

Supplemental Table S1

List of 191 *Cerdocyon thous* specimens belonging to group Allopatric, Gymnocercus or Vetulus, representing 118 localities in South America, used for morphometric analyses, with data on species, sex (F, female; M, male; or unknown), museum number and geographical coordinates.

Group	Sex	Museum number	Latitude	Longitude
Allopatric	F	MHNCI 164	– 22.96	– 53.30
Allopatric	F	MHNCI 5235	– 22.63	– 52.88
Allopatric	Unknown	MHNCI 5786	– 22.63	– 52.88
Allopatric	M	MHNCI 60	– 22.72	– 53.17
Allopatric	F	MN 10987	– 14.80	– 39.03
Allopatric	F	MN 11205	– 14.80	– 39.03
Allopatric	Unknown	MN 25570	– 4.33	– 38.88
Allopatric	M	MN 25577	– 4.33	– 38.88
Allopatric	Unknown	MN 25578	– 4.05	– 40.87
Allopatric	M	MN 25583	– 8.89	– 36.50
Allopatric	F	MN 25584	– 8.89	– 36.50
Allopatric	Unknown	MN 25594	– 22.66	– 42.38
Allopatric	F	MN 25597	– 19.93	– 40.60
Allopatric	M	MN 25598	– 19.48	– 40.48
Allopatric	F	MN 25608	– 8.89	– 36.50
Allopatric	Unknown	MN 32370	– 15.60	– 39.86
Allopatric	F	MN 3885	– 22.96	– 44.04
Allopatric	M	MN 3887	– 22.96	– 44.04
Allopatric	F	MN 42800	– 22.50	– 44.56
Allopatric	Unknown	MN 43968	– 22.96	– 42.03
Allopatric	F	MN 5505	– 23.44	– 45.08
Allopatric	Unknown	MN 63471	– 7.49	– 36.66
Allopatric	Unknown	MN 72784	– 22.37	– 41.78
Allopatric	F	MZUSP 1164	– 24.10	– 49.34
Allopatric	M	MZUSP 1165	– 24.10	– 49.34
Allopatric	F	MZUSP 13797	– 23.02	– 48.01
Allopatric	F	MZUSP 1933	– 20.76	– 51.70
Allopatric	M	MZUSP 1935	– 20.65	– 51.50

Allopatric	M	MZUSP 19741	- 20.87	- 51.61
Allopatric	F	MZUSP 2832	- 21.46	- 49.95
Allopatric	F	MZUSP 2833	- 21.46	- 49.95
Allopatric	F	MZUSP 2835	- 21.46	- 49.95
Allopatric	M	MZUSP 3504	- 14.79	- 39.28
Allopatric	F	MZUSP 3762	- 21.50	- 51.32
Allopatric	F	MZUSP 3763	- 21.50	- 51.32
Allopatric	Unknown	MZUSP 3831	- 12.95	- 38.50
Allopatric	M	MZUSP 4135	- 21.46	- 49.95
Allopatric	M	MZUSP 463	- 22.32	- 49.07
Allopatric	F	MZUSP 486	- 22.32	- 49.07
Allopatric	M	MZUSP 487	- 22.32	- 49.07
Allopatric	M	MZUSP 6636	- 23.29	- 46.59
Allopatric	M	MZUSP 8732	- 4.33	- 38.88
Gymnocercus	Unknown	MCNFZB 423	- 28.64	- 53.61
Gymnocercus	M	MCNFZB 598	- 29.69	- 51.47
Gymnocercus	M	MCP 178	- 30.29	- 51.30
Gymnocercus	F	MHNCI 1077	- 25.39	- 51.46
Gymnocercus	M	MHNCI 132	- 24.79	- 50.01
Gymnocercus	M	MHNCI 1708	- 23.30	- 50.07
Gymnocercus	F	MHNCI 1713	- 25.46	- 49.53
Gymnocercus	M	MHNCI 1714	- 23.30	- 50.07
Gymnocercus	M	MHNCI 1717	- 24.21	- 49.78
Gymnocercus	M	MHNCI 252	- 25.85	- 48.64
Gymnocercus	F	MHNCI 2723	- 24.32	- 50.62
Gymnocercus	M	MHNCI 307	- 24.79	- 50.01
Gymnocercus	M	MHNCI 309	- 24.79	- 50.01
Gymnocercus	M	MHNCI 3401	- 25.50	- 49.34
Gymnocercus	M	MHNCI 3728	- 25.99	- 49.34
Gymnocercus	Unknown	MHNCI 3811	- 25.68	- 54.43
Gymnocercus	F	MHNCI 3826	- 25.68	- 54.43
Gymnocercus	M	MHNCI 3850	- 25.68	- 54.43
Gymnocercus	Unknown	MHNCI 3923	- 25.10	- 50.16
Gymnocercus	M	MHNCI 3925	- 25.57	- 49.39
Gymnocercus	M	MHNCI 3941	- 25.35	- 49.16
Gymnocercus	F	MHNCI 3945	- 25.20	- 53.15

Gymnocercus	Unknown	MHNCI 3948	- 25.84	- 52.03
Gymnocercus	F	MHNCI 3972	- 26.23	- 50.93
Gymnocercus	M	MHNCI 4043	- 25.45	- 49.07
Gymnocercus	F	MHNCI 54	- 25.82	- 48.54
Gymnocercus	M	MHNCI 56	- 25.82	- 48.