571869	0.676719	0.035984	0.579895	-0.346070
M4684	SAM	-0.231875	0.139301	0.330281	-1.240536	0.812117
M4210	WAM	-0.326019	0.995188	1.767490	1.197056	-2.221239
M7420	WAM	1.057619	0.295100	2.085762	0.854240	-1.575998
M4568	WAM	-0.770606	-0.582137	0.915782	-0.340009	0.595864
M4010	WAM	-0.074264	0.382563	-0.095612	-0.790944	-0.697510
M4242	WAM	0.100995	1.345306	-1.470948	-0.950304	-1.328887
M4203	WAM	0.752546	0.834853	-1.545077	-1.847314	-1.169849
M3826	WAM	-0.772157	0.124093	-0.169047	-1.582739	0.559543
M3824	WAM	-0.865668	0.343995	-1.878087	-0.489024	0.251255
M4213	WAM	-1.220402	0.427952	-0.870035	-0.061044	-0.900493
M6639	WAM	-1.215546	-0.249832	1.384410	1.142096	0.211411
M4212	WAM	-1.346799	-0.402361	0.144910	-0.741427	-1.185787
M4211	WAM	-1.611540	-0.055250	-0.059888	1.723388	-0.336642
C101	MAC	-1.784016	0.243933	0.102475	-0.228140	-1.125903
C71	MAC	-0.843051	-0.260998	-0.324061	0.008737	0.986871
C60	MAC	-1.651029	-0.125964	-0.557178	0.407687	0.081754
79	MAC	-0.218256	0.820309	-0.742399	1.127334	-1.150995
102	MAC	-1.107941	-0.123824	-0.271212	0.672930	-0.462999
106	MAC	-0.486752	0.222221	-0.094541	-0.627961	0.041442
M4686	SAM	-1.519820	0.559707	-0.575277	-1.261736	-0.136627
M3889	SAM	-1.304519	-0.059152	-0.364153	-2.004155	0.345949
M5153	SAM	-0.825321	-0.064529	0.411182	-0.039408	0.273184
M1962	SAM	-0.553005	-0.097327	-0.252467	0.167703	0.176805
M3041	SAM	-1.540596	-0.133848	1.013563	0.483588	-0.153332
M4629	SAM	-0.909060	0.426881	-0.103627	0.001277	-0.708659
M3889(2)	SAM	-0.814184	0.163020	0.049291	-0.010329	-0.339998
M4685	SAM	-1.002781	-0.284484	2.867719	0.589835	0.013714
M3412	WAM	-0.015367	0.269857	-1.612310	-0.871693	0.280480
M3413	WAM	-0.750877	0.430349	0.197219	0.167464	0.120997
S1796	AM	-1.627143	-0.878464	-0.421895	-0.045367	0.387810
M6109	SAM	0.243474	1.498394	0.240183	2.600625	-0.592760
25.10.8.36BMN		-0.943728	0.735918	-0.653666	0.603786	0.198515
M8278	SA	0.644241	0.714143	-1.786987	-1.938774	0.209281
M6159	S	0.196845	-0.283949	1.240134	-0.824909	1.458210
25.10.8.35F		0.249896	-0.222967	1.731961	1.228701	-0.089323
M1966		-0.322244	-0.157761	0.979292	0.421527	-1.591642

Case scores (cont d)

M1965	SAM	-0.370622	-0.626011	0.464801	-0.624502	0.806142
M2933	SAM	1.582096	-0.339984	0.451020	-2.023975	0.278839
M6299	SAM	0.476804	0.432614	1.457168	-2.255993	-1.599211
C18	MAC	0.394674	-0.077950	0.954121	-0.755889	-0.043006
C32	MAC	0.609988	-0.054532	2.930901	-0.610158	0.482078
C9	MAC	0.785381	-0.172305	0.826983	-0.311977	0.673335
C17	MAC	0.321209	0.288816	0.171300	0.197080	-0.008096
C30	MAC	0.718233	-0.054180	0.718424	0.803340	0.232843
25(B)	MAC	0.537979	-0.018291	0.224485	0.217215	0.620697
26	MAC	0.085417	-0.079620	0.144006	-2.211517	1.253396
123	MAC	0.189299	0.098245	-0.335518	1.408653	-0.178834
141	MAC	0.485718	-0.357498	-0.139456	0.362095	0.980932
118	MAC	0.771336	0.294372	-0.835100	-0.530379	-0.384641
C45	MAC	1.182451	0.909502	0.395149	-0.860668	-1.461464
112	MAC	1.023444	-0.798182	1.549672	-0.577853	0.942804
M3835	WAM	0.449958	-0.606757	0.866178	-1.261038	-0.046838
S1798	AM	-0.316754	-0.521220	0.712308	0.938164	0.046062
M7467	SAM	-0.368785	-0.612204	0.110110	-0.696673	-0.109764
C16968	NMV	-0.302188	-0.192288	-0.244495	-0.497714	-0.228870
M3834	WAM	0.053979	-0.124419	0.309104	-0.381810	-0.332061
M3838	WAM	0.503643	-2.111218	-0.972630	-0.110735	-0.157623
M4975	WAM	-0.647735	0.342017	0.229232	-0.521139	-0.062809
S1797	AM	-1.058159	-3.978682	-2.787857	0.398916	-0.765527
S1898	AM	-3.062082	-1.302152	0.509770	0.316017	-1.661136
M7468	SAM	2.791309	1.652846	1.446207	0.418163	-2.011463
M6158	SAM	-0.844249	0.580676	0.686118	0.381776	0.187149
M7470	SAM	-1.369497	0.088944	0.039953	0.674548	-0.190289
M9039	SAM	-0.070658	0.199931	-0.932772	0.389683	-0.360421
M1968	SAM	-1.405234	0.063262	1.112019	0.342652	-0.394347
M1966(2)	SAM	-1.163385	0.164194	0.592379	0.856177	-1.653905
M61	SAM	-0.389401	1.660947	1.309822	1.363921	-0.989613
C16	MAC	-0.153944	-0.608381	1.384299	-0.633727	-0.716502
115	MAC	-1.263997	-0.308041	0.102694	0.030586	-0.133814
126	MAC	-0.360802	-0.576614	1.682490	-1.289377	0.117764
142	MAC	-1.727320	-0.485464	0.509175	-1.124709	0.120516
127A	MAC	-0.220099	-0.168002	1.478995	-0.401717	-0.045542
113	MAC	-1.052161	0.900930	-0.260542	0.109322	-1.533740
9	MAC	-0.799568	0.288919	-1.134225	-0.374271	-0.235135
4	MAC	-0.120389	0.607519	-0.449844	-0.904472	-0.122017
116	MAC	-0.166075	0.083089	1.008852	0.745369	-0.115350
3	MAC	-0.757096	-0.566761	0.773986	-1.304742	0.302226
109	MAC	-2.280263	-0.131234	0.080880	0.107318	-0.953230
111	MAC	-1.239196	-0.363763	0.717229	0.244076	0.721718
107	MAC	-1.583503	0.142571	-0.534345	-0.074949	-0.289277
117	MAC	-0.267161	-0.332212	1.706742	-2.086450	0.838822
C19	MAC	-1.397363	0.843413	-0.449579	-0.884943	-0.569547
M3841	WAM	2.428578	0.059201	1.178305	0.519877	-0.966184
7.9.1.56	BMNH	1.437329	-0.121623	-0.622104	-0.147707	1.052465
DARGO	NMV	1.831108	0.798615	0.320618	0.159743	-0.061863
M1749	AM	0.246528	-0.667473	1.190646	0.354838	-0.315622
M7243	AM	0.070634	-1.935071	3.378922	-0.711665	2.934189
M5389	AM	0.610655	-6.067810	-0.865961	1.676515	-0.721240
M601	CSIRO	0.392033	-3.687013	-2.158403	1.158636	-1.880459
M326	CSIRO	1.951339	-5.318561	-0.584898	-0.530183	0.376136
M371	CSIRO	0.942242	1.046348	-1.538051	1.807462	-1.267808
M365	CSIRO	0.646362	-0.150655	1.049440	2.157933	0.387577
153663	AM	0.494729	0.643384	0.466118	1.475171	-1.095809
7017	BL	1.629844	0.470204	0.127621	0.988932	-0.398297

Case scores (cont'd)

8.8.8.20	BMNH	0.253065	0.827956	-1.982940	0.103172	-0.564293
Q01	ANU	1.570004	0.716970	-0.272066	0.323110	-0.237424
Q03	ANU	1.700737	1.130644	-1.289213	-0.550055	-0.423998
Q06	ANU	2.107606	0.015342	1.059711	1.196123	-0.386172
Q08	ANU	2.124196	0.509584	0.489394	-0.114704	-0.035044
S1998	AM	1.637848	0.193438	1.358143	0.416717	-0.266711
4.1.3.104	ABMNH	0.820504	-0.284242	1.116201	-0.706439	1.753768
C120	MAC	2.200136	-0.571798	0.486186	-0.441012	0.737443
M3847	WAM	2.021018	-3.106264	-2.150516	0.624674	-0.020122
A116.16	BERLN	1.555785	-0.610458	-2.011361	0.250864	-0.506766
167.D	BMNH	1.364573	-0.021776	0.238970	-0.551012	-0.719192
M1036	MCLY	-0.773358	-0.479806	0.478979	-0.504971	0.098190
M7386	AM	-0.193558	-0.362301	0.317587	0.378621	-0.618575
F312	CSIRO	-0.338132	0.667285	3.429730	1.864026	-1.633677
F278	CSIRO	-0.672067	-4.106736	2.648756	2.605745	-2.313405
F325	CSIRO	-0.519798	-4.416227	-1.592273	-0.369864	-0.943149
F446	CSIRO	-0.050389	0.445712	0.107120	0.826908	-0.072774
F150	CSIRO	-0.568138	0.829472	-0.818697	0.002407	-0.078486
F321	CSIRO	0.127014	0.651277	-1.441158	0.883594	-1.044115
F315	CSIRO	0.067429	0.021029	-0.064435	1.090797	-0.405579
F362	CSIRO	-0.331219	0.467318	-0.153232	0.586488	0.606162
F316	CSIRO	0.224549	0.944134	-0.853667	0.643757	-1.163875
153629	AMNH	-0.215230	0.684056	-0.827484	1.349158	-0.535744
154465	AMNH	0.007004	0.142416	-1.877154	1.909439	-0.086653
153664	AMNH	-0.294814	0.664204	-1.077106	1.091701	-0.317771
Q02	ANU	-1.559292	0.534664	0.507438	-0.070116	0.365818
Q04	ANU	0.824123	0.279260	0.762125	-1.241372	-0.209665
Q05	ANU	-0.600084	0.578107	-0.823213	-0.068805	-0.693856
Q07	ANU	0.056598	-0.272729	0.554203	-0.807781	0.244336
Q09	ANU	0.055072	0.131744	-0.027512	-0.139165	-0.124493
4.1.3.104	BMNH	0.195305	0.585232	-0.612089	0.533747	-0.610635
R6957	NMV	-0.623210	-0.377910	0.169393	-1.129720	0.044388
C17229	NMV	0.128870	-0.217917	-1.386711	-0.497406	-0.375201

APPENDIX 9

INFORMATION CONCERNING THE d_1^2 ANALYSIS

Input data to program YPIMSL: means, standard deviations, and correlation matrix:

1. Combined sample (O + AC + AP + NA) dingoes
2. *C. lupus* (southern Asian varieties).

Australian dingo population parameters : MALES
 Cranial variables V1,V3,V4,V7,V8,V12,V18,V25,V38,V40,V46
 Means, standard deviations, and correlation matrix.

201.9623	99.3019	128.9245	53.0189	78.1509	65.3962	54.9623	85.3962
67.6604	53.9057	57.9811					
6.6880	3.9739	4.0471	2.8789	2.9378	3.6708	2.5036	2.8578
2.6814	2.3555	4.3123					
1.000000	0.9027419	0.9206859	0.7900783	0.7069658	0.7009094	0.6488306	0.7835921
0.7295321	0.7175403	-0.0453681					
0.9027419	1.0000000	0.8934805	0.7138988	0.5577376	0.6692638	0.6893090	0.6683078
0.6143932	0.5721737	-0.2106384					
0.9206859	0.8934805	1.0000000	0.8204466	0.6236970	0.6984877	0.6260561	0.6727255
0.6763048	0.5822271	0.0329757					
0.7900783	0.7138988	0.8204466	1.0000000	0.7659215	0.5797784	0.5390689	0.6816057
0.6859149	0.4681751	0.1332476					
0.7069658	0.5577376	0.6236970	0.659215	1.0000000	0.5632139	0.4557463	0.6089106
0.5241758	0.4050454	0.1368471					
0.7009094	0.6692638	0.6984877	0.5797784	0.5632139	1.0000000	0.3322871	0.2890582
0.4457157	0.4114079	0.0357130					
0.6488306	0.6893090	0.6260561	0.5390689	0.4557463	0.3322871	1.0000000	0.5827153
0.5996299	0.3972220	-0.2779464					
0.7835921	0.6683078	0.6727255	0.6816057	0.6089106	0.2890582	0.5827153	1.0000000
0.7030128	0.5570150	0.0271440					
0.7295321	0.6143932	0.6763048	0.6859149	0.5241758	0.4457157	0.5996299	0.7030128
1.0000000	0.7072791	0.0426757					
0.7175403	0.5721737	0.5822271	0.4681751	0.4050454	0.4114079	0.3972220	0.5570150
0.7072791	1.0000000	0.1096284					
-0.0453681	-0.2106384	0.0329757	0.1332476	0.1368471	0.0357130	-0.2779464	0.0271440
0.0426757	0.1096284	1.0000000					

Australian dingo population parameters : MALES
 Upper dental variables V50,V51,V52,V54,V56,V57,V58
 Means, standard deviations, and correlation matrix.

13.0429	20.2571	12.4262	10.2714	15.7357	7.7190	5.0976
0.4073	0.9339	0.6016	0.4702	1.0629	0.3604	0.2599
1.0000000	0.1774103	0.5048499	0.4534965	0.1704569	0.4146428	0.5216483
0.1774103	1.0000000	0.3575296	0.4408817	0.0426000	0.5676973	0.1623233
0.5048499	0.3575296	1.0000000	0.5398017	-0.1285131	0.5668414	0.4823645
0.4534965	0.4408817	0.5398017	1.0000000	-0.0364578	0.2378808	0.2848022
0.1704569	0.0426000	-0.1285131	-0.0364578	1.0000000	-0.0202954	0.2696068
0.4146428	0.5676973	0.5668414	0.2378808	-0.0202954	1.0000000	0.3416075
0.5216483	0.1623233	0.4823645	0.2848022	0.2696068	0.3416075	1.0000000

Canis lupus (southern Asian varieties) : FEMALES
 Cranial variables V1,V3,V4,V7,V8,V12,V18,V25,V38,V40,V46
 Means, standard deviations, and correlation matrix.

214.5000	106.0000	139.8125	54.0000	84.0000	73.0625	58.4375	90.0000
68.7500	54.3125	63.4375					
8.0000	4.5461	6.1125	4.0661	4.3205	3.5302	2.7561	3.2660
2.8166	2.0565	3.2857					
1.0000000	0.7130716	0.8922991	0.7910899	0.8351669	0.5960429	0.7846363	0.6863674
0.7071130	0.4234554	0.6429373					
0.7130716	1.0000000	0.8181067	0.5409842	0.4785852	0.5981821	0.3405382	0.3906415
0.3228029	-0.0213928	0.4998774					
0.8922991	0.8181067	1.0000000	0.7725081	0.8406237	0.6061213	0.5671359	0.4909008
0.4927433	0.1481668	0.6483249					
0.7910899	0.5409842	0.7725081	1.0000000	0.9031754	0.3854819	0.8507008	0.7228974
0.7218091	0.3507953	0.8183598					
0.8351669	0.4785852	0.8406237	0.9031754	1.0000000	0.5376230	0.7894175	0.6614378
0.6135720	0.3376451	0.7420008					
0.5960429	0.5981821	0.6061213	0.3854819	0.5376230	1.0000000	0.3875672	0.2312873
0.2363401	0.3185310	0.2561224					
0.7846363	0.3405382	0.5671359	0.8507008	0.7894175	0.3875672	1.0000000	0.8369222
0.8223032	0.5741491	0.6621155					
0.6863674	0.3906415	0.4909008	0.7228974	0.6614378	0.2312873	0.8369222	1.0000000
0.6957252	0.2481458	0.5777624					
0.7071130	0.3228029	0.4927433	0.7218091	0.6135720	0.2363401	0.8223032	0.6957252
1.0000000	0.6243861	0.5672877					
0.4234554	-0.0213928	0.1481668	0.3507953	0.3376451	0.3185310	0.5741491	0.2481458
0.6243861	1.0000000	0.3533360					
0.6429373	0.4998774	0.6483249	0.8183598	0.7420008	0.2561224	0.6621155	0.5777624
0.5672877	0.3533360	1.0000000					

Canis lupus (southern Asian varieties) : FEMALES
 Upper dental variables V50,V51,V52,V54,V56,V57,V58
 Means, standard deviations, and correlation matrix.

14.7273	22.0727	13.2364	10.8636	16.9818	8.1091	5.3545
0.6650	0.7900	0.7865	0.5732	0.8010	0.4867	0.4275
1.0000000	0.9018903	0.6748047	0.6010396	0.7801370	0.6047257	0.6380356
0.9018903	1.0000000	0.7742563	0.7285162	0.5521898	0.4349768	0.4904611
0.6748047	0.7742563	1.0000000	0.6509674	0.4345014	0.4379145	0.4605042
0.6010396	0.7285162	0.6509674	1.0000000	0.3686764	0.4457589	0.5517222
0.7801370	0.5521898	0.4345014	0.3686764	1.0000000	0.7340149	0.8179940
0.6047257	0.4349768	0.4379145	0.4457589	0.7340149	1.0000000	0.8865387
0.6380356	0.4904611	0.4605042	0.5517222	0.8179940	0.8865387	1.0000000

Australian dingo population parameters : MALES
 Lower dental variables V69,V70,V71,V73,V74,V75,V79
 Means, standard deviations, and correlation matrix.

21.2923	12.3974	10.5949	8.5795	6.5256	5.2872	10.5179
0.6421	0.4815	0.4634	0.3548	0.3032	0.2342	0.5716
1.000000	0.4953258	0.4810135	0.5341197	0.4132337	0.5191197	0.4126410
0.4953258	1.0000000	0.7288656	0.2476866	0.4979095	0.5015223	0.4485762
0.4810135	0.7288656	1.0000000	0.2026291	0.4017442	0.4092567	0.6342075
0.5341197	0.2476866	0.2026291	1.0000000	0.4893116	0.4370329	0.2003886
0.4132337	0.4979095	0.4017442	0.4893116	1.0000000	0.6792330	0.2933081
0.5191197	0.5015223	0.4092567	0.4370329	0.6792330	1.0000000	0.4008602
0.4126410	0.4485762	0.6342075	0.2003886	0.2933081	0.4008602	1.0000000

Australian dingo population parameters : FEMALES
 Lower dental variables V69,V70,V71,V73,V74,V75,V79
 Means, standard deviations, and correlation matrix.

20.2426	11.6574	9.9915	8.0660	6.1383	4.9213	9.7426
0.7807	0.5849	0.4308	0.3778	0.3499	0.2726	0.6296
1.000000	0.6211103	0.6022709	0.6470130	0.4467738	0.5942300	0.4438355
0.6211103	1.0000000	0.7146815	0.6987341	0.3555310	0.6875228	0.4413007
0.6022709	0.7146815	1.0000000	0.5151125	0.2459575	0.5346848	0.3772675
0.6470130	0.6987341	0.5151125	1.0000000	0.3455822	0.5433119	0.4668433
0.4467738	0.3555310	0.2459575	0.3455822	1.0000000	0.4972357	0.4602022
0.5942300	0.6875228	0.5346848	0.5433119	0.4972357	1.0000000	0.5050207
0.4438355	0.4413007	0.3772675	0.4668433	0.4602022	0.5050207	1.0000000

Canis lupus (southern Asian varieties) : MALES
 Cranial variables V1,V3,V4,V7,V8,V12,V18,V25,V38,V40,V46
 Means, standard deviations, and correlation matrix.

229.8824	113.5882	150.3529	61.1176	91.2353	77.1765	62.8824	95.9412
74.0000	58.5294	69.0588					
9.0546	4.3310	6.1841	2.7587	4.3088	3.2449	3.1797	6.5809
2.8940	2.6248	3.2686					
1.0000000	0.8752615	0.9249893	0.8137813	0.7744961	0.7665422	0.5899628	0.5348032
0.6368406	0.7732952	0.4268266					
0.8752615	1.0000000	0.8925168	0.7680487	0.5246313	0.7348400	0.3820366	0.3039006
0.5335633	0.6911150	0.3417746					
0.9249893	0.8925168	1.0000000	0.8656845	0.7707195	0.7255216	0.4821966	0.5365161
0.6216322	0.7000953	0.3359371					
0.8137813	0.7680487	0.8656845	1.0000000	0.7546731	0.5700591	0.4434399	0.3446671
0.5480056	0.5864264	0.4913112					
0.7744961	0.5246313	0.7707195	0.7546731	1.0000000	0.4483235	0.6772950	0.7521136
0.7067172	0.5409099	0.5004126					
0.7665422	0.7348400	0.7255216	0.5700591	0.4483235	1.0000000	0.3171274	0.3868518
0.3660565	0.5533736	0.2994860					
0.5899628	0.3820366	0.4821966	0.4434399	0.6772950	0.3171274	1.0000000	0.7194751
0.8422237	0.5096602	0.7103096					
0.5348032	0.3039006	0.5365161	0.3446671	0.7521136	0.3868518	0.7194751	1.0000000
0.6825943	0.3745886	0.4534358					
0.6368406	0.5335633	0.6216322	0.5480056	0.7067172	0.3660565	0.8422237	0.6825943
1.0000000	0.6829128	0.6871591					
0.7732952	0.6911150	0.7000953	0.5864264	0.5409099	0.5533736	0.5096602	0.3745886
0.6829128	1.0000000	0.3603828					
0.4268266	0.3417746	0.3359371	0.4913112	0.5004126	0.2994860	0.7103096	0.4534358
0.6871591	0.3603828	1.0000000					

Canis lupus (southern Asian varieties) : MALES
 Upper dental variables V50,V51,V52,V54,V56,V57,V58
 Means, standard deviations, and correlation matrix.

15.6267	23.8067	14.4467	12.1600	17.6733	9.0800	5.9867
0.6341	0.8447	0.6323	0.7366	0.8172	0.5697	0.3833
1.0000000	0.5477282	0.1605665	0.3189971	0.5817940	0.0727638	-0.0131284
0.5477282	1.0000000	0.5744397	0.5159210	0.4793750	0.5569013	0.3642665
0.1605665	0.5744397	1.0000000	0.7005589	0.3509228	0.4429718	0.1530349
0.3189971	0.5159210	0.7005589	1.0000000	0.2935668	0.6345436	0.0713345
0.5817940	0.4793750	0.3509228	0.2935668	1.0000000	0.2120301	0.0170202
0.0727638	0.5569013	0.4429718	0.6345436	0.2120301	1.0000000	0.6691610
-0.0131284	0.3642665	0.1530349	0.0713345	0.0170202	0.6691610	1.0000000

Australian dingo population parameters : FEMALES
 Cranial variables V1,V3,V4,V7,V8,V12,V18,V25,V38,V40,V46
 Means, standard deviations, and correlation matrix.

188.2949	93.2051	120.5385	49.0256	73.4615	61.0897	52.8846	79.8974
64.0513	50.1795	55.1667					
6.2546	3.2045	4.1457	2.7397	3.0523	3.3736	2.1380	2.9568
2.1253	1.9853	4.6527					
1.0000000	0.8794590	0.9203773	0.8158142	0.7989026	0.6437518	0.4940079	0.7706197
0.6700492	0.6472769	0.2790002					
0.8794590	1.0000000	0.9016877	0.7671285	0.6341521	0.5676808	0.4679191	0.7314293
0.6677587	0.5595955	0.2642172					
0.9203773	0.9016877	1.0000000	0.8391913	0.8062904	0.6659982	0.3968568	0.7006354
0.6409569	0.5340660	0.2800936					
0.8158142	0.7671285	0.8391913	1.0000000	0.8185678	0.5322852	0.4949501	0.7474265
0.7157473	0.5435448	0.3959912					
0.7989026	0.6341521	0.8062904	0.8185678	1.0000000	0.5004017	0.5057914	0.7607838
0.6029071	0.5905248	0.1892992					
0.6437518	0.5676808	0.6659982	0.5322852	0.5004017	1.0000000	0.0644757	0.3264204
0.2728586	0.2903596	0.2133274					
0.4940079	0.4679191	0.3968568	0.4949501	0.5057914	0.0644757	1.0000000	0.6062117
0.6329793	0.5679326	-0.0881273					
0.7706197	0.7314293	0.7006354	0.7474265	0.7607838	0.3264204	0.6062117	1.0000000
0.7159204	0.6602651	0.2646434					
0.6700492	0.6677587	0.6409569	0.7157473	0.6029071	0.2728586	0.6329793	0.7159204
1.0000000	0.7088080	0.4272876					
0.6472769	0.5595955	0.5340660	0.5435448	0.5905248	0.2903596	0.5679326	0.6602651
0.7088080	1.0000000	0.1457541					
0.2790002	0.2642172	0.2800936	0.3959912	0.1892992	0.2133274	-0.0881273	0.2646434
0.4272876	0.1457541	1.0000000					

Australian dingo population parameters : FEMALES
 Upper dental variables V50,V51,V52,V54,V56,V57,V58
 Means, standard deviations, and correlation matrix.

12.4250	19.0481	11.7154	9.5231	14.8058	7.3558	4.7692
0.7725	0.7790	0.4300	0.5614	1.0845	0.3589	0.3109
1.0000000	0.4550654	0.5236141	-0.0388963	0.1898496	0.1285265	-0.0253096
0.4550654	1.0000000	0.7102264	0.2807692	0.3199366	0.4783518	0.2960324
0.5236141	0.7102264	1.0000000	0.3705737	0.2950038	0.5013560	0.4084282
-0.0388963	0.2807692	0.3705737	1.0000000	0.1124893	0.5891280	0.5590688
0.1898496	0.3199366	0.2950038	0.1124893	1.0000000	0.3699283	-0.0552788
0.1285265	0.4783518	0.5013560	0.5891280	0.3699283	1.0000000	0.3758968
-0.0253096	0.2960324	0.4084282	0.5590688	-0.0552788	0.3758968	1.0000000

APPENDIX 10

METRICAL DATA ON FOSSIL DINGO

1. Group A
2. Group B

Fossil dingo ; non-archaeological

Variables V1 to V16

76.9.385	WAM	211		101	134	105	35	57	86	104	162	36	70	12	22	35	112
76.9.384	WAM	205		100	130	100	33	56	81	99	156	36	65	12	21	32	114
60.8.3	WAM	211	197	101	135	103	35	57	87	107	162				21	37	
71.10.63	WAM	197		96	123	96		51	75	96	157					37	105
64.2.4B	WAM	192	181	94	122	92	32	54	77	92	147	34	61	12	20	33	105
64.2.4D	WAM		186		126	98		53		102		35	70	12	20	32	
62.3.1	WAM	198	185	95	125	96	31	54	81	99	151	34	68	12	20	31	108
66.2.99	WAM	197	185	94		98	34	50	77		152					32	
65.12.61	WAM	164	154	80	103	85	27	41	62	77	129	27	52	11	16	31	85
65.12.104	WAM	185	175	91	123	92	30	47	75	91	142				18	30	96
64.2.4A	WAM			92		94	31			93	143			11	19	33	
64.2.4C	WAM	180	171	90	118	91	30	47	71	88	141	33	59	11	17	30	92
63.3.25	WAM	178	165	87	112	88	30	43	70	88	138	32	59	11	17	29	92
72.9.26	WAM			88	110	87	32							11	18	33	
65.12.87	WAM						31	43	68					12			
60.8.4	WAM		175	89		91	30	50	75	86	141	31	57	12	19	31	
60.8.2	WAM	197	183	93	125	99	31	50	80	98	153	35	63	11	19	31	102
67.12.41	WAM	192	180	96	127	96	34	51	74	92	144	36	59	13	20	36	107
67.9.138	WAM	172	161	85	109	88	29	42	66	82	135	29	56	11	17	29	99
62.9.12	WAM			88		92				84	137			12	17	32	
60.4.1	WAM	195	179	93	121	95	34	51	77	92	147	35	60	12	19	32	107
68.7.49	WAM																
62.9.5	WAM	188	178		122	96		52		91	148	32	60	12	19		103
66.11.1	WAM																
66.6.25	WAM																
F6342	WAM																
63.7.163	WAM																
71.1.291	WAM																
72.2.9	WAM																
63.7.31	WAM																115
60.8.1	WAM																
65.12.10	WAM																
65.12.10A	WAM																
65.12.103	WAM																
65.12.32	WAM																
71.1.291	WAM																
70.2.9	WAM																
68.7.49	WAM																
P21393	NMV																106
FC 02	NMV	183	172	91	117	93	35	48	71	92	143				20	35	
FC 01	NMV	215	197	103	134	102	38	60	84		162					36	119
McE 02	NMV			88	113	89	32										
McE 01	NMV		172	94	117	92	32	48	72		138				16	34	
McE 01A	NMV																
P7447	NMV																
P22853	NMV																
P19510	SAM																95
MILK 01	ANU	181	178	91	114	88	31	50	78	79	134			13		31	

Fossil dingo ; non-archaeological

Variables V17 to V32

76.9.385	WAM	20	59	20	28	10	17	38	30	89	56	55	63	51	50	17.8	9.4
76.9.384	WAM	21	60	21	27	11	17	35	27	89	57	54	62	52	50	16.6	8.6
60.8.3	WAM	20	59	21	28		17			87	56	54	63	53	51		9.3
71.10.63	WAM	20	55	20	25		17	32	29	83	58	50	59	55	46		9.7
64.2.4B	WAM	20	57	21	25		16	34	29	83	54	51	58	49	45	15.7	
64.2.4D	WAM	22	57	19	26		18			84							
62.3.1	WAM	20	57	24	26		16	35	28	82	54	49	58	49	48	17.5	9.9
66.2.99	WAM		54	20	25		14				54	53	58			14.8	9.1
65.12.61	WAM	19	48	18	22		12	29	28	74	51	45	50	47	39	12.5	
65.12.104	WAM	18	52	20	26		13	32	30	79	52	47	55	47	42		9.1
64.2.4A	WAM							32	29						43		
64.2.4C	WAM	19	52	20	25		13	31	27	77	54	47	53	48	41	16.0	8.5
63.3.25	WAM	18	52	19	25		13	31	29	75	54	47	53	49	41	9.7	
72.9.26	WAM																
65.12.87	WAM			18	24		15			74	54			49	43		
60.8.4	WAM	19	54	19	26		16			80	53			48	49		
60.8.2	WAM	19	55	18	24		16	33	29	83	55	47	56	50	45	12.5	9.0
67.12.41	WAM	20	57	19	24		18	33	28	82	55	52	59	48	45	14.5	9.7
67.9.138	WAM	19	50	17	23		16	29	28	75	51	44	50	47	39	10.6	8.1
62.9.12	WAM			19	25				30						38		
60.4.1	WAM	19	54	20	25		15	35	30	82	55	50	56	49	44	14.0	8.3
68.7.49	WAM																7.9
62.9.5	WAM	19	54	19	25		15			79	52	47	54	49	41	13.7	8.8
66.11.1	WAM																
66.6.25	WAM																
F6342	WAM																
63.7.163	WAM			18	24		16										
71.1.291	WAM																
72.2.9	WAM																
63.7.31	WAM	20	58	22	27		15				57	63	53	53			
60.8.1	WAM																
65.12.10	WAM																
65.12.10A	WAM																
65.12.103	WAM																
65.12.32	WAM																
71.1.291	WAM																
70.2.9	WAM																
68.7.49	WAM																
P21393	NMV	22	56	18	23		19			88	60	48	54	51			
FC 02	NMV	21	54	18	24		15			80	57	46	53	52	47		9.5
FC 01	NMV	20	60	18	25		18	34	30		61	56	65	55			
McE 02	NMV																
McE 01	NMV	19	55	19	24	16	16				51	54	51	48	45		8.9
McE 01A	NMV			18	22	15	16										
P7447	NMV																
P22853	NMV																
P19510	SAM	18	51	17	23		14			76	53	46	54	48			8.3
MILK 01	ANU	17	44	14	22			30		72	48	54	36	40	36		

Fossil dingo ; non-archaeological

Variables V33 to V48

76.9.385	WAM	42	62	41	59	46	71	41	58	21	13	31	35	48	62	11	11
76.9.384	WAM	40	58	38	56	46	69	39	56	21	14	29	33	48	63	11	11
60.8.3	WAM	42		40	59	47	69	40	56	21	13	33	38	51	64	13	12
71.10.63	WAM	36	51	39	58	44	70	39	53	19	15	29	35	50	61		
64.2.4B	WAM	35	51	36	54	42	69	38	53	20	14	29	34	46	58	11	11
64.2.4D	WAM				54		69	38		19		28	32	46	59	11	11
62.3.1	WAM	38	59	39	56	45	66	38	52	19	13	28	31	45	59	12	12
66.2.99	WAM	36	51	38		44	68	39	53	20	13	29	31	45	58	11	11
65.12.61	WAM	30	43	35	52	41	59	35	44	18	14	28	33	40	56	9	9
65.12.104	WAM	35	51	35	55	44	62	36	51	24	13	27	30	43	55	10	10
64.2.4A	WAM	35	51	35								29	32	45	58	10	10
64.2.4C	WAM	33	49	35	54	43	64	36	49	19	13	27	30	43	54	10	10
63.3.25	WAM	35	50	36	55	44	62	36	47	19	13	26	29	39	52	9	10
72.9.26	WAM											29	34	45	57	9	9
65.12.87	WAM	33	49	37	55	43	63	36		19	13	27	32	43	57		
60.8.4	WAM	35	53	35	55	44	64	37		19	13	28	32	45	57	10	10
60.8.2	WAM	39	53	37	56	45	64	39	51	20	14	28	33	47	59	11	11
67.12.41	WAM	37	56	37	55	41	69	40	54	20	12	32	35	48	62	11	12
67.9.138	WAM	32	49	34	54	44	59	35	47	18	14	28	32	42	57	9	9
62.9.12	WAM	32	53					35		20	14	29	32	44	60	11	11
60.4.1	WAM	34	53	36	56	42	65	38	53	20	13	28	32	46	59	11	11
68.7.49	WAM																
62.9.5	WAM	38	57	38	53	41	63	37	51	19	14	30	34	45	58	11	13
66.11.1	WAM																
66.6.25	WAM																
F6342	WAM																
63.7.163	WAM						66	38		20							
71.1.291	WAM																
72.2.9	WAM																
63.7.31	WAM	43	64	38	57	44	72	43	55	21	14						
60.8.1	WAM																
65.12.10	WAM																
65.12.10A	WAM																
65.12.103	WAM																
65.12.32	WAM																
71.1.291	WAM																
70.2.9	WAM																
68.7.49	WAM																
P21393	NMV	43	58	36	57	44	66	38	50	20	15						
FC 02	NMV			39	58	49	64	38	50	19	14	32	35		61	11	10
FC 01	NMV	40	59	40	59	48	70	40	57	22	14	31	37	53	65	12	11
McE 02	NMV											28	34	42	55		
McE 01	NMV				54	45	68	37	52	19	14	29	35	47	62	11	13
McE 01A	NMV						62	37		19	15						
P7447	NMV																
P22853	NMV																
P19510	SAM	32	48	30	53	42	63	33	49	18	14						
MILK 01	ANU	30	44	29	50	40	60		52			25	30	42	52		

Fossil dingo ; non-archaeological

Variables V49 to V64

76.9.385	WAM	8.0	14.1	22.5	13.7	12.2	11.4	9.7	16.1	8.0	5.3	4.6	21.5	6.4	66
76.9.384	WAM	7.3	12.2	20.0	12.4	10.9	10.7	9.5	15.5	7.2	5.1	4.3	19.4	5.9	60
60.8.3	WAM	7.7	13.6	21.0	13.0	11.3	10.8	9.8	16.6	7.7	5.2	4.8	21.2	6.4	63
71.10.63	WAM	7.1	13.7	21.3		10.8		9.3	14.9	7.5		4.1	20.7		59
64.2.4B	WAM	7.3	13.0	20.3	12.3	11.1	11.4	9.0	15.1	7.3	5.4	4.6	19.6		57 19.6
64.2.4D	WAM		13.6	20.3					16.1	7.8					61 19.3
62.3.1	WAM		12.7	19.9	12.1	14.9	9.7		15.7	7.5	4.8	4.2			59 19.1 21.0
66.2.99	WAM	7.9	13.5	21.8	13.0	11.1		10.3	16.1	7.9	6.1	4.3	21.5		62 20.8 21.5
65.12.61	WAM	7.2	12.6	19.2		10.1	9.9	9.3	14.7	7.0		4.3	19.1		53
65.12.104	WAM	7.0	13.0	19.8	11.9	10.9		9.3	9.6	14.8	7.8	4.9	4.2	20.1	6.3 56 18.7 19.5
64.2.4A	WAM	7.5	13.5	19.8			10.0	9.8	15.7	8.1			20.5	5.7	58 18.8
64.2.4C	WAM		12.6	19.5	12.5			9.5		14.2	6.8	4.3			56 18.5 19.5
63.3.25	WAM	6.9	11.8	19.2	10.9			8.7	8.8	14.6	7.0			18.6	55 18.0
72.9.26	WAM	6.8	12.1	18.3	10.9			9.9	9.5	14.5	7.0	5.2		18.5	51
65.12.87	WAM	6.9		20.0					8.8		7.6				56 19.1
60.8.4	WAM	6.9	12.8	18.9	11.6	10.8	10.0	9.0	14.1	7.2	5.0	4.3	19.8		56
60.8.2	WAM	7.2	13.1	21.1	12.8	10.5	9.6	9.9	16.0	7.7	4.9	4.1	20.4	6.3	61 20.0 20.5
67.12.41	WAM	7.8	12.9		12.3	11.0		10.0	16.5		5.6	4.7	20.9	6.6	57
67.9.138	WAM	6.6	12.1	19.2	10.7	9.9	9.3	9.3	14.8	7.5	4.7	4.2	18.5	5.8	54
62.9.12	WAM														55
60.4.1	WAM	7.3	12.7	19.8	11.7	10.6	10.5	9.4	15.0	8.3	5.1	4.4	19.7		62 18.7 19.1
68.7.49	WAM														17.6
62.9.5	WAM	7.5	12.4			10.2	10.0	9.6	15.0			4.2	19.7		59 19.5
66.11.1	WAM														
66.6.25	WAM														
F6342	WAM	7.5	13.2	19.7	11.5	10.2	9.7	9.9	15.8	7.3	4.9	4.1	20.5	6.3	57 18.6 20.2
63.7.163	WAM	7.4	12.3	21.1	11.8	10.9	9.4	9.2	15.3	7.6	5.3	4.1	19.6		
71.1.291	WAM														
72.2.9	WAM														
63.7.31	WAM	8.0	13.4	22.2	13.7	12.6		10.7	17.2	8.3	5.3	4.8	22.2		65
60.8.1	WAM	6.8	13.4	21.3				9.5	15.3	7.8			20.0		58
65.12.10	WAM														
65.12.10A	WAM														
65.12.103	WAM														
65.12.32	WAM														
71.1.291	WAM														
70.2.9	WAM														
68.7.49	WAM														
P21393	NMV														
FC 02	NMV	8.3	12.9	18.0	11.3	9.6		9.6	13.6	7.0	4.3	4.1	21.0		57 19.2
FC 01	NMV	7.0	13.1	19.2	12.0	10.6	10.4	9.3	15.2	8.4	5.6	4.5	20.3		62 18.4 19.4
McE 02	NMV	7.4	12.2	18.5				8.9	14.0	7.8			19.7		53 17.2
McE 01	NMV	6.8	12.3	18.7	11.0			9.2	14.0	7.8	4.9		19.1		55 18.0 19.7
McE 01A	NMV						9.6								
P7447	NMV		11.2	18.0	12.1	11.2			15.2	7.1	5.1	4.4			58
P22853	NMV														
P19510	SAM	7.0	11.7	16.5	10.4	8.9	9.4	8.6	13.4	7.4	4.7	4.2	19.4	5.6	15.5 17.9
MILK 01	ANU		12.1	18.1	10.7	9.1	9.3	9.8	15.4	7.0	4.8	4.2	19.2		54 17.0 17.9

Fossil dingo ; non-archaeological

Variables V65 to V80

76.9.385	WAM	155	156	24	11	22.5	12.8	11.7	9.6	9.3	6.6	5.5	5.0	10.7	5.8	11.8	7.8
76.9.384	WAM	148	150	24	10	20.8	11.6	10.7	9.5	8.4	6.1	5.3	4.8	9.8	4.3	11.2	6.9
60.8.3	WAM		151	24	11	22.0	12.5	11.3	9.2	8.7		5.4	4.5	10.4	5.2	11.0	7.2
71.10.63	WAM	145	144	25	11	21.5	12.4	10.6	8.6	8.6	6.7	5.7	4.7	9.9	5.2	10.4	7.3
64.2.4B	WAM																
64.2.4D	WAM																
62.3.1	WAM			25	11	22.0	12.6	11.2	9.2	8.5	6.5	5.4	4.5	10.5	5.4	10.6	7.3
66.2.99	WAM	143	145	22	11	22.3	13.1	11.1		7.9	6.8	5.4		10.4	4.9	11.1	7.0
65.12.61	WAM																
65.12.104	WAM	137	137	21	10	20.2	11.8	10.5	8.6	8.3	6.2	5.1	4.4	9.0	3.4	9.8	7.1
64.2.4A	WAM																
64.2.4C	WAM	133	133	20	9	20.3	11.5	10.3	7.8	7.6	5.8	4.7	4.1	9.2	3.5		6.5
63.3.25	WAM																
72.9.26	WAM																
65.12.87	WAM																
60.8.4	WAM																
60.8.2	WAM	145	143	22	10	21.7	11.9	10.6		8.5	6.0	4.9		10.1	2.0	10.3	6.8
67.12.41	WAM	145	144	22	11	22.5	12.1	10.5		9.1	6.8	5.8	5.1	10.5	3.0	9.4	7.5
67.9.138	WAM	128	126	19	9	20.2	11.1	9.6	8.0	8.1	6.0	5.0	4.3	9.5	4.5	9.7	6.7
62.9.12	WAM			20	10	20.6	11.4			8.3	6.0			9.7	3.1		
60.4.1	WAM	143	143	22	10	20.1	12.1	10.3	7.8	8.7	6.6	5.4	4.3	9.6	7.1	10.2	6.6
68.7.49	WAM	130	129	19	9	18.7	11.0	9.1		7.5	5.5	4.6		9.0	5.3		6.0
62.9.5	WAM			22	11	20.5	11.3		8.2	8.7	6.0		4.6	9.0	4.1	10.0	7.1
66.11.1	WAM					22.3	10.6	10.1				5.0					
66.6.25	WAM																
F6342	WAM	132	132	21	9	20.9	11.6	10.0	8.2	8.3	6.1	5.2	4.6	10.0	4.8	10.0	7.3
63.7.163	WAM					21.1	11.5	10.5	8.5	8.5	5.9	5.1	4.6	9.0		10.3	6.9
71.1.291	WAM	144	143	24	11	21.5	12.0	10.6	8.2	8.4	6.3	5.4	4.5	9.8	3.8	11.0	
72.2.9	WAM	145	144	22	10	20.8	12.0	9.3	7.8	8.2	6.0	5.0	4.2	9.5	6.1	10.6	
63.7.31	WAM	157	157	25	12	23.2	13.4	11.7	9.4	9.1	6.8	5.7	4.8	11.0	4.9	11.8	7.7
60.8.1	WAM																
65.12.10	WAM	161	160	22	11	22.7	13.5	11.6	9.9	9.7	7.3	5.9	5.3	9.7	5.5	12.0	7.7
65.12.10A	WAM	150	149	24	12	21.7	12.3	10.9	9.0	8.7	6.8	5.9	4.9	10.0	4.1	11.3	7.6
65.12.103	WAM	145	144	23	10	20.9	12.5	10.5	8.5	8.2	6.0	5.0	4.3	9.7	5.7		
65.12.32	WAM	137	137	21	10	20.8	12.0	10.3	8.2	8.3	5.9	4.9	4.2	9.4	3.4	10.0	6.8
71.1.291	WAM	144	143	24	11	21.5	12.0	10.6	8.2	8.4	6.3	5.4	4.5	9.8	3.8	11.0	7.3
70.2.9	WAM	145	144	22	10	20.8	12.0	9.3	7.8	8.2	6.0	5.0	4.2	9.5	6.1	10.6	6.7
68.7.49	WAM	130	129	19	9	18.7	11.0	9.1		7.5	5.5	4.6		9.0	5.3		6.0
P21393	NMV																
FC 02	NMV	135	136	22	10	20.4	11.5	9.7	8.8	7.9	5.5	4.8	4.3	8.1	4.0	10.5	6.9
FC 01	NMV	155	155	26	12	20.5	11.8	9.9		8.6	6.5	5.3		10.2	7.6	10.7	
McE 02	NMV																
McE 01	NMV	142	142	22	11	21.1	12.2	10.2	8.6	8.4	6.8	5.4	4.8	9.2	4.8	10.4	6.9
McE 01A	NMV	129	129	21	10		11.4	10.1			6.6	5.1				9.7	
P7447	NMV																
P22853	NMV	134	134	21	10	19.2	11.2	10.2		7.6	5.9	4.8		9.8	4.8		
P19510	SAM					18.9	10.5	9.8	7.4	7.8	6.0	4.8	4.3	9.2		8.9	6.9
MILK 01	ANU		126	20	10	18.6	10.7	9.2	7.6	7.5	6.0	4.8	4.1	9.2	3.0	9.0	6.3

Fossil dingo ; archaeological

Variables V49 to V64

BB4/G7	AM	7.5	12.8	20.4	12.1	10.9	9.2	15.8	8.2	5.6	5.0	62	19.5
BB4/G5B	AM	7.5	12.9	19.9	11.2	9.9	10.4	9.9	15.2	8.0	4.0	20.4	5.7
N62/I6(3W)	AM	7.2											19.1
BB4/F4	AM	7.4					9.2					58	
BB4/FN5A	AM												19.1
BB4/G5B	AM												
BB4/FN5B	AM	6.8		18.1	11.0	9.7	9.5	8.3	7.3	4.5	3.9	57	17.1
CU5/I6	AM	7.5	13.6	20.1	11.1	10.8	10.7	15.9	8.0	4.9	4.1	60	19.0
CR/D6:21	AM												
MUR 01	ANU	7.0	12.6	18.4	12.2	10.4	9.6	8.5	14.3	7.1	4.9	4.3	19.9
MUR 02	ANU											54	4.0
KILOA 01	ANU		11.1	17.5	9.9	9.3	9.2		6.7	4.0	4.1	18.2	5.5
MAL 01	ANU	8.2	13.2	19.8	11.9	10.3	10.4	15.5	7.5	5.5	4.5	21.0	63
MAL 02	ANU	7.5	12.7	19.8	11.7	10.9	10.4	9.9	15.2	8.1	4.9	4.3	20.3
P19511	SAM	7.5	13.7	21.0	12.8	11.1		9.9	16.0	8.6	5.2	4.8	20.5
FROMM 01	SAM	7.5	13.0	19.4	11.7	10.6		9.6	15.2	8.1	5.0	4.2	20.3
												6.1	6.1
												56	16.6
												63	18.9
												60	18.7
												63	20.3
												55	21.8

APPENDIX 11

TWO COMMENTS RELATING TO THE DATING OF THE LAKE MUNGO CANIDS

1. The specimen Mu 01 was identified and surface collected by P. Brown and Dr A.G. Thorne in June 1979. Thorne and myself arranged a subsequent salvage excavation of the remaining parts of the skeleton. The specific goal was to establish its status with respect to the Zanci unit.

The excavation, which was done by Professor Jack Golson, showed that the skeletal remnants (including fore and hind limbs) were wholly within a brown sandy lens, and not in any part intrusive into the green-grey Zanci deposit. Details on the stratigraphy are contained in my report sent to the National Parks and Wildlife Service of New South Wales.

The prime question for interpretation concerns the relationship between the brown sandy lens and the clearly defined Zanci unit. With this in mind Dr J. Bowler supervised the taking of oriented box samples close to the skeleton and across the boundary of the green and brown sediments. His examination of the thin sections prepared from these samples suggests that the two sediments were not connected through pedogenic processes. Rather, the brown sediment appears to have been associated with an independent depositional phase.

The next question arises from this finding: what is the chronological association of the Zanci and brown sediment? There is currently no clear answer to this question, but the next element in the investigation provides an interesting clue.

An investigation of the excavation site by Drs J. Hope and T. Dare-Edwards later in 1979 produced a further box sample with a canid bone fragment in situ in the brown deposit. This was thin sectioned and examined. The interpretation in this case suggests that the interface between bone and brown sediment gives no indication of long-term association between the bone and matrix. Because the skeleton and brown lens are probably contemporaneous, the implication may be drawn that neither are particularly old.

2. A preliminary note has been provided by John Head (Radiocarbon Laboratory, Department of Prehistory, ANU) on chemical assays on parts of a number of specimens.

Chemical assays on bone fragments on a number of arid region canids have produced the following results:

Specimen	Percentage by weight	
	Carbon	Nitrogen
Modern fox (Mungo)	15.0	4.5
Mungo 01	9.0	2.1
Mungo 02	4.3	0.1
Milkengay 01	2.2	nil

My preliminary survey of bone material from the western region of NSW (date range modern-28000 BP) suggests that nitrogen levels in bone reduce to less than 1% (by weight) by 500 BP and that carbon begins to oscillate around the value of 3.5% soon after 500 BP [J. Head 1980, pers. comm.].

I believe it would be reasonable in the light of the above findings to suggest that both Mungo canid specimens are of pre-European contact antiquity.

APPENDIX 12

PROVENANCE AND METRICAL DATA ON NON-AUSTRALIAN CANIDS

1. *C. lupus* (south Asian varieties)
2. *C. aureus*
3. *C. alpinus*
4. *C. familiaris*

SOURCES:

BMNH British Museum (Natural History), London, UK
CAMB University Museum of Zoology and Comparative Anatomy,
Cambridge, UK.
Berlin Humboldt University, Zoological Museum, Berlin, GDR.
Munchen State anthropological collection, Munchen, GFR.
Kiel Institut für Haustierkunde, Kiel, GRF.
Senckenberg Natural History Museum, Senckenberg, GFR.
Bern Natural History Museum, Bern, Switzerland.
Leiden National Museum of Natural History, Leiden, Netherlands.
ZSI Zoological Survey of India, Calcutta, India.
BNHS Bombay Natural History Society, Bombay, India.
Bogor Lembaga Biologi Nasional, Bogor, Indonesia.
Sarawak Sarawak Museum, Kuching, Sarawak.
AMNH American Museum of Natural History, New York, USA.

C. lupus (SOUTH ASIAN VARIETIES)

Identification		Provenance
36.11.22.1	BMNH	Ladakh, Kashmir. Collected Lord Aylesford. Female.
33.7.20.6	BMNH	Gilgit, Kashmir. Collected W.F.R. Trevelyan. Very young individual.
35.8.30.2	BMNH	Bikanir. Collected Heir apparent to Bikanir.
35.1.10.3	BMNH	Rawlpindi, Punjab. Collected Zool. Soc. 1912. Female.
98.3.3.1	BMNH	Karachi, Sind. Collected A. Murray. Female (?).
35.1.18.4	BMNH	Chawra, Hindu Kutch. Collected G.A. Crump. Male.
85.8.1.52	BMNH	Sambhar, Rajputna. Collected R.M. Adams. Male.
35.1.18.3	BMNH	Hazaribagh, Bihar. Collected O.A. Smith 1914. Female.
35.8.30.4	BMNH	Bikanir. Probably female.
49997	Berlin	Sind.
49996	Berlin	Sind. Probably female.
11911.2266	Munchen	Baluchistan.
6272	BNHS	Sikkim. Collected C.H. Dracott 1915.
6276	BNHS	Buhatwarh. Collected J. Jacobs 1916.
5302	BNHS	Jullunder, 1937.

Identification		Provenance
9952	ZSI	Hazaribagh, Bihar, 1913. Collected Major O.A. Smith. Female.
11.12.19	ZSI	Zoo Garden.
9950	ZSI	Hazaribagh, Bihar. Collected Major O.A. Smith. Female.
7.6.21.1	BMNH	Kashmir. Collected S.L. Tooth.
35.1.10.2	BMNH	Chitral. Collected Captain H.W.F. Stirling, 1923.
25.10.28.1	BMNH	Ladakh, Kashmir. Collected Lord Cunliffe.
56.5.6.42	BMNH	Salt Range, Pubjab. Collected Theobald Oldham.
99.6.23.2	BMNH	Kashmir. Collected Gerrard.
34.8.12.2	BMNH	Quetta, Baluchistan. Collected Col. Hinde.
81.8.16.6	BMNH	Kandahar, Afghanistan. Collected Col. Swinhoe.
35.8.30.1	BMNH	Bikanir. Male.
44.80	BMNH	Basrah, Iraq, 1929. Male.
86.2.1.1	BMNH	Harnal, Sind. Male.
35.1.18.2	BMNH	Hazaribagh, Bihar. Collected Major O.A. Smith. Male.
61.4.55	BMNH	Mirzapur. Collected C.R.P. Henderson, 1880. Male.
17589	Kiel	Afghanistan, 1976.
91078	Berlin	Collected E. Schäfer, 1939.
K3151	CAMB	Sohan River, Punjab, 1893. Male.
1957.297	Munchen	Chusistan, Iran, 1957.
5312	BNHS	Chitral. Collected Captain H.F.D. Stirling.
5311	BNHS	Gilgit. Collected Major A.D. Macpherson, 1915.
9951	ZSI	Hazaribagh, Bihar. Collected Major O.A. Smith. Male.
6274	BNHS	Central Province. Collected Col. Syezespante, 1907.

C. aureus (SOUTHERN ASIAN VARIETIES)

Identification	Provenance
5321 BNHS	Khandesh, Maharashtra.
5351 BNHS	Barhi, Bihar, 1914.
5318 BNHS	Palaupur, Gujarat. Male.
6283 BNHS	Palaupur, Gujarat. Male (?).
6289 BNHS	Burma (?). Collected Burma Shell Oil:
6406 BNHS	Bengal. Female.
5349 BNHS	Hazaribagh, Bihar. Female.
5316 BNHS	Cutch. Female.
17614 ZSI	Sind, 1915. Male.
17402 ZSI	? Male. 1866.
11185 ZSI	Imphral Valley, Assam, 1945. Female.
17601 ZSI	Hazaribagh, Bihar, 1914. Male.
17524 ZSI	Palkonda Hills, South India, 193(?). Male.
17527 ZSI	Dattnaghj, Bihar, 1915. Male.
17520 ZSI	Chanda, M.P., 1912. Male.
17521 ZSI	Punjab, 1921. Male.
12909 ZSI	?
17610 ZSI	Cutch, 1911. Female.
17613 ZSI	Sind, 1915. Male.
17602 ZSI	Darjeeling, Bengal, 1916.
23.7.6.64 BMNH	Virajpet, South Coorg. Male.
23.7.6.65 BMNH	Virajpet, South Coorg. Female.
23.7.6.67 BMNH	Madura, South India. Male.
30.5.24.12(2) BMNH	Eastern Ghats. Male.
23.7.6.69 BMNH	Madura, South India. Female.
9.12.3.2 BMNH	Ceylon. Female.

Identification		Provenance
37.5.26.36	BMNH	Nepal. Male.
26.6.7.5	BMNH	Katmandu, Nepal.
23.7.6.41	BMNH	East Kahandeesh.
37.10.8.4	BMNH	Ceylon.
35.4.8.1	BMNH	Ceylon. Male.
20.5.1.9	BMNH	Ceylon. Female.
20.5.1.10	BMNH	Ceylon. Male.
40.331	BMNH	Ceylon, 1935. Male.
16.4.16.10	BMNH	Palanpur, Gujarat. Male.
23.7.6.24	BMNH	Sind.
37.5.26.23	BMNH	Eastern Ghats, 1937. Male.
37.5.26.22	BMNH	Kurnool. Male.
23.7.6.70	BMNH	Koyna Valley, Satara.
23.7.6.66	BMNH	Virajpet, South Coorg. Female.
30.5.24.12(1)	BMNH	Eastern Ghats. Female.
30.5.24.12(0)	BMNH	Eastern Ghats. Male.

Cuon alpinus (INDONESIA AND INDIA)

Identification		Provenance
736	Bogor	Pasir Datar, 1924.
677(7)	Bogor	West Java, 1941.
677(0)	Bogor	West Java, 1932.
677(8)	Bogor	West Java, 1941.
936	Bogor	East Java, 1925.
935	Bogor	East Java, 1925.
206(6)	Bogor	Tjang Plateau, 1929.
677(1)	Bogor	Tjang Plateau, 1933.
676(9)	Bogor	Tjang Plateau, 1932.
206(7)	Bogor	Tjang Plateau, 1929.
114(7)	Bogor	Kali Baroe, 1925.
203(6)	Bogor	Tjang Plateau, 1929.
677(9)	Bogor	?
206(5)	Bogor	Tjang Plateau.
5453	BNHS	Chikalda Berar.
M1159	BNHS	Hassimara, 1919.
5426	BNHS	Kanara.
5466	BNHS	Thailand.

C. familiaris (NEAR EAST AND SOUTHERN ASIAN VARIETIES)

Identification		Provenance
D.96	BMNH	Constantinople.
58.5.4.92	BMNH	?
166.D	BMNH	Nepal.
56.5.6.45	BMNH	Bengal.
56.5.6.44	BMNH	Bengal.
D.61	BMNH	Mysore.
45.1.8.55	BMNH	
166.P	BMNH	Nepal.
47.1.13.17	BMNH	India (?).
A1682	FNHN	Nepal.
885	Berlin	Bengal.
4270	Berlin	Ceylon.
7434	Berlin	Istanbul.
7433	Berlin	Istanbul.
(?)	Bern	Cairo.
(?)	Bern	Cairo.
(?)	Bern	Egypt.
546B	Bern	Egypt.
(?)	Bern	Egypt.
147	Bern	Algeria.
(?)	Bern	Cairo.
(?)	Bern	Luxor, Egypt.

C. familiaris (THAI AND MALAYSIAN VARIETIES)

Identification		Provenance
Thai 01	Otago	Northeastern Thailand.
Thai 02	Otago	Northeastern Thailand.
37.5.26.39	BMNH	Mt Popa, Burma.
71.753	BMNH	Ikau Merah, Malaya.
15-9-59	Sarawak	Kuching, Sarawak.
29-9-59	Sarawak	Kuching, Sarawak.
21-9-59	Sarawak	Sakamah Rd, Kuching. Male.

C. familiaris (CHINESE AND JAPANESE VARIETIES)

2242	Leiden	China. Collected Blazer, 1934. Female.
2244	Leiden	China. Collected Blazer, 1934. Female.
44(HH)	Leiden	Japan. Collected von Siebold.
Ost.K	Leiden	Japan. Collected von Siebold. Female.
GG	Leiden	Japan. Collected von Siebold.
CC	Leiden	Japan.

C. familiaris (INDONESIAN VARIETIES)

Identification		Provenance
4679	Leiden	Java.
4680	Leiden	Java. Collected Dubois, 1941.
9066	Leiden	Bandung, Java, 1950.
Ost 0	Leiden	Sumatra.
4066	Leiden	Batavia, Java, 1932. Male.
Ost WW	Leiden	<i>C. f. tenggerana</i> (Kohlbrugge 1896). Male. Co-type. Collected in Tengger Mountains, Java.
Ost XX	Leiden	<i>C. f. tenggerana</i> (Kohlbrugge 1896). Male. Co-type specimen. Collected in Tengger Mountains.
835	Bern	Sumatra. Female.
(?)	Bern	Sumatra. Male.
13	Bern	Sumatra. Batak dog. Male.
9	Bern	Sumatra. Batak dog.
88	Bern	Sumatra. Batak dog. Male.
40	Bern	Sumatra. Batak dog.
8	Bern	Sumatra. Batak dog.
89	Bern	Sumatra. Batak dog. Female.
12	Bern	Sumatra. Batak dog (?).
81	Bern	Sumatra. Batak dog. 1888. Male.
2407	Bogor	Buitensorg, Java, 1930.
2435	Bogor	Buitensorg, Java, 1930.
2434	Bogor	Buitensorg, Java, 1930.
5403	Berlin	Soerabaja, Sumatra, 1904. Batak dog.
5403B	Berlin	Soerabaja, Sumatra, 1904. Batak dog.
6328	Berlin	Sumatra. Batak dog.
6445	Berlin	Sumatra, 1898. Batak dog.

Identification		Provenance
4094	Berlin	Siam? 1885.
16353	Senckenberg	Java, 1865. Male.
36409	Senckenberg	Lombok, 1927.

C. familiaris (PAPUAN VARIETY)

151803	AMNH	Bernard Camp, highlands of West Irian, 1939. Female.
1966.491	Munchen	Bogaro, Mt Bosavi, Southern Highlands Province, 1966. Collected Th. Schultz-Westrum.
1966.487	Munchen	All these specimens are similar to first named Mt Bosavi individual. No sexes known. Most, if not all specimens, are victims of an enteritis epidemic a number of years before the Schultz-Westrum expedition.
1966.487	Munchen	
1966.482	Munchen	
1966.488	Munchen	
1966.483	Munchen	
1966.493	Munchen	
1966.492	Munchen	
1966.485	Munchen	
1966.495	Munchen	
6444	Berlin	Papua.
6442	Berlin	Papua.
71.3100	BMNH	Mimika River, Papua.

C. familiaris (HALLSTROM VARIETY)

Identification		Provenance
TPZ 03	ANU	Approx. 8th generation Taronga Park Zoo. Female. Sacrificed in 1977, and prepared by K. Gollan.
TPZ 04	ANU	As above.
M7989	AM	An early Taronga Park Zoo specimen. Male. Deposited in 1957.
M9135	AM	Taronga Park Zoo specimen. Female. Deposited in 1968.
M8917	AM	Allotype of <i>C. hallstromi</i> . Female. Collected by J. Sinclair in Southern Highlands, PNG. Deposited 1967.
M8502	AM	Type of <i>C. hallstromi</i> . Male. Collected by J. Sinclair in Southern Highlands, PNG. Deposited 1956.
M9185	AM	Taronga Park Zoo specimen. Female. Deposited 1968.

Canis lupus (south Asian varieties) ; males

Variables VI to VI6

7.6.21.1	BMNH	227	220	112	152	117	33	64	96	111	171	40	76	12	25	41	136
35.1.10.2	BMNH	239	220	115	121	121		60	95	119	177	42	81	12	26	44	128
25.10.28.1	BMNH	218	206	107	142	110	35	58	88	107	165	38	74	13	24	41	126
56.5.6.42	BMNH	234	219	115	150	117	41	60	93	115	178	39	79	13	24	41	131
99.6.23.2	BMNH	238	224	119	154	120	44	61	93	117	178	43	77	12	25	43	133
34.8.12.2	BMNH	223	209	107	145	111	37	58	92	110	170	41	72	12	24	41	118
81.8.16.6	BMNH	229	216	112	149	115	39	61	93	116	178	42	76	10	23	41	117
35.8.30.1	BMNH		214	112	147	114	39	62	90	112	174	37	77	13	24	40	131
44.80	BMNH	227	211	112	145	112		61	88		169	39		24	24	38	133
86.2.1.1	BMNH	238	222	115	155	121	40	63	96	119	184	39	82	13	27	40	125
35.1.18.2	BMNH	212	200	109	140	108	36	56	82	112	167	36	76	11	25	38	118
61.4.55	BMNH	224	209	111	146	112	37	58	84	114	164	38	78	12	25	39	120
17589	KIEL	224	212	111	148	114	37	60	89	116	171	43	75	13	26	41	127
91078	BERL	227	218	115	153	117	39	62	92	115	178	42	76	11	23	40	125
K3151	CAMB	243	226	121	162	123	41	63	94	122	187	42	83	014	25	42	135
1957.297	MCHN	229	214	112	150	114	39	61	92	111	177	42	73	14	24	39	127
5312	BNHS	246		122	162	122	44	67	97	124	187	45	82	11	25	46	135
5311	BNHS	241		115	155	119		64	95	122	185	46	81	12	24	41	136
9951	ZSI	228		116	149	114	36	63	86	112	173	40	75	12	24	36	124
6274	BNHS	227		112	144	114	39	60	89	114	171	38	77	14	25	42	130

Canis lupus (south Asian varieties) ;males

Variables V17 to V32

7.6.21.1	BMNH	23	66	23	30	19	36	33	100	66	63	55	56	51
35.1.10.2	BMNH	24	63	22	30	18	39	35	99	63	66	55	54	54 19.5
25.10.28.1	BMNH	22	62	21		17	35	34	93	60	62	54	56	51
56.5.6.42	BMNH	22	67	24	31	21	38	33	99	62	65	57	56	58 27.5
99.6.23.2	BMNH	22	68	25	32	23	37	34	101	66	68	60	58	57
34.8.12.2	BMNH	20	62	23	30	21	38	31	95	61	63	53	56	53 24.8
81.8.16.6	BMNH	20	60	23	32	21	37	33	96	63	65	58	56	53 27.7
35.8.30.1	BMNH	21	63	23	29	22	39	32	96	64			60	54
44.80	BMNH	23	64	23	29	21	35	34		63	65	55	57	22.5
86.2.1.1	BMNH	21	62	22	33	22	39	34	99	61	62	56	55	55 26.0
35.1.18.2	BMNH	20	58	22	29	20	38	32	88	58	58	53	56	52 22.2
61.4.55	BMNH	20	60	22	28	18	36	32	92	60	61	54	52	52 24.5
17589	KIEL	21	64	22	29	20	36	30	96	66	63	53	56	53
91078	BERL	20	61	21	28	17	37	32	99	65	61	54	59	53 16.0
K3151	CAMB	20	62	23	28	20	38	33	100	62	67	58	55	57 24.2
1957.297	MCHN	21	63	22	27	20	40	32	100	60	62	56	53	52 20.5
5312	BNHS	22	66	24	29	21	37	33	102	63	59	69	55	57
5311	BNHS	22	68	24	31	20	39	34	101	65	59	68	59	57 11.4
9951	ZSI	20	58	22	30	17	36	32	75	58	53	62	53	56 10.0
6274	BNHS	19	62	23	29	20	39	32	95	61	54	60	57	55 25.4 11.4

Canis lupus (south Asian varieties) ; males

Variables V33 to V48

7.6.21.1	BMNH	43	55	43	66	51	78	46	58	23	16	35	42	56	72	12	14
35.1.10.2	BMNH	46	58	41	61	47	76	43	60	21	14	40	43	56	73	15	12
25.10.28.1	BMNH	42	56	40	63	47	72	43	57	21	14	34	41	54	69	13	12
56.5.6.42	BMNH	47	68	39	65	44	75	46	59	22	15	34	38	54	70	14	14
99.6.23.2	BMNH	45	61	41	65	50	80	47	61	23	16	37	44	57	73	14	12
34.8.12.2	BMNH	47	66	44	62	47	73	40	58	20	12	35	40	53	68	14	13
81.8.16.6	BMNH	37	54	38	61	47	75	41	60	21	15	36	41	54	67	13	14
35.8.30.1	BMNH	40	62	40	65	47	74	43		22	17	34	38	53	69	13	12
44.80	BMNH	44	61	42	62	48	77	41	62	18	14	34	39	58	71	12	11
86.2.1.1	BMNH	40	56	39	63	45	72	45	56	22	14	33	39	54	69	12	11
35.1.18.2	BMNH	38	52	37	62	46	70	40	56	21	14	31	37	49	66	13	13
61.4.55	BMNH	39	59	36	60	45	72	42	57	21	14	35	39	52	67	13	13
17589	KIEL	42	60	42	64	50	74	41	56	19	14	35	40	55	69	13	12
91078	BERL	43	58	42	65	51	73	44	55	22	14	35	41	56	69	13	14
K3151	CAMB	48	66	38	63	46	75	45	63	23	15	35	39	52	64	12	13
1957.297	MCHN	44	60	37	60	45	72	43	58	22	14	32	35	52	65	13	14
5312	BNHS	46	57	39	62	50	78	45	64	21	16	40	45	58	77	13	12
5311	BNHS	45	64	40	66	48	77	41	62	21	15	37	42	57	72	13	12
9951	ZSI	41	60	33	61	46	70	42	58	20	14	32	37	50	66	13	13
6274	BNHS	43	63	40	60	47	72	44	57	20	16	35	38	53	71	14	14

Canis lupus (south Asian varieties) ; males

Variables V49 to V64

7.6.21.1	BMNH	7.4	15.4	24.7	14.8	14.5	12.8	9.8	17.3	9.5	6.0	6.0	22.8	8.4	23.3	25.1
35.1.10.2	BMNH	9.4	15.7	23.4	14.0	13.0	11.4	12.9	19.1	9.0	6.4	5.4	25.6	7.8	22.4	25.3
25.10.28.1	BMNH	8.0	15.5	23.3	14.4	13.1	12.4	10.9	16.9	9.6	6.4	5.6	23.3	7.9	20.9	24.1
56.5.6.42	BMNH	8.0	16.0	23.7	13.6	12.1	12.0	10.5	17.0	8.8	6.1	5.2	24.2	7.0	22.6	24.6
99.6.23.2	BMNH	8.4	16.7	25.5	14.8	13.2	13.0	11.3	18.8	10.0	6.2	5.4	25.4	7.2	24.0	26.5
34.8.12.2	BMNH	8.6	16.1	24.3	14.7	13.6	12.3	11.8	18.7	9.3	5.9	5.3	24.6	7.3	22.2	23.3
81.8.16.6	BMNH	8.4	15.9	23.9	14.5	13.0	11.7	11.8	17.7	8.4	5.4	4.8	23.9	7.0	22.6	23.7
35.8.30.1	BMNH	8.1	14.1	22.6	14.6	12.3	11.4	10.8	16.7	8.8	5.9	5.0	22.2	7.5	21.0	22.9
44.80	BMNH			22.5											20.8	22.8
86.2.1.1	BMNH	7.5	15.4	23.4	14.4	13.2	12.3	11.4	18.3	9.0	5.6	5.0	23.0	7.2	22.6	25.2
35.1.18.2	BMNH	8.3	14.8	22.7	13.1	11.7	11.2	10.5	16.5	8.4	5.6	4.5	23.0	7.2	21.2	23.3
61.4.55	BMNH														21.0	22.9
17589	KIEL	8.3	16.0	24.9	15.1	13.3	11.8	11.9	18.1	8.5	6.1	4.9	24.2	7.5	23.0	25.3
91078	BERL	8.0	15.1	24.5	14.7	13.7	12.1	11.0	17.0	10.1	6.9	5.6	23.0	7.7	23.0	25.1
K3151	CAMB	9.0	14.8	24.1	14.8	13.4		12.5	18.0	9.3	6.3	5.6	24.0	7.1	22.6	25.8
1957.297	MCHN	8.4	16.0	22.9	13.6	12.0	11.5	12.1	17.5	8.6	5.7	4.8	23.9	7.5	20.5	25.7
5312	BNHS		16.2	25.5	15.9	14.2		19.5	9.3	6.3	5.9				75	
5311	BNHS	8.1	15.5	24.0	15.5	13.3	14.0	10.9	18.2	9.6	5.8	5.2	23.7	8.1	72	
9951	ZSI	7.9	13.5	22.2	13.8	11.6		10.9	16.6	7.8	5.1	4.4	21.6		73	
6274	BNHS	9.6	16.2	23.3	14.9		12.5	11.6	17.3	8.6	5.8		25.7		70	

Canis lupus (south Asian varieties) ; males

Variables V65 to V80

7.6.21.1	BMNH	174	175	26	13	26.8	15.4	13.8	12.2	10.0	7.4	6.3	6.0	11.1	3.2	12.5	7.2
35.1.10.2	BMNH		172	29	14	26.4	14.5	13.0	11.6	10.4	7.2	6.2	5.5	11.0	0.0	11.9	8.1
25.10.28.1	BMNH	164	162	26	13	25.2	15.0	12.5	11.8	10.0	7.6	6.4	6.0	10.8	3.4	13.4	7.8
56.5.6.42	BMNH	173	173	28	13	25.7	13.9	12.6	11.0	10.0	7.0	6.0	5.4	11.0	6.1	12.6	8.4
99.6.23.2	BMNH	178	179	29	13	27.1	15.6	13.3	12.3	11.4	7.6	6.3	5.9	12.0	3.0	13.4	9.2
34.8.12.2	BMNH	168	165	26	13	25.4	15.1	13.0	12.0	9.8	7.4	6.0	5.5	11.1	3.7	12.5	8.0
81.8.16.6	BMNH	168	170	27	12	25.6	14.0	12.6	11.6	9.7	6.5	5.5	5.2	10.7	4.4	11.8	8.1
35.8.30.1	BMNH	174	176	27	11	24.5	14.2	12.4	11.2	9.8	7.3	6.0	5.4	5.7	5.4	12.1	7.4
44.80	BMNH	165	166	26	12					9.1		5.5		10.8	3.7	11.5	
86.2.1.1	BMNH	173	176	26	12	26.4	14.5	13.3	12.0	10.1	6.7	5.7	5.3	11.4	3.0	12.4	7.5
35.1.18.2	BMNH	160	164	24	12	25.1	13.8	11.8	10.0	10.0	6.6	5.6	4.9	10.0	5.7	11.1	7.4
61.4.55	BMNH	161	167	25	12	24.1	14.1	12.9	11.0	9.5	7.2	6.3	5.4	10.6	1.2		
17589	KIEL	165	166	25	12	26.9	15.5	13.5	11.3	9.8	7.9	5.9	5.1	11.5	1.4	11.8	7.9
91078	BERL	170	172	25	12	25.6	15.1	13.4	12.3	10.0	7.5	6.4	5.8	11.0	1.5	13.0	7.5
K3151	CAMB	175	178	31	13	26.1	14.8	13.2	12.2	10.0	7.3	6.0	5.7	12.1	3.5	13.4	8.0
1957.297	MCHN	168	168	26	12	26.2	14.5	12.1	9.8	9.7	7.6	5.5	4.9	11.6	3.9	12.6	7.6
5312	BNHS	181	182	27	13	27.0	15.3	14.0	12.2	10.1	7.4	6.4	6.0	12.7	2.2		7.9
5311	BNHS	178	176	30	13	25.2	15.7	13.8	12.4	10.1	7.5	6.2	5.5	11.7	3.0	14.5	8.5
9951	ZSI	170	170	25	11	24.1	13.2	12.3	10.4	9.1	6.4	5.6	4.7	9.7	4.1	12.0	7.2
6274	BNHS	171	171	26	13	27.0	14.4	12.8	11.5	9.5	7.0	5.8	5.1	10.4	3.2	13.2	7.7

Canis lupus (south Asian varieties) ; females

Variables VI to VI6

36.11.22.1 BMNH	220	197	104	139	106	36	57	86	110	168	43	70	12	21	39	126
36.7.20.6 BMNH	203	195	103	135	108	36	49	81	100	157			11	20	40	109
35.8.32 BMNH	230	212	111	148	113	36	59	89	112	174	39	79	11	22	38	126
35.1.10.3 BMNH	204	191	100	132	104	30	51	82	106	160	35	74	11	22	36	116
98.3.3.1 BMNH	220	202	101	142	109	34	56	90	107	172	38	73	10	21	34	114
35.1.18.4 BMNH	206	193	102	137	109	33	48	81	104	164	35	72	11	20	37	101
85.8.1.52 BMNH	202	183	99	129	101	30	49	76	95	150	65	66	11	21	35	112
35.8.30.3 BMNH		202	107	141	110	35	56	86	111	169	38	76	10	23	38	120
35.1.18.3 BMNH	215	203	112	144	113	36	53	82	106	164	37	71	10	23	36	113
35.8.30.4 BMNH	216	198	106		109	33	52	81	110	165	37	79	11	22	37	118
49997 BERL	213	202	106	138	108	38	56	85	106	158	38	71	12	24	37	127
49996 BERL	209	193	101	136	105	35	52	81	106	162	39	68	11	24	37	112
1911.2266 MCHN	207	195	106	134	108	38	50	79	105	165	37	71	11	19	36	107
6272 BNHS	222		110	149	114	36	63	92	107	167	38	74	11	23	40	126
6276 BHNS	223		112	145	113	37	57	86	109	165	38	75	13	23	38	122
5302 BHNS	223		111	146	117	39	52	85	115	176	42	77	11	23	37	109
9952 ZSI	215		109	144	111	36	56	86	112	167	40	75	12	24	36	115
11.12.19 ZSI	209		104	132	106	33	50	79	107	152	35	75	10	22	36	118
9950 ZSI	214		108	142	111	34	55	85	111	162	36	78	11	23	36	115

Canis lupus (south Asian varieties) ; females

Variables V17 to V32

36.11.22.1BMNH	23	63	22	27	19	18	35	32	94	62	63	53	58	54	26.0
36.7.20.6 BMNH	22	60	20	27	19	18	37	30	90	64	57	52	56	51	19.4
35.8.32 BMNH	21	63	24	30	22	17	35	32	95	63	63	57	56	55	24.5
35.1.10.3 BMNH	21	57	21	28	19	14	34	31	87	58	58	49	54	51	21.5
98.3.3.1 BMNH	21	61	22	29	19	15	36	32	93	59	61	51	53	47	22.5
35.1.18.4 BMNH	20	54	19	27	18	15	35	31	85	55	56	48	52	48	18.5
85.8.1.52 BMNH	20	57	21	26	19	13	35		88	58	56	50	53	47	21.5
35.8.30.3 BMNH	20	60	22	29	20	15	35	31	91	59		50	55	54	23.2
35.1.18.3 BMNH	20	56	21	27	20	15	34	30	88	57	56	50	52	49	
35.8.30.4 BMNH	20	57	22	28	21	13	35	31	87	56	58	53	52	52	25.2
49997 BERL	20	59	23	28	21	15	36	32	94	62	58	51	55	52	30.7
49996 BERL	20	55	21	28	18	15	34	30	85	60	58	50	53	49	21.5
1911.2266 MCHN	21	56	22	27	19	14	37	31	92	57	55	51	52	52	22.2
6272 BHNS	21	62	23	30	22	15	36	31	93	59	54	60	51	50	
6276 BHNS	21	60	21	29	22	17	36	31	91	57	52	59	51	52	10.3
5302 BHNS	22	58	22	29	20	15	38	31	90	59	51	59	55	51	11.1
9952 ZSI	21	58	23	28	19	17	35	31	90	57	50	55	51	52	10.4
11.12.19 ZSI	20	57	22	27	18	14	33	32	87	61	49	59	54	52	10.9
9950 ZSI	20	59	21	29	19	17	34	30	88	59	54	60	53	52	10.6

Canis lupus (south Asian varieties) ; females

Variables V33 to V48

36.11.22.1BMNH	40	55	37	68	51	74	39	56	20	16	35	40	53	66	13	15
36.7.20.6 BMNH	36	49	41	64	50	73	41	54	20	16	34	41	56	73	11	11
35.8.32 BMNH	41	59	37	60	44	75	45	58	22	16	30	35	49	65	13	12
35.1.10.3 BMNH	42	59	39	61	48	65	38	54	20	14	30	33	48	63	11	11
98.3.3.1 BMNH	35	51	36	60	47	69	40	55	21	14	28	33	47	62	11	13
35.1.18.4 BMNH	30	44	35	59	44	68	38	54	20	14	31	36	45	61	11	12
85.8.1.52 BMNH	35	50	37	60	46	67	39	54	20	14	30	33	45	60	10	11
35.8.30.3 BMNH		52	40	62	47	69	40		21	15	33	37	49	64	12	11
35.1.18.3 BMNH	36	51	36	60	45	67	41	52	22	14	32	37	47	63	13	10
35.8.30.4 BMNH	38	56	36	57	44	67	41	54	20	15	31	35	49	65	13	12
49997 BERL	39	58	38	60	46	70	40	54	20	15	32	38	51	67	12	12
49996 BERL	37	53	36	60	47	67	38	54	20	14	30	34	47	61	12	12
1911.2266 MCHN	34	47	36	60	45	66	39	51	20	14	30	33	45	59	10	10
6272 BNHS	41	55	33	59	44	71	42	56	20	14	34	39	54	72	12	12
6276 BHNS	41	62	39	62	46	71	43	55	20	15	32	36	50	66	13	13
5302 BHNS	35	50	38	63	45	66	41	54	19	14	33	37	52	65	13	15
9952 ZSI	38	50	34	61	44	68	40	50	20	14	31	36	49	63	14	13
11.12.19 ZSI	39	56	39	59	45	68	38	57	19	14	31	33	45	61	11	11
9950 ZSI	38	55	35	61	47	68	39	55	20	14	31	34	48	61	12	13

Canis lupus (south Asian varieties) ; females

Variables V49 to V64

36.11.22.1	BMNH	6.6	14.5	21.5	12.3	11.8	11.0	14.3	17.5	8.9	6.0	5.5	21.5	7.1	19.5	22.7
36.7.20.6	BMNH	8.7	16.3	24.3	14.9	13.5		11.9	19.4	9.2	6.2	5.5	24.6	7.5	22.4	25.2
35.8.32	BMNH	8.1			13.6			11.3	17.6	8.3	5.9	4.7			22.2	23.8
35.1.10.3	BMNH	8.5	14.8	21.8	13.6	11.3	10.0	11.7	17.7	8.5	5.5	4.4	23.3	6.5	20.1	22.6
98.3.3.1	BMNH	9.0	14.7	22.0	13.5	11.9	11.0	12.6	17.7	8.0	5.5	4.9	23.8	7.1	20.4	22.6
35.1.18.4	BMNH	7.8	15.0	21.9	13.6	11.5	11.2	11.5	17.3	8.4	5.6	4.9	23.4	6.5	20.0	22.5
85.8.1.52	BMNH	7.4	14.3	21.5	12.0	10.5	10.2	10.0	16.7	7.3	5.0	4.2	21.3	6.7	19.6	22.4
35.8.30.3	BMNH	8.0	14.0	21.6			10.5	10.5	16.7	8.2	5.5	4.5	22.0	6.8	21.0	22.1
35.1.18.3	BMNH	9.0	15.5	23.0	14.2	12.0	11.2	11.8	17.2	8.3	5.6	4.8	24.6	7.2	21.0	23.5
35.8.30.4	BMNH	8.0	14.1	21.5	12.9	10.2		11.2	11.8	8.4	5.7	4.4	22.3	6.9	19.9	21.2
49997	BERL	8.3	14.6	22.1	13.4	12.1	11.3	11.4	16.6	7.8	5.0	4.5	22.8	6.4	20.4	22.0
49996	BERL	7.3	14.0	21.2	12.1	11.1	10.0	9.5	15.8	7.6	4.5	4.2	21.5	6.3	19.7	21.9
1911.2266	MCHN	7.7	13.6	21.2	13.0	11.2	10.6	10.4	15.4	7.6	5.0	4.4	21.6	6.0	19.8	21.5
6272	BNHS	7.4	14.8	22.1				9.8	15.7	9.1			22.1		70	
6276	BHNS	9.0	15.0	23.1	14.2	12.4	11.6	10.1	17.0	8.3	5.5	4.6	23.7	6.8	67	
5302	BHNS	8.7	16.0	23.5	13.7	11.7	11.4	11.2	17.9	8.5	5.7	4.8	24.3		73	
9952	ZSI	8.5	13.9	21.0	13.0	11.5		10.2	14.9	7.4	4.9	4.6	22.3	6.7	71	
11.12.19	ZSI	8.6	15.2	21.6	13.3	11.8		11.0	16.5	7.7	5.0	4.4	24.0		67	
9950	ZSI	7.9	14.5	22.1	13.4			10.9	16.3	7.9	5.3		22.1		70	

Canis lupus (south Asian varieties) ; females

Variables V65 to V80

36.11.22.1	BMNH	156	156	24	13	24.8	13.5	11.5	10.4	9.6	7.0	5.8	5.1	10.3	2.8	11.5	6.9
36.7.20.6	BMNH	147	148	24	12	27.2	14.7	13.1	12.5	10.6	7.2	6.0	5.7	11.0	0.0	12.6	8.5
35.8.32	BMNH	168	167	27	12	24.9	13.5	12.3		9.3	6.6	5.7	4.9	11.1	5.1		7.3
35.1.10.3	BMNH	149	151	22	11	24.6	13.6		10.5	9.6	6.4		5.0	11.0	3.5	10.4	7.5
98.3.3.1	BMNH	157	159	25	11	23.5	13.2	12.2	10.6	9.0	6.4	5.2	4.7	10.8	2.5	11.0	8.2
35.1.18.4	BMNH	147	149	21	11	24.4	13.3	12.3	10.6	9.2	6.7	5.8	5.2	10.2	2.2	11.9	7.6
85.8.1.52	BMNH	148	145	22	11	24.0	13.0	10.9	9.3		6.0	5.1	4.5	10.7	4.2	10.9	
35.8.30.3	BMNH	160	163	24	11	23.4	14.2	12.3		9.1	6.8	5.7	5.0	9.5	5.7		7.1
35.1.18.3	BMNH	160	162	23	10	25.1	14.3	12.9	11.0	9.3	6.9	5.7	5.0	11.5	3.2	11.2	7.7
35.8.30.4	BMNH	158	159	23	11	22.6	13.1	11.5	9.0	9.0	7.0	5.6	4.7	9.8	6.6	11.3	7.7
49997	BERL	157	159	25	12	23.6	13.8	12.0	10.0	8.8	6.5	5.5	4.8	10.5	3.8	12.1	7.4
49996	BERL	151	151	22	11	23.5	12.9	11.5	9.7	8.4	5.8	4.8	4.2	10.3	5.4	10.1	6.8
1911.2266	MCHN	149	150	25	10	22.5	13.5	11.8	11.0	8.5	6.2	5.5	4.8	9.1	2.5	11.0	6.6
6272	BNHS																
6276	BHNS	167	166	27	11	24.5	14.1	12.6	11.1	9.5	7.1	5.5	5.0	9.7	3.7	12.4	7.0
5302	BHNS	165	166	25	10	26.5				9.7				10.9	5.1		8.1
9952	ZSI	161	163	24	11	21.8	13.2	12.5	10.4	8.9	6.5	5.3	5.0	9.3	4.3	11.0	7.5
11.12.19	ZSI	152	150	22	12	23.4	14.2	12.1	10.2	9.1	7.0	5.7	4.4	10.5	2.0	12.0	7.3
9950	ZSI	160	160	23	10		13.3	12.3	9.5	8.9	6.1	5.2	4.7		4.7	11.0	7.0

Canis aureus Metrical Data

Id.	Variables V1 to V16															
5321BNHS	163	152	77	106	82	29	41	67	75	120	23	54	8	17	28	87
5351BNHS	155	147	78	102	81	27	39	62	75	118	24	53	8	16	26	87
5318BNHS	166	157	80	107	83	27	43	69	78	122	20	57	9	16	27	86
6283BNHS	153	143	74	96	78	25	36	61	72	115	23	52	10	14	25	81
6289BNHS	153	145	74	93	77	28	39	64	73	113	25	49	8	15	27	82
6406BNHS	146	136	70	93	74	25	37	60	68	111	21	50	9	14	25	78
5349BNHS	149	140	70	94	75	24	35	64	66	110	22	46	9	15	27	82
5316BNHS	145	139	71	96	75	25	35	62	68	109	21	49	9	14	25	76
17614ZSI	163	155	79	105	80	29	43	69	79	127	25	57	10	10	26	85
17402ZSI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11185ZSI	160	146	74	103	77	24	43	66	76	123	24	55	8	16	29	88
17601ZSI	160	152	77	103	81	29	42	67	76	123	25	53	8	16	27	88
17524ZSI	160	150	75	101	79	26	41	67	79	121	24	58	11	14	26	83
17537ZSI	157	148	75	101	80	30	39	66	73	120	24	52	11	16	30	90
17520ZSI	158	151	76	101	79	28	41	67	74	120	25	53	9	15	29	87
17521ZSI	168	157	79	108	82	28	43	70	74	126	26	51	11	16	28	89
12909ZSI	157	149	75	112	78	27	43	67	74	120	22	55	8	10	26	79
17610ZSI	149	142	72	96	78	27	35	63	69	115	24	49	8	14	25	78
17613ZSI	153	0	73	99	77	26	40	0	74	114	25	52	8	15	24	78
17602ZSI	161	153	79	103	83	27	39	67	72	122	24	50	8	16	29	82
23.7.6.64 BMNH	152	145	73	99	77	26	40	63	74	115	24	53	7	14	26	83
23.7.6.65 BMNH	136	131	67	90	71	26	35	57	62	105	20	45	8	13	23	77
23.7.6.67 BMNH	165	155	78	108	86	27	41	71	78	124	24	56	8	15	28	90
30.5.24.12BMNH	156	146	75	101	79	28	38	64	72	119	24	49	8	14	27	82
23.7.6.69 BMNH	143	137	67	93	73	24	37	65	69	107	21	50	9	15	26	80
9.12.3.2 BMNH	153	142	71	98	77	24	37	64	70	116	23	50	8	15	27	84
37.5.26.36BMNH	165	155	80	106	82	30	43	67	71	124	24	50	9	15	27	90
26.6.7.5 BMNH	169	162	83	111	86	31	43	70	79	124	27	56	10	18	30	93
23.7.6.41 BMNH	149	141	71	96	77	25	37	65	70	116	23	48	9	15	24	80
37.10.8.4 BMNH	134	143	73	99	78	26	38	64	71	115	23	50	9	15	26	80
35.4.8.1 BMNH	159	151	78	104	80	27	43	66	78	120	24	56	9	10	30	86
20.5.1.9 BMNH	149	142	73	99	78	27	37	64	71	112	22	52	7	14	24	77
20.5.1.10 BMNH	161	152	76	103	81	26	42	69	79	121	25	57	10	15	34	88
40.331 BMNH	145	137	70	93	73	26	36	59	67	108	19	49	8	14	26	80
16.4.16.10BMNH	163	156	80	108	82	29	43	69	76	123	27	50	9	16	28	90
23.7.6.24 BMNH	152	145	75	101	77	25	40	64	71	116	24	50	8	15	24	85
37.5.26.23BMNH	158	150	79	112	82	27	38	63	76	119	23	58	8	15	26	86
37.5.26.22BMNH	160	148	80	104	80	29	41	62	78	124	26	53	9	15	26	83
23.7.6.70 BMNH	158	150	77	102	81	27	39	67	74	120	24	52	8	16	28	86
23.7.6.66 BMNH	150	143	74	98	78	26	39	63	70	113	23	50	9	14	26	81
30.5.24.12BMNH	139	134	68	91	71	23	36	60	67	106	21	48	9	13	23	74
30.5.24.12BMNH	153	150	76	102	80	28	41	66	74	116	22	54	8	15	27	84

Canis aureus Metrical data

Id.	Variables V17 to V32														
5321BNHS	18	47	18	25	17	11	31	25	72	46	47	40	40	38	19
5351BNHS	17	47	18	22	16	12	31	26	68	45	46	38	40	39	17
5318BNHS	18	44	19	24	17	11	31	26	73	50	46	42	41	41	18
6283BNHS	18	46	18	23	17	10	31	25	69	48	42	37	40	36	17
6289BNHS	17	45	17	21	15	12	30	26	68	45	43	38	38	38	14
6406BNHS	17	42	16	20	14	12	29	24	68	46	42	37	39	35	13
5349BNHS	18	45	18	25	18	10	30	26	69	45	42	38	39	35	20
5316BNHS	16	43	17	22	15	11	29	24	67	45	40	36	39	36	15
17614ZSI	16	45	18	25	16	11	31	25	72	46	45	39	39	40	0
17402ZSI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11185ZSI	17	49	18	21	14	13	30	25	71	48	46	39	41	38	0
17601ZSI	16	45	18	23	15	13	30	26	70	45	44	40	40	39	0
17524ZSI	17	47	17	23	14	12	31	26	72	48	44	35	40	40	0
17537ZSI	17	47	17	22	14	12	30	26	74	47	45	38	42	41	0
17520ZSI	17	48	18	23	15	12	32	26	71	50	45	39	43	39	0
17521ZSI	18	47	18	24	16	13	33	25	74	48	48	40	44	39	0
12909ZSI	18	46	18	21	15	11	31	25	71	45	42	37	38	37	0
17610ZSI	16	43	17	22	14	11	28	25	69	45	42	37	40	36	0
17613ZSI	16	44	18	23	15	11	32	24	69	45	43	37	38	37	0
17602ZSI	17	49	17	25	17	13	30	25	76	50	48	40	43	40	0
23.7.6.64 BMNH	18	45	16	23	16	13	28	24	67	44	42	39	39	36	8
23.7.6.65 BMNH	16	42	17	20	14	11	27	24	63	42	38	34	39	33	6
23.7.6.67 BMNH	19	47	18	21	16	12	30	27	75	48	45	38	41	37	0
30.5.24.12 BMNH	18	47	17	22	16	13	32	26	72	45	43	38	40	38	0
23.7.6.69 BMNH	17	44	17	20	14	11	27	24	67	44	43	38	39	37	8
9.12.3.2 BMNH	17	48	18	22	17	11	31	25	69	45	44	39	41	36	12
37.5.26.36 BMNH	16	45	17	23	17	10	29	27	77	47	47	41	41	40	12
26.6.7.5 BMNH	19	50	20	24	17	11	31	26	76	46	46	41	39	41	15
23.7.6.41 BMNH	16	42	17	21	15	9	28	24	69	43	40	36	38	34	9
37.10.8.4 BMNH	19	46	18	24	16	11	28	25	72	48	46	42	40	37	13
35.4.8.1 BMNH	19	48	20	24	17	11	29	25	70	47	45	40	40	38	14
20.5.1.9 BMNH	17	42	19	22	17	9	28	24	67	45	42	38	38	34	12
20.5.1.10 BMNH	19	47	19	24	16	12	29	26	72	48	46	41	39	40	0
40.331 BMNH	17	44	19	21	17	10	27	24	65	43	43	39	37	35	0
16.4.16.10 BMNH	17	46	18	24	17	11	31	26	76	46	46	41	40	40	10
23.7.6.24 BMNH	16	44	17	22	15	10	27	26	71	47	42	37	40	38	9
37.5.26.23 BMNH	16	45	17	22	16	9	30	26	72	47	45	39	38	39	11
37.5.26.22 BMNH	16	45	16	20	13	10	30	26	71	47	43	37	39	37	9
23.7.6.70 BMNH	18	45	16	23	16	10	30	26	71	45	45	40	38	38	12
23.7.6.66 BMNH	18	46	16	23	17	12	28	25	70	45	41	36	38	37	10
30.5.24.12 BMNH	17	41	16	22	15	10	28	24	65	44	38	36	37	34	9
30.5.24.12 BMNH	16	46	17	21	15	12	27	25	71	46	43	40	40	38	8

Canis aureus Metrical data

Id.	Variables V33 to V46															
5321BNHS	26	41	27	51	37	55	29	42	17	12	23	26	38	51	10	10
5351BNHS	27	44	32	52	40	53	30	41	17	12	23	25	35	49	8	9
5318BNHS	28	40	29	50	36	55	30	42	16	13	24	27	37	50	9	10
6283BNHS	27	42	30	51	38	50	28	38	15	12	22	24	32	47	8	10
6289BNHS	26	42	26	49	36	51	29	39	15	11	22	27	34	47	9	10
6406BNHS	24	37	29	49	39	49	26	37	14	11	21	24	32	45	9	8
5349BNHS	23	34	27	50	37	51	28	37	15	12	23	27	35	48	9	10
5316BNHS	25	38	29	47	38	48	26	36	10	12	22	25	33	45	9	9
17614ZSI	27	37	29	49	39	51	29	39	15	11	23	25	35	49	9	10
17402ZSI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11185ZSI	27	43	30	53	38	53	26	41	14	13	22	29	38	50	9	9
17601ZSI	26	37	28	51	37	53	31	40	17	11	22	27	35	49	8	8
17524ZSI	29	44	30	53	39	53	30	38	16	12	22	24	33	48	9	11
17537ZSI	31	48	35	54	41	52	28	39	16	14	25	28	36	50	9	8
17520ZSI	28	43	30	51	40	53	30	41	17	12	24	26	36	50	9	8
17521ZSI	26	42	30	52	40	56	30	42	15	11	24	27	35	49	9	9
12909ZSI	25	37	27	48	36	52	28	39	15	10	22	25	34	46	8	9
17610ZSI	25	38	26	50	37	48	28	37	16	13	22	25	32	46	9	8
17613ZSI	24	37	29	49	37	50	0	38	0	0	21	25	34	46	8	9
17602ZSI	25	36	31	54	40	58	32	42	18	13	24	26	34	50	9	10
23.7.6.64 BMNH	26	43	31	48	37	51	29	37	15	11	23	27	35	48	8	10
23.7.6.65 BMNH	25	41	29	49	38	49	28	35	15	12	21	24	29	44	8	8
23.7.6.67 BMNH	32	48	32	54	40	55	31	41	16	12	25	27	39	54	14	11
30.5.24.12 BMNH	26	40	32	52	42	53	30	39	15	11	23	26	36	48	9	11
23.7.6.69 BMNH	27	40	29	47	39	50	27	40	13	11	21	25	33	45	9	9
9.12.3.2 BMNH	25	42	29	50	39	53	29	40	15	11	23	26	37	50	9	9
37.5.26.36 BMNH	24	42	30	50	37	53	29	43	15	11	22	27	35	49	9	10
26.6.7.5 BMNH	28	41	28	54	39	56	32	42	17	12	25	29	39	53	10	10
23.7.6.41 BMNH	25	39	30	41	38	49	28	37	15	12	19	22	31	45	9	10
37.10.8.4 BMNH	27	41	31	51	41	51	28	40	14	11	22	27	35	47	8	11
35.4.8.1 BMNH	28	45	32	51	38	55	31	42	16	12	25	30	40	51	9	9
20.5.1.9 BMNH	23	35	29	48	38	49	27	38	14	11	21	25	33	46	8	9
20.5.1.10 BMNH	31	46	33	50	39	53	30	41	15	12	24	30	40	51	9	10
40.331 BMNH	24	40	26	47	35	49	29	38	14	11	21	46	33	46	8	8
16.4.16.10 BMNH	30	42	30	50	39	54	30	42	16	12	24	27	37	52	9	8
23.7.6.24 BMNH	28	41	30	49	39	51	29	37	15	11	21	24	33	46	8	10
37.5.26.23 BMNH	27	42	30	50	39	50	29	40	16	12	22	26	36	50	8	10
37.5.26.22 BMNH	26	40	27	49	39	51	28	39	15	11	21	24	33	46	9	13
23.7.6.70 BMNH	26	39	26	52	39	51	30	41	16	12	25	29	39	51	9	10
23.7.6.66 BMNH	27	40	30	50	39	51	28	37	15	11	23	28	35	50	9	10
30.5.24.12 BMNH	25	39	29	48	38	47	27	36	14	11	21	25	33	45	8	9
30.5.24.12 BMNH	26	43	29	52	40	52	31	40	16	11	23	28	35	47	9	9

Canis aureus Metrical data

Id.	Variables V49 to V64														
5321BNHS	7.0	12.5	16.8	10.7	9.3	7.8	9.0	13.1	6.3	4.0	3.6	19.5		15.6	18.3
5351BNHS	6.8	12.7	16.5	9.4	7.7	8.1	9.1	14.0	6.0	3.8	3.2	19.5	5.0	15.4	18.6
5318BNHS	6.9	11.7	16.0	9.5	8.4	7.7	8.7	12.8	6.1	3.8	3.4	18.6		14.9	17.2
6283BNHS	6.4	11.7	16.6	9.4	8.0	7.8	9.0	14.0	6.2	3.7	3.3	18.2	4.9	15.5	17.4
6289BNHS	6.8	12.0	15.6	9.7	8.6	8.2	8.4	13.1	6.2	4.0	3.6	18.8	4.7	15.0	16.8
6406BNHS	6.7	11.3	15.5	9.0	7.8	6.8	8.7	12.8	5.2	3.6	3.2	17.9	4.8	14.2	16.7
5349BNHS	7.1	11.5	16.6	9.9	7.7	7.1	9.1	13.3	6.3	4.0	3.1	18.5	4.6	16.0	17.5
5316BNHS	6.7	11.9	16.5	10.2	8.9	7.2	8.6	7.7	5.9	4.0	3.4	18.6	5.2	15.2	17.7
17614ZSI	6.5	12.0	16.2	10.1	8.5	8.0	8.2	12.9	5.9	4.2	3.4	18.8		15.0	
17402ZSI															
11185ZSI	6.6	11.6	15.6	10.1	8.1	8.5	8.1	12.3	6.3	4.5	3.5	18.2		14.3	
17601ZSI		12.0	17.4	10.0	8.4	7.7		13.4	6.6	4.1	3.4			16.1	17.4
17524ZSI	6.9	12.3	16.3	9.9		7.2	8.6	13.2	5.9	3.4		19.0		15.0	16.4
17537ZSI	6.9	12.4	17.0		8.6	8.5	9.0	13.3	6.0		3.2	18.7		16.2	17.3
17520ZSI	7.2	12.6	17.5	10.3	9.0	8.3	9.1	14.0	6.5	4.3	3.7	19.5			17.5
17521ZSI	7.0	12.2	16.9	10.8	8.6	8.5	9.2	14.0	6.5	4.1	3.4	19.0		15.3	17.1
12909ZSI	6.7	11.0	15.4	9.7	8.4	7.3	9.1	13.1	5.7	3.9	3.4	17.5			
17610ZSI	6.5	12.8	16.1	10.0	8.4	7.0	8.8	13.7	6.1	4.1	3.5	19.5			
17613ZSI	6.4	11.3	15.8	9.6	8.1	7.6	9.1	13.3	6.4	4.0	3.4	17.8		14.8	16.0
17602ZSI	7.2	12.9	17.2		8.8		9.0	13.2	6.3		3.5	20.2		15.7	17.2
23.7.6.64 BMNH	6.7	11.1	16.1	9.8	8.4	7.5	8.8	12.3	5.7	3.9	3.4	17.8	4.6	15.4	17.1
23.7.6.65 BMNH	6.0	12.0	15.7	9.8	8.3	7.0	9.0	13.1	5.5	3.3	2.8	17.7	4.6	15.5	15.9
23.7.6.67 BMNH	7.1	13.5	17.6	10.7			9.8	14.2	6.6	3.9		20.6	5.4	16.5	17.9
30.5.24.12 BMNH	7.0	12.9	17.5	10.5	8.4	8.0	9.1	14.0	6.6	3.7	4.0	19.8	4.7	16.8	18.4
23.7.6.69 BMNH	6.7	11.4	15.5	9.4	7.9	7.3	8.9	12.6	5.6	3.4	3.2	17.8	4.8	14.5	16.2
9.12.3.2 BMNH	6.6	11.8	16.6	9.5	7.8	7.0	8.6	13.9	6.2	3.3	2.9	17.9	4.9	15.8	
37.5.26.36 BMNH	6.9	11.9	17.0	10.5	9.0	8.8	9.2	13.4	6.0	3.8	3.4	18.5		16.1	17.9
26.6.7.5 BMNH	7.4	11.5	17.2	10.7	8.7	9.3	8.9	8.5	6.5	4.0	3.6	19.4	5.0	16.3	18.4
23.7.6.41 BMNH	6.5	11.1	16.4	9.9	8.6	7.3	9.5	14.0	5.7	3.5	3.0	17.3	4.5	15.6	16.5
37.10.8.4 BMNH	7.0	12.2	16.7	11.0	8.4	7.5	9.8	14.1	6.2	3.6	3.7	19.0	5.1	15.6	16.9
35.4.8.1 BMNH	7.6	12.9	17.7	11.6	9.7	8.6	9.6	13.9	6.5	4.0	4.1	20.2	6.0	16.8	17.2
20.5.1.9 BMNH	7.3	11.9	16.1	9.8	7.5	6.7	9.6	14.0	6.5	3.5	3.8	18.8	4.9	15.4	16.6
20.5.1.10 BMNH	6.6	11.9	17.7	12.0	8.9	8.0	8.8	14.1	6.7	4.0	4.0	18.5	5.4	16.7	17.4
40.331 BMNH	6.9	11.9	15.6	9.8	8.6	6.9	8.7	12.7	5.4	3.0	3.1	18.4	5.0	14.7	
16.4.16.10 BMNH	7.2	12.2	16.9	10.4	8.7	8.6	9.8	13.7	6.1	4.4	4.0	19.5	5.3	15.3	17.0
23.7.6.24 BMNH	7.1	10.5	15.0	9.2	7.8	7.4	9.7	12.5	5.5	3.7	2.9	17.5	4.9	14.1	16.6
37.5.26.23 BMNH	6.9	12.5	18.3	10.9	8.9	8.3	9.0	14.2	7.1	4.4	3.9	19.3	5.2	17.0	17.3
37.5.26.22 BMNH	7.2	12.3	17.2	10.4	8.6	7.6	9.5	8.6	6.0	3.6	3.4	19.4	5.0	16.1	17.5
23.7.6.70 BMNH	6.8	12.3	17.1	10.8	9.3	8.4	9.7	14.5	6.5	4.5	3.7	18.9	5.0	16.1	17.7
23.7.6.66 BMNH	6.9	11.7	17.0	10.6	9.0	7.5	9.7	8.7	6.1	3.8	3.5	18.7	5.2	16.1	18.0
30.5.24.12 BMNH	6.6	10.8	15.0	8.9	7.8	6.5	9.2	12.3	5.4	3.5	3.2	17.4	4.3	14.3	16.0
30.5.24.12 BMNH	6.6	12.1	17.5	10.9	9.5	8.4	9.6	14.3	7.0	4.0	3.5	19.0	5.4	16.5	18.4

Canis aureus Metrical data

Id.	Variables V65 to V80															
5321BNHS	120	177	16	8	19.2	10.5	9.5	8.2	7.1	5.2	4.2	3.8	9.5	1.5	7.6	6.5
5351BNHS	117	114	17	8	19.1	9.7	8.2	7.5	7.0	4.9	3.9	3.5	8.2	1.8	7.3	6.3
5318BNHS	120	120	16	8	18.4	9.6	8.5	7.5	7.0	4.5	3.9	3.5	8.8	3.9	7.2	6.0
6283BNHS	112	112	16	8	18.5	9.9	8.6	7.5	7.0	4.4	3.7	3.1	8.5	0.0	7.7	6.1
6289BNHS	116	113	15	9	18.2	9.5	8.6	7.6	7.1	4.7	4.2	3.9	8.5	1.9	7.7	6.0
6406BNHS	106	106	14	8	17.9	9.2	7.8	6.9	6.9	4.4	3.6	3.4	8.1	2.0	6.4	5.7
5349BNHS	109	107	15	9	18.5	10.5	8.4	7.1	7.4	5.0	3.9	3.4	9.0	0.0	6.1	6.0
5316BNHS	109	107	16	8	16.6	10.0	9.3	7.9	6.8	4.6	3.8	3.6	7.7	0.0	7.2	6.0
17614ZSI																
17402ZSI																
11185ZSI	113	115	16	9	17.8	10.3	8.7	7.4	6.8	5.2	4.2	3.8	8.3	1.8	8.0	6.0
17601ZSI	120	118	17	9	19.0	10.3	8.9	7.6	7.4	5.2	4.1	3.8	8.6	2.1	7.2	6.5
17524ZSI	117	117	16	8	18.0	9.5	8.5	7.7	6.7	4.3	3.6	3.4	8.5	2.0	7.0	6.0
17537ZSI	118	116	17	9	18.3	10.2	9.0	8.3	7.1	4.7	3.9	3.6	8.1	0.0	7.8	6.5
17520ZSI	119	116	16	9	19.0	10.3	9.3	8.3	7.6	5.1	4.3	4.1	8.8	0.0	8.0	6.5
17521ZSI	123	120	18	9	19.1	11.0	9.2	8.3	7.3	5.1	4.1	3.7	8.5	2.2	8.1	6.3
12909ZSI	114	113	16	9	17.7	9.6	8.4	7.5	7.0	4.4	3.6	3.5	7.9	1.3	7.0	5.9
17610ZSI	110	109	17	8	18.9	10.0	9.0	7.9	7.3	5.0	4.2	3.8	8.7	0.0	7.2	
17613ZSI	112	110	15	7	17.1	10.1	8.7	7.6	6.8	5.1	4.0	3.6	7.8	1.7	7.5	6.0
17602ZSI	116	115	16	9	19.0	10.5	9.2	8.3	7.1	5.0	4.0	3.8	8.7	1.5		6.4
23.7.6.64 BMNH	114	113	16	8	17.9	9.9	8.7	8.2	7.0	4.8	4.0	3.7	8.3	0.8	7.4	6.2
23.7.6.65 BMNH	103	100	15	7	16.9	9.6	8.4	7.6	6.5	4.3	3.4	3.2	7.9	0.0	6.7	5.7
23.7.6.67 BMNH	123	122	18	8	19.0	11.1	9.0	8.5	7.4	5.0	4.0	3.7	9.3	1.4		6.3
30.5.24.12BMNH	112	112	16	8	19.1	10.2	9.4	7.7	7.4	5.3	4.4	4.4	9.4	0.0	8.1	6.0
23.7.6.69 BMNH	107	105	15	8	17.1	9.7	8.3	7.1	6.9	4.4	3.6	3.4	7.8	2.0	7.4	5.5
9.12.3.2 BMNH																
37.5.26.36BMNH	122	119	17	8	18.7	10.5	9.1	8.6	7.0	4.8	4.0	3.8	8.3	1.6	8.5	6.2
26.6.7.5 BMNH	126	128	18	9	19.5	11.1	9.5	8.3	7.5	5.5	4.2	4.0	8.1	1.2	8.6	6.3
23.7.6.41 BMNH	111	110	16	7	17.9	10.2	8.6	7.3	6.6	4.7	3.6	3.3	8.8	2.1	6.7	6.1
37.10.8.4 BMNH	113	111	16	8	17.9	10.8	8.3	7.8	7.3	5.4	4.2	3.6	9.0	0.0	7.7	6.1
35.4.8.1 BMNH	118	116	16	9	18.3	10.6	9.7	8.5	7.5	5.0	4.1	3.8	8.7	0.0	8.2	6.5
20.5.1.9 BMNH	112	109	14	8	17.7	9.9	8.5	7.4	6.9	4.5	3.6	3.4	8.4	1.5	6.7	6.0
20.5.1.10 BMNH	120	117	17	9	18.5	11.1	9.5	8.4	7.3	5.2	4.3	4.1	8.8	0.0	8.1	5.8
40.331 BMNH																
16.4.16.10BMNH	122	121	17	8	18.9	10.6	9.1	8.1	7.4	4.9	4.2	3.9	9.3	1.5	9.0	6.1
23.7.6.24 BMNH	114	112	16	8	17.5	10.1	8.4	6.9	6.4	4.4	3.6	3.2	7.6	1.5	7.6	5.2
37.5.26.23BMNH	118	116	15	8	18.5	10.5	9.6	8.4	7.6	5.8	4.7	4.4	9.1	2.0	8.2	6.5
37.5.26.22BMNH	117	115	15	8	18.5	10.0	9.1	8.0	6.8	4.5	3.7	3.5	8.8	2.0	7.2	6.1
23.7.6.70 BMNH	119	116	16	8	18.7	10.6	9.5	8.4	7.4	4.8	4.0	3.8	8.7	1.5	8.3	6.3
23.7.6.66 BMNH	111	1.09	14	8	19.0	10.4	9.2	8.2	7.0	4.8	4.1	3.7	9.2	0.0	7.7	6.6
30.5.24.12BMNH	102	101	14	8	17.0	9.2	7.8	7.0	6.4	4.2	3.5	3.5	8.3	0.0	6.5	6.0
30.5.24.12BMNH	116	116	17	8	19.4	11.0	9.4	8.2	7.5	5.0	4.1	3.8	9.0	0.0	7.8	6.5

Cuon alpinus Metrical data

Id. Variables V1 to V16

00736BOGOR	168	79	106	82	29	43	70	78	127	27	55	12	18	35	96
00677BOGOR	174	83	110	84	31	45	70	82	131	31	56	13	19	37	98
00677BOGOR	162	77	102	79	28	44	68	77	122	27	53	12	18	35	95
00677BOGOR	178	82	108	84	30			83	134	30	58	12	20	36	100
00936BOGOR	165	78	102	79	30	45	69	77	123	26	55	13	19	36	96
00935BOGOR	171	79	106	83	28	45	73	80	127	28	55	12	19	37	100
00206BOGOR	176	82	109	84	33	47	72	82	132			14	21	36	101
00677BOGOR	178	83	111	84	31	48	74	82	133	29	55	13	21	37	102
00676BOGOR	164	79	104	80	31	43	66	77	123	25	55	14	18	37	99
00206BOGOR	171	80	107	82	30	46	71	82	131	27	57	13	20	38	99
00114BOGOR	171	81	106	82	30	44	69	79	127	28	54	13	20	38	103
00203BOGOR	175	79	107	83	31	46	74	80	129	27	55	13	21	38	101
00677BOGOR	178	84	113	87	31	47	75	86	136	31	57	14	21	38	106
00206BOGOR	183	84	114	86	32	52	77	87	137	30	59	15	22	39	110
5453BNHS	189	92	121	92	31	52	78	92	143	34	61	14	21	41	114
M1159BNHS	185	91	113	89	36	48	73	88	140	32	59	13	20	39	110
5426BNHS	180	86	111	86	32	49	72	87	132	31	60	11	19	35	104
5466BNHS	187	90	119	90	31	54	78	91	139	32	62	13	21	38	106

Cuon alpinus Metrical data

Id.	Variables V17 to V32															
	17	26	10	12	33	26	79	57	43	49	47	43	43	43	43	
00736BOGOR	21	51	17	26	10	12	33	26	79	57	43	49	47	43	14.2	7.3
00677BOGOR	23	51	18	25	11	13	33	26	81	57	44	52	48	45	8.1	8.1
00677BOGOR	22	50	17	25	14	13	32	25	78	58	42	48	47	42	12.0	6.5
00677BOGOR	21	51					35	26	82	63		54	53	46	7.0	7.0
00936BOGOR	21	51	17	25	10	13	33	25	81	58	42	47	46	44	13.5	7.0
00935BOGOR	22	53	19	26	10	12	32	25	83	60	45	50	49	46	16.5	7.3
00206BOGOR	20	52	18	27	11	12	34	26	83	59	46	51	48	48	16.0	7.5
00677BOGOR	21	53	18	26	11	12	32	26	86	56	46	52	48	48	16.2	7.5
00676BOGOR	22	51	15	24	9	13	32	25	79	54	42	47	49	45	10.7	7.6
00206BOGOR	20	53	18	26	10	12	34	26	82	61	45	51	50	46	21.6	21.6
00114BOGOR	21	53	16	24	10	12	31	26	82	57	45	51	48	46	14.0	7.2
00203BOGOR	20	53	18	25	11	12	33	26	85	57	46	52	48	46	13.0	7.2
00677BOGOR	22	53	17	27	10	13	32	26	85	55	45	51	47	40	15.0	7.5
00206BOGOR	21	55	19	27	11	12	35	28	88	60	48	55	49	49	16.5	7.8
5453BNHS	22	58	20	28	18	14	34	28	89	59	56	49	48	52	22.4	22.4
M1159BNHS	21	58	19	25	18	15	32	26	86	61	60	55	51	52	17.0	17.0
5426BNHS	22	55	18	26	19	16	33	27	82	59	55	50	48	50	15.5	15.5
5466BNHS	21	58	18	24	16	18	34	28	86	59	55	48	49	47		

Cuon alpinus Metrical data

Variables V33 to V48

ld.

00736BOGOR	30	41	32	46	60	32	45	17	14	30	35	42	55	11	13
00677BOGOR	33	46	31	45	62	32	47	17	14	32	33	41	57	11	14
00677BOGOR	31	40	32	45	57	30	44	17	14	30	34	40	55	11	15
00677BOGOR	32	47	36	49	60		47			32	36	44	58	12	14
00936BOGOR	34	45	32	45	59	31	44	16	14	31	36	43	56	12	14
00935BOGOR	34	45	32	46	62	34	47	17	13	32	36	44	58	13	15
00206BOGOR	35	47	35	47	60	32	48	17	13	32	36	43	57	14	15
00677BOGOR	36	47	32	46	61	31	46	16	13	32	37	45	57	13	14
00676BOGOR	33	44	36	47	59	33	42	17	13	30	36	42	56	11	13
00206BOGOR	33	43	34	47	62	33	48	18	14	33	36	43	59	14	16
00114BOGOR	34	47	30	46	60	31	47	16	14	34	39	47	59	13	15
00203BOGOR	35	46	33	46	61	32	46	17	14	32	38	47	58	13	14
00677BOGOR	37	47	35	47	63	33	49	17	14	33	37	44	60	14	16
00206BOGOR	38	51	36	47	63	34	51	17	13	34	37	43	61	15	16
5453BNHS	40	53	36	48	67	37	50	19	15	36	40	52	67	14	16
M1159BNHS	37	46	35	46	66	36	54	18	14	34	39	49	63	13	12
5426BNHS	32	41	30	48	66	35	50	17	12	32	35	45	59	12	10
5466BNHS	37	52	34	46	66	37	51	18	13	33	37	47	59	13	11

Cuon alpinus Metrical data

Id.	Variables V49 to V64										51	52	46	52	48	50	51	52	47	51	51	52	54	52	19.1	21.3
	5.7	12.9	17.8	9.9	6.1	9.1	7.5	13.1	6.7	4.5																
00736BOGOR	5.7	12.9	17.8	9.9	6.1	9.1	7.5	13.1	6.7	4.5	4.3	18.5	6.0	51												
00677BOGOR	5.4	13.0	18.4	9.5	10.4	7.2	13.4	7.0	4.8	4.4	18.5	6.4	52													
00677BOGOR	5.4	12.0	18.2	9.5	7.8	9.5	6.8	12.1	6.4	4.4	4.0	17.5	6.1	46												
00677BOGOR	5.5	12.7	20.0	14.3	8.9	10.6	7.5	13.8	7.0	5.0	4.9	18.4	6.3	52												
00936BOGOR	5.9	11.8	18.2	9.2	8.1	9.3	7.8	12.3	6.1	4.4	4.0	17.7	5.7	48												
00935BOGOR	5.7	12.5	19.1	10.0	8.7	9.5	8.1	13.0	6.8	4.8	4.5	18.3	5.7	50												
00206BOGOR	5.5	13.0	19.7	10.7	8.8	9.9	7.8	13.7	7.0	4.8	4.3	18.4	6.1	51												
00677BOGOR	5.7	12.3	19.3	10.4	8.7	9.9	7.9	13.3	6.8	4.7	4.3	17.8	6.0	52												
00676BOGOR	4.9	12.5	18.8	10.2	8.2	9.9	6.8	12.6	6.5	4.5	4.1	17.0	6.3	47												
00206BOGOR	5.6	13.0	19.9	10.4	9.1	10.1	8.0	13.7	6.7	5.0	4.4	18.4	6.3	51												
00114BOGOR	5.4	12.2	19.1	10.7	8.9	9.8	7.9	13.1	6.4	4.9	4.3	18.0	5.8	51												
00203BOGOR	5.7	12.8	18.9	10.6	8.7	9.8	7.8	13.8	6.6	5.2	4.5	18.1	5.9	52												
00677BOGOR	6.3	13.2	19.5	10.6	10.4	10.4	8.5	14.1	7.0	4.8	4.3	19.0	6.3	54												
00206BOGOR	5.9	13.2	19.2	11.3	9.2	10.3	8.1	13.6	7.3	5.0	4.6	18.4	6.3	52												
5453BNHS	4.6	17.3	20.6	11.2	8.5	9.5	6.5	12.7	7.4	5.6	4.8	18.0	6.4													
M1159BNHS	4.7	13.0	19.9	11.5	8.9	10.2	6.3	13.0	7.7	5.4	4.5	18.2	6.2													
5426BNHS	12.1	18.7		9.0	9.0	12.9	7.2	7.2	5.0	4.2																
5466BNHS	12.7	19.7	10.6	8.4	9.0	13.5	7.3	7.3	5.0	4.5			6.2													

Cuon alpinus Metrical data

ld.

Variables V65 to V80

00736	B	125	122	18	10	19.9	11.2	9.5	8.0	7.3	4.9	4.1	4.0	7.6	0.0	9.1	5.6
00677	B	128	127	19	12	20.8	11.6	10.0	8.8	7.5	5.1	4.6	4.1	7.1	0.0	9.8	6.0
00677	B	122	119	17	10	19.1	10.6	8.9	7.8	7.2	4.7	4.0	3.5	6.1	0.0	9.5	5.6
00677	B	128	126	19	11	21.3	11.8	9.6	8.5	7.8	5.2	4.5	4.1	7.8	0.0	10.2	6.1
00936	B	122	121	18	11	19.8	10.9	8.0	7.2	7.4	5.1	4.1	3.6	6.1	0.0	9.0	5.8
00935	B	126	125	19	11	20.1	11.9	9.5	8.0	7.3	5.6	4.5	4.0	7.2	0.0	9.3	5.9
00206	B	129	129	20	11	20.7	12.2	9.3	8.1	7.4	5.9	4.5	4.1	7.0	0.0	9.8	5.8
00677	B	133	131	22	12	20.9	11.8	9.4	8.3	7.5	5.6	4.5	4.2	6.5	0.0	9.7	5.9
00676	B	123	121	18	11	19.6	11.4			7.4	5.2	4.2		6.0	0.0		5.7
00206	B	127	127	20	10		12.3	9.4	8.3	7.9	5.8	4.7	4.2	7.3	0.0	10.0	5.9
00114	B	127	125	19	11	21.3	11.7	9.1	8.1	7.5	5.6	4.6	4.2	7.0	0.0	10.0	6.0
00203	B	128	127	21	11	20.6	11.7	9.0	7.8	7.7	5.8	4.8	4.2	7.9	0.0	9.8	5.9
00677	B	134	133	22	12	21.3	12.0			7.8	5.5	4.7		7.5		10.4	6.0
00206	B	135	136	21	11	21.3	12.4	9.8	8.5	8.0	5.7	5.0	4.4	6.9	1.7	10.0	6.2
5453BNHS		139	137	21	11	22.1	12.0	9.8	8.5	8.4	6.0	4.9	4.5	8.9	1.6	9.5	6.8
M1159BNHS		140	135	23	12	24.8	11.9	9.8		8.0	6.2	5.0		8.5		10.4	5.8
5426BNHS		136	131	20	10	19.9	11.5			7.3	5.7			7.6	0.0		5.9
5466BNHS		142	139	23	12	20.9	12.4	9.3	7.9	8.3	6.2	4.8	4.3	9.3	2.6		6.2

Canis familiaris (Middle east and south Asian)

Id.	Variables V1 to V16															
	195	181	99	127	96	37	53	72	102	156	38	68	11	20	35	107
D.96	BMNH															
D.96	BMNH															
58.5.4.92	BMNH	170	91	120	94	32	48	71	92	142	34	61	10	19	32	101
166.D	BMNH	164	89	114	89	34	47	64	87	137	32	58	12	18	32	104
56.5.6.45	BMNH	168	96	117	89	28	49	74	90	137	31	61	11	18	31	91
56.5.6.44	BMNH	181	98	126	98	34	48	75	101	148	35	68	11	19	29	100
D.61	BMNH	167	92	118	90	34	49	69	96	147	31	67	12	19	34	99
45.1.8.55	BMNH	161	84	114	89	29	45	70	90	134	31	63	8	16	30	100
166.P	BMNH	184	97	126	98	33	53	79	101	148	36	68	12	20	36	104
47.1.13.17	BMNH	176	92	121	95	32	49	76	103	149	38	71	11	19	32	93
A1682	FNHN	182	99	127	98	34	52	75	100	146	35	65	10	17	34	101
885	BERLIN	165	85	111	89	27	44	72	86	139	30	57	11	18	31	97
4270	BERLIN	163	83		86	29	47	72	86	134	31	57	10	19	33	98
7434	BERLIN	171	93	119	92	35	49	71	92	141	30	63	10	19	36	102
7433	BERLIN	161	86	108	88	30	42	66	84	134	31	55	9	18	30	89
	BERN	160	85	111	86	27	45	68	89	135	30	61	10	18	32	95
	BERN	160	86	111	85	30	45	66	84	135	31	56	12	17	30	93
	BERN	165	87	115	90	28	43	70	91	140	31	63	11	17	29	95
546B	BERN	169	88	117	92	29	48	72	88	143	32	59	13	19	32	97
	BERN	161	86	112	88	27	45	67	87	134	30	59	10	17	31	98
147	BERN	176	97	122	97	34	48	71	93	144	33	62	10	20	32	103
	BERN	158	83	108	85	28	45	67	83	132	31	54	11	17	32	96
	BERN	175	92	120	95	33	48	74	96	148	33	66	13	19	35	102

Canis familiaris (Middle east and south Asian)

Variables V17 to V32

Id.

Id.	22	56	17	20	16	19	34	30	83	57	53	48	54	47	9.3
BMNH	20	51	17	21	14	17	32	29	80	54	50	42	47	43	9.0
BMNH	20	50	15	20	15	16	31	28	78	58	53	46	53	45	9.2
58.5.4.92	18	50	15	21	14	18	31	27	78	52	51	40	46	41	6.0
166.D	21	52	17	22	15	18	32	28	80	56	52	47	50	48	9.3
56.5.6.45	21	51	18	22	16	15	33	28	82	59	51	44	55	48	10.0
56.5.6.44	29	48	15	21	15	14	30	27	73	58	52	46	53	46	8.0
D.61	20	52	16	24	15	18	34	29	82	57	55	48	52	50	9.7
45.1.8.55	19	52	19	24	18	16	33	30	80	53	52	45	48	47	13.5
166.P	21	54	19	24	17	15	33	29	81	56	58	52	51	48	
47.1.13.17	20	49	14	20	16	18	32	28	78	57	53	47	54	44	7.2
A1682	19	50	15	21	13	17	31	27	76	56	51	45	54	43	8.2
885	22	52	18	23	17	16	30	27	80	59	52	45	54	46	12.5
4270	20	50	17	20	15	17	32	25	75	55	50	45	51	44	8.2
7434	20	49	15	22	14	16	30	28	78	58	52	44	52	14	9.5
7433	19	48	17	21	14	17	32	28	78	56	50	44	50	44	9.5
	20	49	17	23	15	16	33	27	77	54	52	44	47	41	10.5
546B	20	50	15	20	15	17	33	29	83	57	50	44	50	45	9.0
	19	47	17	21	14	14	30	28	78	57	49	42	50	44	8.2
147	21	51	18	22	16	14	32	30	82	56	51	47	53	49	10.3
	20	50	17	20	14	18	30	27	77	59	51	46	52	43	6.5
	21	53	16	21	16	21	33	30	86	55	53	45	44	47	11.2

Canis familiaris (Middle east and south Asian)

Variables V33 to V48

Id.	34	49	32	56	41	65	39	49	19	14	31	35	48	61	10	9
D.96	BMNH	51	35	57	43	63	35	47	19	14	28	31	43	57	10	9
D.96	BMNH	33	36	57	44	63	35	50	18	15	29	32	43	55	9	9
58.5.4.92	BMNH	33	36	55	43	63	34	46	18	13	27	30	41	52	11	11
166.D	BMNH	37	33	53	43	66	39	48	21	15	26	30	40	55	10	11
56.5.6.45	BMNH	35	34	54	46	64	33	48	16	13	29	34	45	56	10	10
56.5.6.44	BMNH	36	37	56	42	61	36	47	18	12	27	31	40	55	8	9
D.61	BMNH	32	36	55	42	61	36	47	18	12	27	31	40	55	8	9
45.1.8.55	BMNH	37	37	55	42	63	38	49	19	13	32	36	48	60	13	13
166.P	BMNH	36	35	54	43	62	35	48	18	15	27	29	43	55	11	12
47.1.13.17	BMNH	34	35	54	44	69	37	54	19	15	30	36	46	59	12	14
A1682	FNHN	34	38	54	45	60	36	47	17	15	27	33	43	56	9	9
885	BERLIN	33	35	53	43	60	35	47	18	12	30	33	45	57	11	9
4270	BERLIN	33	37	58	44	60	35	46	18	16	30	35	46	56	9	9
7434	BERLIN	38	36	53	44	61	36	47	19	14	26	32	41	57	8	10
7433	BERLIN	34	36	55	45	63	34	48	17	19	28	33	42	56	11	12
	BERN	35	34	53	43	59	32	48	17	14	27	31	41	53	8	10
	BERN	32	33	52	43	61	37	48	18	14	25	29	40	52	9	11
	BERN	33	33	52	43	61	34	47	18	15	28	34	39	59	10	9
546B	BERN	39	35	54	44	61	34	47	17	14	26	31	39	53	9	10
	BERN	35	35	58	47	62	36	46	19	15	31	36	48	60	13	11
147	BERN	35	49	54	42	61	34	46	17	14	28	32	42	55	11	8
	BERN	34	34	52	41	67	38	50	19	14	29	33	47	57	10	9
	BERN	40	38	52	41	67	38	50	19	14	29	33	47	57	10	9

Canis familiaris (Middle east and south Asian)

Variables V49 to V64

Id.

D.96	BMNH	7.0	11.9	17.7	12.1	10.2	9.8	8.9	8.8	6.5	4.9	3.8	17.9	5.5	16.5	19.0
D.96	BMNH	7.0	12.9	19.4			10.0	9.2	9.4	7.6			20.0		17.8	18.5
58.5.4.92	BMNH	6.3	11.1	17.4	10.5		9.2	8.8	13.3	6.6	4.5		17.6	5.0	16.4	
166.D	BMNH	6.2	10.8	17.3			8.9	7.8	12.7	6.5			16.7	4.2	16.1	
56.5.6.45	BMNH	6.7	13.2	19.0	10.8	8.8	10.0	8.3	15.2	7.5	5.5	4.4	20.8	5.2	17.5	19.4
56.5.6.44	BMNH	6.6	11.8	17.2	10.9	9.1	9.0	8.5	14.0	6.8	4.8	4.1	18.2	5.8	16.5	18.9
D.61	BMNH	6.8	12.6	18.0	11.2	9.0	9.2	9.0	14.0	6.5	4.5	3.8	19.0	4.9	17.1	19.2
45.1.8.55	BMNH	7.4	12.1	19.0	12.0	10.5	10.4	9.8	15.0	7.7	5.6	4.6	19.9	5.8	17.1	19.2
166.P	BMNH	6.7	12.7	17.3	10.1		8.4	8.1	14.1	7.3	4.5		19.5	4.8	16.3	
47.1.13.17	BMNH	7.5	12.7	18.8	12.4	11.0	10.0	10.0	15.6	8.3	5.4	4.6	20.7	6.1	17.5	20.7
A1682	FNHN	6.9	12.7	18.5	11.3	9.8	10.0	9.1	14.5	7.3	5.6	4.6	19.6	5.0	17.4	19.0
885	BERLIN	6.2	12.0	18.0	10.0	8.5	8.6		13.5	6.4	4.7	3.8	17.8	5.2	16.6	18.7
4270	BERLIN	6.8	12.0	16.7	10.7	9.8	10.1	8.8	14.5	6.6	4.2	3.7	19.1	5.0	15.5	18.4
7434	BERLIN	6.6	12.1	17.4	11.0	9.1	9.5	8.3	15.1	6.4	4.8	4.2	19.6		15.8	18.4
7433	BERLIN						8.7								16.7	17.9
	BERN	6.6	12.5	18.1	10.0	9.3	8.9	8.1	14.6	6.5	4.5	4.0	18.9	5.3	17.1	19.2
	BERN	6.1	12.8	18.3	10.5	9.6	8.7	8.0	13.6	6.6	4.5	4.1	18.6	5.5	17.3	18.7
546B	BERN	7.9	13.6	19.8	11.7	10.6	10.3	9.9	15.8	8.0	5.7	5.2	21.2	6.1	18.9	21.6
	BERN	5.7	12.9	18.2	10.6	9.2	9.0	8.6	14.4	6.9	4.8	4.1	19.0	5.0	17.3	
147	BERN	7.1	13.6	18.1	12.1	10.8	9.9	9.2	14.5	7.2	5.3	4.5	20.4	6.0	16.7	19.6
	BERN	6.5	11.5	16.5		8.6	8.7	9.1	14.1	7.0		3.6	18.3	5.2	15.3	19.1
	BERN	7.0	13.4	19.2	12.6	10.7	10.2	9.5	15.2	7.4	5.5	4.3	20.5	5.9	18.0	21.0

Canis familiaris (Middle east and south Asian)

Id.	Variables V65 to V80																
D.96	BMNH	140	141	24	11	19.4	11.0	9.8	8.4	7.1	5.6	4.6	4.0	8.3	2.9	9.6	6.1
D.96	BMNH																
58.5.4.92	BMNH	134	134	22	11	20.2	12.0	9.9	9.0	8.1	6.2	4.1	4.4	9.1	2.3	11.0	6.7
166.D	BMNH																
56.5.6.45	BMNH																
56.5.6.44	BMNH	142	143	21	10	20.7	11.8	10.0	7.3	8.5	6.7	5.3	4.5	9.5	5.7		6.5
D.61	BMNH	130	130	21	11	19.7	11.5	9.5	8.0	8.0	6.1	4.9	4.4	8.6	1.3	9.5	6.2
45.1.8.55	BMNH	129	129	19	11	20.2	11.1	9.9	8.8	7.8	5.7	5.0	4.1	9.5	2.0	9.8	6.6
166.P	BMNH	146	143	23	12	20.8	11.9	10.6	9.0	8.0	6.5	5.5	4.9	8.8	2.9	10.0	6.8
47.1.13.17	BMNH																
A1682	FNHN	146	145	24	11	21.5	12.6	10.9	9.5	8.3	7.2	5.6	5.0	8.9	1.4	10.3	8.1
885	BERLIN	128	129	20	11	20.1	11.4	9.6		8.3	6.4	4.9		7.8		10.1	6.4
4270	BERLIN	127	129	20	11	19.9	10.5	9.0	6.0	7.3	5.8	4.2	3.6	8.8	3.3	9.0	
7434	BERLIN	135	132	22	11	19.7	10.6	9.5	7.7	7.3	5.0	4.3	4.0	8.7	2.9	10.1	6.0
7433	BERLIN	127	125	17	9	19.9	11.0	9.9	7.8	7.9	6.0	4.9	3.8	9.0	1.3	9.8	5.8
	BERN	126	126	21	10						5.5		4.1	8.8	1.4	9.2	
	BERN	121	123	20	10	20.5	10.5	9.0	7.8	7.7	5.6	4.4	4.3	8.9	1.2	9.2	6.1
	BERN	126	127	19	10	19.7	11.1	9.2	8.0	7.4	5.8	4.8	4.4	7.9	4.4	9.9	6.0
546B	BERN	130	131	20	11	22.6	12.1	10.2	9.3	8.8	6.6	5.6	5.2	8.8	1.0	11.6	6.8
	BERN	127	126	21	11	20.2	11.0	9.2	7.9	7.7	6.1	5.7	4.1	8.6	1.5	9.7	5.7
147	BERN	140	141	20	10	21.1	11.9	10.7	9.6	8.1	6.9	5.4	5.0	9.5	3.1	10.8	6.9
	BERN	121	123	20	10	19.9	10.5	8.6	7.3	7.2	5.3	4.2	3.6	8.0	1.9	9.1	5.5
	BERN	137	139	21	11	22.3	11.9	10.5	9.5	7.9	6.1	5.0	4.7	9.0	1.2	10.9	6.8

Canis familiaris (Thai and Malaysian varieties)

Id.	Variables V1 to V16															
THAI 01	173	157	85	110	84	30	45	65	82	131	29	56	12	18	33	108
THAI 02	176	161	85	112	86	29	45	67	85	137	31	57	13	19	32	
37.5.26.39	154	136	72	95	76	25	36	58	77		29	51	10	16	26	85
71.753	155	150	78	101	80	29	43	64	80	151	29	53	10	16	29	93
15-9-59	187	175	91	93	93	32	53	75	92	139	34	62	10	20	34	100
29-9-59	177	168	90	116	88	33	53	70	89	138	33	59	11	20	39	100
21-9-59	191	174	92	121	88	33	53	73	94	150	35	61	13	18	36	95

Canis familiaris (China , Japan)

Id.	Variables V1 to V16															
2242	170	156	83	109	85	31	43	63	81	131	31	52	10	18	37	98
2244	179	164	90	114	88	32	46	65	89	139	32	58	9	16	35	100
44	179	168	90	114	91	30	46	69	86	133	30	59	11	18	33	103
OST.K	175	170	85	112	86	31	51	75	84	130	32	55	11	20	56	99
GG	195	185	93	122	94	35	57	83	93	143	29	67	14	20	41	148
CC			93	121	92	35	48		91	142	35	60	11	19	34	100

Canis familiaris (Thai and Malaysian varieties)

Id.	Variables V17 to V32															
THAI 01	20	51	16	18	14	19	30	26	73	52	53	45	51	40	7.3	7.2
THAI 02	21	51	19	22	15	30	30	79	79	55	51	45	51	46		
37.5.26.39	18	44	18	20	14	11	27	25	65	50	43	37	46	38	8.5	
71.753	21	49	16	21	16	17	28	28	69	54	46	42	49	43	8.0	
15-9-59	22	52	18	22	16	18	35	29	80	57	53	48	53	45	10.6	
29-9-59	20	51	17	23	15	17	31	28	78	54	52	46	51	45	10.3	
21-9-59	19	53	19	23	17	16	34	27	80	60	56	50	57	46	11.8	

Canis familiaris (China, Japan)

Id.	Variables V17 to V32															
2242	18	49	16	21	15	15	31	28	73	54	51	44	49	43		
2244	19	52	18	22	15	17	31	27	74	54	52	47	49	45		
44	19	53	18	22	17	16	34	29	78	54	52	46	46	43		
OST.K	20	52	19	23	17	17	31	29	77	54	53	46	50	44		
GG	24	61	20	25	16	21	34	30	89	61	59	51	55	53		
CC	20	53	19	21	16	17	30	28	78	55	50	44	50	44		

Canis Familiaris (Thai and Malaysian varieties)

Id.	Variables V33 to V48															
	32	47	35	55	44	61	35	49	19	15	29	32	43	56	10	10
THAI 01	OTAGO	32	47	35	55	44	61	35	49	19	15	29	32	43	56	10
THAI 02	OTAGO	35	49	37	55	46	60	35	47	19	13	30	32	44	56	10
37.5.26.39	BMNH	34	46	35	51	41	55	30	38	15	13	23	28	38	51	9
71.753	BMNH	31	46	37	51	43	58	34	41	19	13	26	28	38	52	10
15-9-59	SARAWAK	36	54	39	55	46	63	35	47	19	15	30	34	45	59	10
29-9-59	SARAWAK	34	46	36	53	38	61	35	46	16	13	35	39	49	60	13
21-9-59	SARAWAK	35	49	39	56	44	66	36	53	17	15	29	31	43	55	10

Canis familiaris (China, Japan)

Id.	Variables V33 to V48															
	30	44	32	54	44	58	33	45	18	13	33	36	50	63	9	7
2242	LEIDEN	30	44	32	54	44	58	33	45	18	13	33	36	50	63	9
2244	LEIDEN	29	44	33	54	45	62	32	48	17	13	30	35	48	61	10
44	LEIDEN	30	44	30	56	44	63	37	49	19	16	28	31	45	61	10
OST.K	LEIDEN	31	47	33	55	40	62	36	48	19	14	32	37	48	60	12
GG	LEIDEN	38	59	36	59	42	72	39	55	24	13	36	39	52	69	12
CC	LEIDEN	33	48	34	56	44	64				30	33	46	59	10	8

Canis familiaris (Thai and Malaysian varieties)

Id.	Variables V49 to V64															
THAI 01	6.5	11.9	18.0	10.5	7.7	9.4	8.2	14.1	7.3	5.0	4.0	16.4	5.3	51	16.4	19.5
THAI 02	6.3	10.6		10.4	8.2		7.7	12.3	6.4	4.4	3.2	17.5		56	16.0	
37.5.26.59	5.9	10.0	14.9	8.4	6.5	7.4	7.5	11.6	5.7	3.5	2.9		4.6		14.0	
71.753	6.1	10.0	15.9	9.9	8.2	8.0	7.8	11.4	6.0	4.1	3.6	15.8	4.0		14.5	16.4
15-9-59	6.9	12.4	18.7	11.7	10.0	9.6	9.4	14.6	7.2	4.6	4.0	19.4			17.6	18.5
29-9-59	6.5	11.4	16.8	10.3	7.9	9.0	8.2	13.9	6.5	4.4	3.8	17.6			15.7	17.4
21-9-59	6.5	11.5	17.1	9.0	8.8	9.7	8.0	13.1	6.2	4.0	3.6	17.7			16.0	17.5

Canis familiaris (China, Japan)

Id.	Variables V49 to V64															
2242	6.4	11.6	17.8	11.4	9.3	9.6	8.5	14.3	7.6	5.4	4.3	19.5	6.2		16.7	18.6
2244	6.5	11.9	18.0	11.6	9.8	9.7	8.9	14.5	7.3	6.0	4.4	19.0	5.9		14.6	17.2
44	6.8	13.2	19.1	10.6	9.0	9.8	9.0	15.5	7.5	4.9	4.3	20.3	5.9		18.1	22.2
OST.K	6.6		18.2	10.9	8.8	9.5	8.3	13.2	7.2	4.5	3.9	18.9	5.6			
GG	7.0		19.7	11.8	10.2		9.5	15.5	7.7	5.4	4.3	20.6				
CC	7.5	13.2	17.9	10.7	9.3	10.2	8.7	14.4	7.1	4.6	4.3	20.5	5.7		16.4	18.6

Canis familiaris (Thai and Malaysian varieties)

Id.	Variables V65 to V80															
	131	127	20	11	20.4	10.5	9.1	7.4	8.3	5.5	4.6	4.1	9.3	1.6	9.4	6.2
THAI 01	131	127	20	11	20.4	10.5	9.1	7.4	8.3	5.5	4.6	4.1	9.3	1.6	9.4	6.2
THAI 02																
37.5.26.39	114	112	21	8	16.3	8.6	7.6	4.6	6.3	4.3	3.5	2.0	6.3	3.2	7.7	5.3
71.753	117	118	20	9	17.1	10.0	8.5	6.2	6.3	5.0	4.2	3.6	8.0	3.5	7.9	5.5
15-9-59	135	135	22	10	19.5	11.5	9.8	8.3	7.9	6.3	4.7	4.3	8.7	69	9.8	8.7
29-9-59	132	133	22	12	18.4	10.4	8.9	7.9	6.9	5.0	4.3	4.0	8.0	67	9.0	7.9
21-9-59	137	136	23	11	18.8	10.5	8.7	7.5	7.3	5.8	4.2	3.8	7.2	67	9.5	5.9

Canis familiaris (China, Japan)

Id.	Variables V65 to V80															
	124	127	20	11	19.6	11.1	9.9	8.1	6.0	5.1	8.4	10.0	6.0			
2242	124	127	20	11	19.6	11.1	9.9	8.1	6.0	5.1	8.4	10.0	6.0			
2244	131	132	21	11	19.5	12.6	10.0	8.6	7.8	6.5	5.4	4.7	8.2	2.1	9.8	6.5
44	133	132	21	11	22.6	11.5	9.6	7.9	8.3	6.3	5.1	4.5	9.2	2.6	10.2	6.6
OST.K	133	131	21	10	19.9	10.9	9.7	6.8	7.9	5.8	4.6	3.8	9.1	2.3	10.0	6.3
GG																
CC	135	135	22	10	19.8	11.4	9.6	8.0	7.6	5.7	4.7	4.4	8.5	4.4	10.2	6.4

Canis familiaris (Indonesian variety)

Id.		Variables V1 to V16															
		165	153	80	105	83	30	43	65	84	128	30	56	10	17	30	85
4679	LEIDEN	165	153	80	105	83	30	43	65	84	128	30	56	10	17	30	85
4680	LEIDEN	168	155	81	107	81	30	47	65	81	131	30	52	11	17	31	90
9066	LEIDEN	166	158	86	109	86	27	43	60	82	133	31	53	10	18	28	90
OST.O	LEIDEN	184	169	92	117	90	36	49	69	91	141	35	60	12	19	34	103
4066	LEIDEN	148	141	76	94	76	28	38	57	70	114	25	48	7	16	28	85
OST.WW	LEIDEN	209	191	101	130	106	37	54	78	105	164	40	69	14	20	37	116
XX	LEIDEN	201	182	98	126	98	34	55	75	109	161	43	69	13	19	40	113
835	BERN	151	144	76	100	78	26	41	60	75	119	28	49	9	16	28	85
	BERN	166	156	82	109	87	27	41	66	82	132	30	54	8	17	28	86
13	BERN	160		79	104	81	27	43	67	82	123	29	53	11	18	30	95
9	BERN	161	149	79	102	79	28	40	61	76	127	30	48	8	16	28	84
88	BERN	156	147	80	102	79	27	40	61	73	125	27	48	9	18	30	87
40	BERN	163	159	81	107	84	30	43	69	78	123	29	51	11	19	33	92
8	BERN	159		79	101	79	28	40	67	77	124	29	50	11	16	29	89
89	BERN	166	154	81	106	80	29	45	65	83	126	30	57	12	18	31	94
12	BERN	164	156	82	106	83	30	43	66	81	128	27	54	12	20	33	94
81	BERN	152	143	74	97	76	27	41	62	73	117	28	50	11	17	30	95
24	BERN	159	155	80	104	82	28	42	66	78	123	29	52	10	18	31	95
2407	BOGOR	162		78	103	81	26			79	128	29	53	9	17	30	88
2435	BOGOR	173	158	82	109	86	29	45	69	85	135	30	57	10	19	30	100
2434	BOGOR	171	155	85	108	85	32	43	61	87	135	30	58	10	17	33	90
5403	BERLIN	179	167	91	113	88	32	47	67	83		30		10	18	33	100
5403B	BERLIN	172	165	86	113	90	28	44	70	83	135	32	54	9	17	30	90
6328	BERLIN	179	169	85	115	89	29	51	72	89	138	32	59	11	17	36	102
6445	BERLIN	153	145	78	101	76	27	43	59	78	117	27	52	9	14	27	90
4094	BERLIN	171	162	88	114	90	30	45	66	82	128	30	53	10	18	32	97
16353	SENCK	194	180	96	123	95	35	51	74	91	146	30	63	10	20	34	108
36409	SENCK	169	158	82	109	85	31	44	67	81	132			11	16	31	87

Canis familiaris (Indonesian variety)

Id.	Variables V17 to V32																	
	16	15	20	13	13	30	25	73	56	46	42	50	42	42	46	56	7.0	
4679	LEIDEN	16	46	15	20	13	13	30	25	73	56	46	42	50	42	50	42	7.0
4680	LEIDEN	19	54	18	20	16	16	30	27	73	53	49	43	50	39	50	39	10.3
9066	LEIDEN	19	48	17	23	17	14	30	29	72	53	45	41	49	40	49	40	12.1
OST.0	LEIDEN	20	52	16	20	16	18	33	29	79	56	52	48	50	45	50	45	9.3
4066	LEIDEN	18	46	14	20	14	15	27	26	68	52	44	40	47	39	47	39	6.0
OST.WW	LEIDEN	22	57	18	25	16	23	35	30	87	56	59	53	57	50	57	50	13.5
XX	LEIDEN	25	57	18	23	15	21	34	29	82	57	55	49	56	52	56	52	10.4
835	BERN	18	47	15	18	14	16	29	26	70	49	44	39	44	37	44	37	6.5
	BERN	19	48	16	20	15	14	29	27	72	51	46	41	47	39	47	39	9.3
13	BERN	19	49	16	20	15	16	31	27	69	54	49	43	50	43	50	43	9.1
9	BERN	18	48	15	20	15	15	32	28	73	50	47	43	46	38	46	38	7.8
88	BERN	18	47	15	20	13	15	29	28	71	51	46	40	46	39	46	39	7.0
40	BERN	18	48	17	22	15	14	30	27	72	49	49	44	46	41	46	41	10.1
8	BERN	18	54	14	20	13	15	29	29	71	54	48		48	39	48	39	7.8
89	BERN	20	50	15	21	14	15	32	27	71	52	50	44	47	43	47	43	8.1
12	BERN	19	50	15	20	14	16	31	27	72	50	49	44	47	42	47	42	8.5
81	BERN	18	46	13	19	14	15	28	26	68	50	46	40	44	39	44	39	7.0
24	BERN	21	51	15	22	15	16	31	30	72	52	48	44	47	40	47	40	10.1
2407	BOGOR							33	26					46	37	46	37	
2435	BOGOR	19	48	16	23	15	15	31	26	76	51	50	45	47	41	47	41	8.0
2434	BOGOR	21	52	16	20	14	18	31	27	73	53	50	45	50	48	50	48	10.5
5403	BERLIN	20	53	17	22	15	18	35	29	80	56	52	45	51	44	51	44	9.8
5403B	BERLIN	19	48	17	21	13	17	30	29	78	52	47	41	46	39	46	39	7.7
6328	BERLIN	21	56	19	22	16	17	32	28	80	60	52	46	54	46	54	46	12.8
6445	BERLIN	19	47	15	19	13	16	28	26	63	48	44	39	43	36	43	36	5.1
4094	BERLIN	19	46	17	21	14	15	31	29	78	55	50	46	50	44	50	44	7.0
16353	SENCK	19	54	18	26	18	14	32	30	84	53	57	47	46	46	46	46	
36409	SENCK	20	49	16	20	15	15	29	27	74	52	50	45	47	47	47	47	

Canis familiaris (Indonesian variety)

Variables V33 to V48

Id.

4679	LEIDEN	33	48	34	53	44	54	32	41	18	14	26	30	38	50	9	9
4680	LEIDEN	31	46	34	52	41	63	34	46	18	14	27	30	41	52	10	10
9066	LEIDEN	30	44	34	55	46	55	34	40	19	13	26	30	40	53	10	12
OST.O	LEIDEN	35	52	36	53	42	63	36	49	17	13	29	33	46	58	12	11
4066	LEIDEN	30	45	34	50	42	54	30	39	16	14	26	28	37	49	10	8
OST.WW	LEIDEN	39	56	35	54	43	73	37	56	18	16	33	40	53	67	15	13
XX	LEIDEN	41	58	37	54	43	68	39	51	18	14	35	40	53	66	14	11
835	BERN	27	41	30	49	40	55	32	40	16	13	24	28	38	50	9	8
	BERN	26	39	30	48	42	58	32	44	16	14	26	28	40	52	10	10
13	BERN	30	48	33	53	44	61	32	47	16	13	26	30	42	52	10	8
9	BERN	28	42	34	52	44	59	35	44	17	14	25	29	39	51	10	9
88	BERN	28	46	35	50	42	57	34	43	17	13	26	28	39	50	10	9
40	BERN	30	48	30	46	37	58	34	45	18	13	28	33	43	55	11	11
8	BERN	30	41	31	53	42	57	35	43	18	14	26	29	37	50	9	8
89	BERN	32	48	33	52	42	62	35	47	18	14	25	32	42	53	10	10
12	BERN	34	51	32	52	39	61	35	45	18	14	29	32	43	55	12	10
81	BERN	32	47	32	48	37	58	32	44	17	12	25	29	41	54	9	9
24	BERN	28	42	29	50	39	59	35	44	17	13	28	32	45	57	11	10
2407	BOGOR	27	38	29	52	42	60	36	46	17	14	27	30	42	54	11	10
2435	BOGOR	37	52	37	52	42	60	31	47	17	14	26	29	41	55	11	10
2434	BOGOR	32	46	35	55	43	61	31	47	16	15	29	33	44	55	11	9
5403	BERLIN	33	50	40	56	46	62	39	47	19	13	29	38	45	59	10	11
5403B	BERLIN	31	42	33	55	45	58	36	40	20	10	27	31	43	50	9	10
6328	BERLIN	33	47	35	58	44	66	36	48	17	14	31	37	48	58	12	13
6445	BERLIN	26	43	29	50	40	55	30	40	15	12	24	28	39	49	9	9
4094	BERLIN	32	44	34	56	43	58	33	43	18	14	28	33	46	59	11	10
16353	SENCK	37	56	33	54	40	68	35	54	18	12	28	34	42	59	10	11
36409	SENCK	30	42	31	52	42	63	34	47	20	14	27	30	39	50	11	12

Canis familiaris (Indonesian variety)

Id.	Variables V49 to V64															
	V49	V50	V51	V52	V53	V54	V55	V56	V57	V58	V59	V60	V61	V62	V63	V64
4679	6.0	12.1	17.0	8.9	8.2	12.8	6.4	4.3	3.7	16.2	4.0	18.4	16.0	18.4		
4680	5.7	9.9	16.1	8.0	8.6	7.5	12.4	6.5	4.3	16.2	4.0	18.4	14.5	15.8		
9066	6.1	11.3	16.5	10.4	8.5	8.0	12.5	6.3	4.2	17.2	5.1	17.9	15.0	17.9		
OST.0	7.1	11.6	18.7	11.4	9.3	10.0	14.4	7.1	4.7	18.8	5.4	18.0	17.3	18.0		
4066	6.0	10.6	15.6	8.4	8.2	7.4	12.0	6.4	4.2	16.7	4.5	17.2	14.6	17.2		
OST.WW	6.7	12.2	18.2	12.1	9.9	10.8	14.8	7.1	5.1	19.3		18.4	17.0	18.4		
XX	7.3	12.5	18.7	12.2	10.4	10.8	14.2	6.9	5.1	19.5		19.1	17.5	19.1		
835	5.8	10.8	15.9	8.6	7.8	7.2	12.0	6.4	3.8	16.5	4.9	17.6	14.4	17.6		
13	6.8	12.1	19.4	11.6	9.3	9.0	15.8	7.6	5.1	18.9	5.6	19.5	18.1	19.5		
9	6.0	10.4	15.2	9.9	7.8	7.7	12.3	6.4	5.8	16.2		16.4	14.1	16.4		
88	6.3	10.8	15.9	10.7	8.9	8.0	11.8	6.4	4.0	17.0	4.8	17.2	14.9	17.2		
40	6.0	10.8	16.5	10.0	7.5	8.0	12.2	6.3	4.8	17.0	4.7	17.2	15.5	17.2		
8	6.6	10.5	16.4	10.9	8.2	8.5	12.4	6.6	4.5	17.1	4.9	17.2	15.3	17.2		
89	5.2	10.4	16.9	10.9	8.5	9.6	13.2	7.3	4.0	16.1	4.9	17.9	15.0	17.9		
12	6.0	10.0	15.8	8.9	7.8	7.6	11.7	5.9	3.6	16.0		15.8	14.7	15.8		
81	5.6	10.6	16.8	9.5	7.3	8.2	12.6	6.1	3.9	16.2	4.9	17.0	15.6	17.0		
24	6.6	10.7	15.3	9.4	7.9	8.1	12.2	6.2	4.0	17.1	4.7	16.0	14.2	16.0		
2407	6.6	10.3	15.8	10.2	8.4	8.8	12.2	6.4	4.5	17.0	4.8	16.1	14.8	16.1		
2435	6.2	10.7	16.2	10.2	8.6	8.2	11.9	6.5	4.5	16.8		17.0	15.0	17.0		
2434	6.7	11.2	17.0	11.3	9.3	8.6	13.5	7.2	4.7	17.8		17.3	16.0	17.3		
5403	6.1	11.6	17.7	11.6	9.6	8.6	14.0	6.5	4.1	17.6		18.2	16.7	18.2		
5403B	7.2	12.0	17.3	11.5	10.0	8.7	14.4	6.5	4.3	19.6	5.2	18.2	16.0	18.2		
6328	7.2	12.9	17.4	11.1	9.6	8.8	14.0	6.7	4.7	19.8	5.4	18.2	16.0	18.2		
6445	6.5	12.1	18.3	11.8	10.4	10.0	13.3	6.7	4.4	8.8	5.0	13.5	13.0	13.5		
4094	5.2	9.3	14.1	8.7	6.0	6.9	10.9	5.6	4.3	14.1	3.9	17.9	16.5	17.9		
16353	6.9	11.6	17.6	11.3	9.0	9.5	14.0	6.5	4.8	18.4	5.3	17.9	16.5	17.9		
36409	8.1	13.6	21.0	11.0	9.7	9.3	10.0	15.9	5.9	22.0	6.3	17.6	16.5	17.9		
	6.4	10.9	16.0	9.6	8.2	8.5	7.9	13.0	3.8	17.6						

Canis familiaris (Indonesian variety)

Id.	Variables V65 to V80												
	117	120	122	123	124	127	130	132	133	141			
4679	LEIDEN	18	8	19.0	9.8	9.2	7.3	4.8	4.4	7.9	2.1	8.7	5.6
4680	LEIDEN	122	19	10	17.3	10.0	6.9	5.2	4.4	7.7	4.0	8.9	5.5
9066	LEIDEN	121	18	8	18.9	11.0	7.5	5.5	4.5	8.1	4.2	8.4	5.9
OST.0	LEIDEN	134	22	10	19.0	11.0	7.3	5.9	4.7	8.8	6.0	10.6	6.1
4066	LEIDEN	111	17	9	17.6	9.5	6.5	5.3	4.2	8.0	2.8	8.9	5.4
OST.WW	LEIDEN	151	25	11	19.8	11.2	8.5	5.8	4.7	8.4	4.9	10.9	6.4
XX	LEIDEN	150	25	10	20.3	11.0	8.4	5.9	5.0	8.2	5.1	11.0	6.6
835	BERN	112	16	10	18.5	9.6	6.4	8.0	4.3	8.6	3.5	8.0	5.5
	BERN	121	17	8	20.7	11.2	8.1	6.1	9.7	8.0	2.0	9.8	6.1
13	BERN	122	20	10	17.7	10.1	6.7	5.6	4.5	6.7	4.7	7.7	5.8
9	BERN	119	17	9	18.3	10.3	7.6	5.1	4.0	7.9	2.5	8.3	6.5
88	BERN	114	18	9	18.3	10.2	6.4	6.1	4.4	7.7	2.7	8.3	5.6
40	BERN	120	18	10	18.2	10.5	6.4	5.4	4.4	8.3	5.2	8.8	5.7
8	BERN	115	16	9	19.0	9.9	5.0	5.4	4.3	8.3	4.1	10.2	5.4
89	BERN	120	20	10	16.9	9.0	7.4	4.8	3.8	6.0	3.0	8.5	5.8
12	BERN	123	19	10	18.3	10.0	6.6	5.3	4.1	7.8	3.4	8.5	5.6
81	BERN	116	19	10	17.1	9.2	6.1	5.0	3.8	7.4	3.4	8.0	5.9
24	BERN	119	18	10	17.3	9.8	6.8	5.2	4.4	7.0	3.9	8.9	5.4
2407	BOGOR	113	20	9	18.1	9.6	8.4	5.4	4.6	8.5	2.2	8.1	6.0
2435	BOGOR	127	20	10	18.2	10.6	8.1	5.6	4.8	7.4	1.7	9.3	6.2
2434	BOGOR	120	19	10	19.3	11.1	8.3	5.7	4.3	9.1	0.0	8.7	5.5
5403	BERLIN	132	19	10	19.5	11.0	8.7	5.2	4.5	9.0	3.0	8.8	6.5
5403B	BERLIN	127	18	9	19.6	10.6	8.4	5.8	4.8	9.0	2.0	9.2	6.7
6328	BERLIN	130	20	10	19.3	11.1	9.1	5.7	4.6	8.5	2.4	10.9	6.2
6445	BERLIN	115	16	9	15.0	8.0	5.3	4.5	3.5	6.3	3.8	7.4	5.0
4094	BERLIN	124	18	10	18.9	11.0	8.3	7.2	4.9	7.6	2.3	9.8	6.1
16353	SENCK	140	20	10	22.4	11.8	10.0	8.4	4.7	10.0	1.9	10.0	7.1
36409	SENCK							5.5	4.7				

Canis familiaris (Papuan variety)

Id.	Variables V1 to V16															
	140	132	71	89	70	24	36	56	67	107	22	45	10	14	25	85
151803	140	132	71	89	70	24	36	56	67	107	22	45	10	14	25	85
1966.491	140	133	72	91	73	24	37	55	65	112	24	44	9	13	23	80
1966.487	131	125	67	85	70	21	33	53	62	101	21	43	10	12	21	77
1966.487	147	140	72	95	76	24	39	61	67	113	25	45	11		26	84
1966.482	141	136	70	91	73	25	37	58	67	108	24	43	10	14	26	84
1966.488	149	141	74	94	75	27	39	61	70	115	26	47	11	15	27	89
1966.483	147	136	73	93	73	24	38	57	66	113	23	45	11	14	25	84
1966.493	147	142	75	96	76	28	40	60	70	116	26	47	11	14	27	85
1966.492	139	133	70	90	73	23	35	55	66	109	23	45	10	13	23	78
1966.485	149	143	75	97	77	26	39	62	69	115	24	47	10	15	26	84
1966.495	150	139	75	95	76	26	38	58	70	117	23	49	11	15	26	86
6444	144	139	73	95	74	25	39	60	70	111	25	47	9	13	23	76
6442	159	149	78	102	80	27	42	63	78	122	29	51	11	15	27	90
6441	156	144	78	100	77	28	41	59	75	121	28	50	9	14	26	80
71.3100	166	158	83	107	82	31	47	68	77	128	25	53	11	15	27	92

Canis familiaris (Papuan variety)

Id.	Variables V17 to V32															
151803	AMNH	18	43	13	16	12	15	27	26	63	48	43	38	44	37	4.2
1966.491	MUNCH	17	42	13	18	13	14	25	25	65	47	41	38	44	35	5.0
1966.487	MUNCH	17	41	14	18	12	13	23	23	62	47	39	34	43	34	4.3
1966.487	MUNCH	16	43	14	19	13	14	27	26	69	49	43	39	45	35	5.7
1966.482	MUNCH	15	43	14	20	14	12	27	26	67	48	42	38	43	36	7.7
1966.488	MUNCH	17	47	15	20	15	15	27	27	69	48	45	40	45	38	7.7
1966.483	MUNCH	17	44	14	19	14	13	27	26	67	50	45	39	46	37	
1966.493	MUNCH	17	44	15	24	14	14	27	26	68	48	43	38	44	35	7.0
1966.492	MUNCH	17	42	14	18	12	13	25	25	65	46	39	35	42	34	5.0
1966.485	MUNCH	16	45	15	20	14	14	27	27	68	49	43	39	44	37	8.3
1966.495	MUNCH	16	45	15	20	14	14	26	26	66	49	44	39	47	37	14.0
6444	BERLIN	16	42	14	19	11	13	27	24	65	46	40	35	41	34	5.3
6442	BERLIN	16	46	16	21	14	12	28	26	69	49	46	41	45	38	8.8
6441	BERLIN	16	45	15	19	13	13	27	24	68	48	46	42	43	36	5.5
71.3100	BMNH	17	49	16	22	15	15	28	26	75	51	50	42	46	41	8.8

Canis familiaris (Papuan variety)

Variables V33 to V48

Id.

151803	AMNH	27	41	31	49	40	52	27	41	14	12	22	27	35	48	10	11
1966.491	MUNCH	27	41	34	49	41	51	29	39	16	13	21	23	33	43	8	9
1966.487	MUNCH	29	38	33	48	42	48	26	37	13	11	19	22	31	42	8	10
1966.487	MUNCH	28	41	33	50	41	52	31	40	16		23	26	36	47	9	11
1966.482	MUNCH	27	38	30	47	40	52	29	40	16	13	23	28	37	48	9	11
1966.488	MUNCH	29	41	31	50	41	57	31	42	17	13	24	26	37	49	8	10
1966.483	MUNCH	29	42	33	50	42	54	30	42	15	14	22	24	35	46	8	10
1966.493	MUNCH	29	42	32	49	41	53	29	38	15	12	23	27	35	47	9	10
1966.492	MUNCH	28	41	32	48	40	50	29	38	15	12	20	23	32	43	8	9
1966.485	MUNCH	28	41	30	48	42	53	31	40	16	12	23	26	35	47	9	10
1966.495	MUNCH	29	39	30	49	42	54	29	42	15	13	22	25	34	48	9	10
6444	BERLIN	25	37	29	45	38	52	28	38	14	11	21	25	32	43	8	10
6442	BERLIN	28	40	26	48	43	56	31	43	16	14	24	28	38	49	9	12
6441	BERLIN	26	38	26	48	39	54	29	43	15	12	23	27	45	50	10	11
71.3100	BMNH	30	46	31	50	43	62	33	46	17	12	24	28	40	52	10	12

Canis familiaris (Papuan variety)

Id.	Variables V49 to V64															
	V49	V50	V51	V52	V53	V54	V55	V56	V57	V58	V59	V60	V61	V62	V63	V64
151803	5.8	10.0	14.7	8.6	6.8	7.4	7.0	10.8	5.8	3.7	3.1	15.7	4.7	13.7	14.4	
1966.491	5.9	9.7	14.9		7.6	7.6	7.8	11.4	5.5		3.0	15.3		13.5		
1966.487	5.5	8.5	12.3	7.7	6.6	6.3	7.2	10.4	5.0	3.1	2.9	14.4	3.7	11.1	12.5	
1966.487	6.3	9.8	15.0				8.3	12.6	6.2			16.3		13.7		
1966.482	5.8	9.9	15.6	9.9	8.2	7.8	8.2	11.7	5.6	3.8	3.3	15.6		14.6		
1966.488	6.6	10.7	16.1				8.2	12.4	6.0			17.1		14.9		
1966.483	5.8	9.9	14.7		8.3	7.5	8.0	11.6	5.7		3.3	15.7	4.6	13.3		
1966.493	6.4	10.0	15.4		8.6	8.3	8.0	11.9	5.9		3.5	16.1		14.4	15.2	
1966.492	5.9	9.8	14.6	9.4	8.0	7.1	7.9	11.5	5.6	3.8	3.4	15.5	4.5	13.2		
1966.485	6.5	10.4	15.7	9.7	8.3	8.0	7.6	11.9	6.1	4.2	3.7	16.6	4.6	14.4	15.5	
1966.495	7.0	10.8	16.5	10.0			8.3	13.2	5.1	3.8		17.6		15.6	15.9	
6444	5.6	9.3	14.1	8.7	7.8	7.0	7.4	10.9	5.1	3.6	3.2	14.9	4.5	12.9	13.7	
6442	6.2	10.2	16.0	9.5	8.7	7.4	8.3	12.2	6.3	3.9	3.4	16.3	5.1	15.0	15.0	
6441	5.8	9.2	14.2		8.2	7.1	8.4	11.6	5.4		3.0	15.2	4.6	13.4	14.4	
71.3100	6.3	10.9	16.9	10.4	9.0	8.2	8.5	12.9	6.3	4.5	3.5	17.2	5.2	15.8		

Canis familiaris (Hallstrom variety)

Variables V1 to V16

TPZ03	ANU	154	79	102	78	27	45	61	72	118	27	47	9	15	28	93
TPZ04	ANU	151	77	99	76	25	43	59	71	117	25	49	9	15	26	92
M7989	AM	170	84	108	82	29	48	67	77	126	28	52	10	17	29	94
M9135	AM	148	76	96	72	26	41	56	69	114	25	45	10	15	27	91
M8917	AM	158	80	103	79	26	44	63	73	120	28	47	9	15	27	95
M8505	AM	165	80	104	80	30	45	65	78	127	29	52	10	16	25	101
M9185	AM	152	77	99	73	27	43	59	70	117	25	47	10	16	28	93

Canis familiaris (Hallstrom variety)

Variables V17 to V32

TPZ03	ANU	18	50	15	20	8	16	28	27	67	53	41	48	49	37	7.4
TPZ04	ANU	18	49	15	19	7	16	29	27	67	52	41	47	46	35	7.0
M7989	AM	18	50	19	22	10	14	30	26	74	53	44	52	49	39	7.8
M9135	AM	18	49	17	20	8	13	29	26	65	51	41	49	48	38	7.4
M8917	AM	18	49	17	21	8	13	29	28	69	51	41	48	47	37	7.0
M8505	AM	18	51	18	21	8	14	29	27	72	58	43	51	47	40	7.8
M9185	AM	17	50	15	19	6	16	30	25	66	52	42	50	48	38	7.1

Canis familiaris (Hallstrom variety)

Variables V33 to V48

TPZ03	ANU	29	39	27	51	44	59	32	45	17	13	25	29	41	52	10	10
TPZ04	ANU	26	36	24	52	42	59	32	44	17	14	24	28	40	51	10	11
M7989	AM	28	41	27	53	43	65	35	48	18	13	26	31	43	54	11	11
M9135	AM	27	41	27	51	42	58	33	44	17	13	25	29	42	53	10	10
M8917	AM	27	39	24	51	43	58	32	44	17	13	25	30	42	53	10	11
M8505	AM	30	41	28	51	43	62	33	49	16	13	20	28	40	54	14	10
M9185	AM	26	40	26	52	42	59	32	44	17	12	25	31	42	54	10	10

Canis familiaris (Hallstrom variety)

Variables V49 to V64

TPZ03	ANU	7.3	9.9	14.4	9.3	7.9	7.2	8.0	11.8	5.6	4.0	3.3	16.1	4.9	48		
TPZ04	ANU	6.3	10.2	14.2	9.4	7.7	7.3	7.8	11.9	6.7	4.0	3.2	16.3	4.9	45		
M7989	AM	6.1	10.5	16.1	10.5	9.2	8.6	7.9	13.2	6.5	4.5	3.5	17.0	4.9	51		
M9135	AM	6.1	10.1	15.2	9.3	8.0	7.2	7.6	11.9	5.5	4.0	3.1	16.2	5.0	42		
M8917	AM	6.1	10.0	15.4	10.6	8.9	7.6	7.9	12.2	6.0	4.4	3.3	16.0	5.1	47		
M8505	AM	6.1	10.2	15.3	10.0	8.7	7.8	8.3	12.3	5.8	4.5	3.5	16.5	5.0	49		
M9185	AM	6.0	10.0	15.1	9.8	8.6	7.2	7.6	11.8	5.7	3.8	3.2	16.1	5.0	44		

Canis familiaris (Hallstrom variety)

Variables V65 to V80

TPZ03	ANU	116	117	19	9	15.0	9.6	7.8	6.6	6.4	4.9	3.7	3.4	7.0	4.0	7.3	5.4
TPZ04	ANU	116	117	18	7	15.3	9.2	8.0	6.3	6.5	5.0	3.9	3.4	7.2	4.2	7.5	5.2
M7989	AM	127	128	18	9	17.0	10.5	9.0	7.3	6.8	5.4	4.4	4.0	7.5	5.1	9.0	5.6
M9135	AM	117	117	17	8	16.0	9.8	7.7	6.6	6.3	4.9	3.7	3.3	7.1	4.1	7.0	5.2
M8917	AM	118	118	19	8	16.0	10.2	8.7	7.2	6.2	5.4	4.2	3.7	7.1	2.9	7.7	5.4
M8505	AM	120	122	18	9	16.2	9.9	8.5	7.0	6.6	5.4	4.1	3.9	7.3	3.8	8.0	5.7
M9185	AM	120	120	17	9	15.3	9.8	8.0	6.6	6.1	4.9	3.7	3.5	7.0	3.8	8.0	5.0

APPENDIX 13

METRICAL DATA ON INDIAN FOSSIL CANIDS

Indian fossil canids

Variables 1 to 16

Id.	36	50	79	74	14	35	100
10797 D ZSI							
H779B ZSI							
SL1976-1 ZSI	89	114	90	32	10	17	86
SL1976-2 ZSI			91	62	10	32	37
SL1976-4 ZSI				67	12	35	33
KLB.1 (1) ZSI			28				
KLB.1 (2) ZSI			50				
BZH3135:1 ZSI	185	176	103	60		26	110
BZH3136:2 ZSI	177	168	96	33	12	23	41
BZH3136:3 ZSI	173	168	90	56	9	18	34
BZH3135:4 ZSI	176	169	88	56	12	19	36
BZH3288:5 ZSI	205	197	106	59	10	18	105
BZH4013:6 ZSI	184	173	92	71	11	24	43
BZH3279:7 ZSI				60	12	32	40
BZH3134:8 ZSI				138	12	89	98

Indian fossil canids

Id.	Variables 17 to 32																
	22	56	20	26	19	17	35	28	89	60	58	50	54	54	46		
10797 D	ZSI																
H779B	ZSI																
SL1976-1	ZSI	20	49	15	21	15	30	28	74	54	42	47	51	46			
SL1976-2	ZSI	20	52	17	21	14			82	56	47	56	53	49			
SL1976-4	ZSI	20	52	17	21	14			82	56	47	56	53	49			
KLB.1 (1)	ZSI																
KLB.1 (2)	ZSI	21	60	19	25	18				62	58	53	58				
BZH3135:1	ZSI	21	53	17	23	15	33			62	61	52	56				
BZH3136:2	ZSI	19	51	18	24	15	31	26	85	58	53	44	52	49			
BZH3136:3	ZSI	21	52	17	23	15	28		81	57	50	43	52	45			
BZH3135:4	ZSI	21	52	17	22	12	31	26	81	58	50	42	52	47			
BZH3288:5	ZSI	22	61	20	27	17	35		92	62	57	49	57	55			
BZH4013:6	ZSI	22	54	18	23	15	30	28	84	59	53	48	52	48			
BZH3279:7	ZSI	22	55	17	25	15	15			59	57	48	54				
BZH3134:8	ZSI	21	52	18	24	15	15			59	52	46	53	10.3			

9.2

8.6

8.4

Indian fossil canids

Id.	Variables 33 to 48															
	36	50	39	57	49	70	42	50	23	15	30	33	47	60		
10797 D	ZSI															
H779B	ZSI															
SL1976-1	ZSI	34	49	38	55	47	59	34	43	20	13	27	31	39	52	9
SL1976-2	ZSI											32			60	
SL1976-4	ZSI	50	50	41	59	45	64	36	52	19	14	29	34	43	57	
KLB.1 (1)	ZSI				60		72	41	56	21	15					
KLB.1 (2)	ZSI				60	48	74	42	56	22	13	36	41	56	74	10
BZH3135:1	ZSI	34	46	38	58	46	64	37	48	20	16	32	35	47	58	11
BZH3136:2	ZSI	32	51	39	55	46	63	37	48	20	14	30	33	45	56	10
BZH3136:3	ZSI	38	55	42	58	48	61	37	46	18	13	32	37	47	60	10
BZH3135:4	ZSI	37	58	43	57	49	63	36	45	18	15	30	34	47	59	11
BZH3288:5	ZSI	42	59	44	58	47	75	39	54	20	13	36	41	54	68	12
BZH4013:6	ZSI	44	64	41	56	47	67	40	48			38			60	
BZH3279:7	ZSI				58	48	69	37	52	18	13					
BZH3134:8	ZSI	58	58	39	56	45	66	40	49	19	14					

Indian fossil canids

Id.	Variables 65 to 80
10797 D ZSI	24 12 23.1 13.1 11.7 9.5 9.3 7.0 5.7 4.8 10.3 5.3 11.7 7.3
H779B ZSI	9.2 5.4 0.0 11.6
SL1976-1 ZSI	
SL1976-2 ZSI	22 12 10.5 9.4 7.5 5.8 5.1 9.2
SL1976-4 ZSI	
KL.B.1 (1) ZSI	
KL.B.1 (2) ZSI	
BZH3135:1 ZSI	
BZH3136:2 ZSI	
BZH3136:3 ZSI	130 128 22 12 21.7 11.3 9.7 5.9 8.0 6.2 5.8 2.9 8.9 0.0 10.0 6.3
BZH3135:4 ZSI	
BZH3288:5 ZSI	
BZH4013:6 ZSI	25 14 22.2 12.2 11.1 7.3 8.9 7.1 6.2 4.6 9.0 5.0 10.8 7.2
BZH3279:7 ZSI	24 14 22.0 12.0 10.0 9.3 6.8 5.8 9.2 4.3 10.2 6.9
BZH3134:8 ZSI	

APPENDIX 14

PHOTOGRAPHIC FRAME

No adequate photograph of this frame with a mounted skull was available at the time of submission of the thesis. The archives of the Department of Prehistory, Research School of Pacific Studies, ANU, holds the complete collection of black and white negatives that were produced in the course of the research. Some of these provide a view of both models of the frame and could be referenced if anyone was interested in the details of construction.

The frame consists of 9 mm hollow stainless steel tube, jointed to allow demounting. The suspension cradle with ratchets is constructed from brass bar and rod, with threaded compression pads that grip the skull laterally just below the ethmoid foramina.

The camera (Asahi Pentax SP500) is fixed on an extensible mount approximately 60 cm from the median plane of the skull. This object distance can be varied according to needs of the shot.

Lighting in all cases for overseas specimens was by synchronised double flash guns, fixed some 2 m from the skull. Otherwise, for Australian material brought into the Prehistory Department, studio lights were used.

APPENDIX 15

FAUNAL REPORT FOR FOSSIL DINGO KIOLOA 01

The following is Ken Aplin's report on the gut contents of Kioloa 01, a full dingo skeleton excavated by K. Gollan and P. Brown in July 1979. The excavation report has been lodged with the National Parks and Wildlife Service of New South Wales.

Teleostei

Fam. LABRIDAE Gen. et sp. Indet.

The following remains are identifiable as from a member of the family Labridae, the Wrasses, and may all represent a single individual. The cranial elements suggest a fish in the order of 15-20 cm in length. All of the labrid remains are unburnt.

No:7 Wt:1.0 g.

- 1 right premaxilla fragment
- 2 left premaxilla fragments
- 1 upper pharyngeal fragment
- 1 lower pharyngeal fragment
- 1 left hyomandibular fragment
- 1 right frontal fragment

Fam. Indet.

The following remains are consistent in size with the proposed labrid individual. No:36 Wt:1.2 g.

- 3 pterygials (pectoral fin)
- 7 pectoral spine fragments
- 24 various spine fragments
- 1 vertebral centrum fragment

A single spine fragment appears to be lightly charred. In addition a quantity of very fragmented but obviously fish cranial plates are less confidently of the labrid size class, but are still probably

the same individual. No:117 Wt:1.6 g.

A single vertebral centrum appears to be too large to be of the labrid individual, but cannot be assigned to any family group.

Wt: 0.2 g.

Marsupialia

Fam. MACROPODIDAE

An unburnt neural arch from the caudal region of a small wallaby, possibly *Thylogale* sp., is the only marsupial element present. The thin cortical layer has been perforated in a number of places, perhaps by solution. Wt: 0.2 g.

Placentalia

Fam. MURIDAE *Rattus lutreolus*

An unburnt right maxilla retaining well worn M^{1-2} represents the swamp rat, *Rattus lutreolus*. No other murid remains are present in the gut contents. Wt: 0.1 g.

Mammalia

One small chip of bone appears to be texturally mammalian rather than fish-like and is calcined.

Summary

	No.	Wt.	MNI
Labridae	7	1.0	1
Other fish	153	3.0	1*
Macropodidae	1	0.2	1
<i>Rattus lutreolus</i>	1	0.1	1
Burnt bone	2	0.1	-

* other than labrid

APPENDIX 16

A NOTE ON THE CALCULATION OF d_i^2

I have discussed in general terms in Chapter 6 the model for testing an hypothesis that an individual with an observation vector \bar{x}_i could be drawn from a population with mean vector \bar{X}_i and dispersion matrix Σ_i . A modified form of the *support* statistic d_i^2 has been developed recently by Dr S. Wilson (Department of Statistics, Research School of Social Sciences, ANU). The expression takes into account the sampling characteristics, in defining the comparison population parameters, and consequently is a function of n , the number of individuals in the comparison population

$$d_i^2 = n \log_e \left[1 + \frac{n}{(n+1)(n-1)} D_i^2 \right]$$

where n = no. of individuals in the comparison population

$$D_i^2 = (\bar{X}_i - \bar{x}_i)^T \Sigma^{-1} (\bar{X}_i - \bar{x}_i) \quad \text{i.e. the Mahalanobis generalised distance in } i \text{ dimensions}$$

It can be shown that d_i^2 has a χ^2 distribution, the percentage points of which can be taken to define the critical values on d_i^2 for rejection of the null-hypothesis. The degrees of freedom are given by the dimensionality of d_i^2 , that is, equal to the number of variables in the computation of d_i^2 .

The program, as written by Ms Y. Pittelkow, calculates D_i^2 from the input variances and correlation matrix of the comparison population, the population mean vector \bar{X}_i and individual observation vector \bar{x}_i . The log transform of D^2 is carried out, using the input value of n . D_i^2 , d_i^2 are listed together with a further calculation of the expression $d_i^2/\chi_{i,0.01}^2$ (which I have called the Chi ratio).

In the implementation of the program there were a number of obstacles. The prime difficulty was in generating a well-scaled and tractable dispersion matrix for the calculation of the generalised distance. Considerable effort was diverted to investigating the causes of failure to achieve

APPENDIX 17

The reduced correlation matrix (only significant correlation is reported) has been produced by the SPSS program, under the convention of listwise deletion of missing data.

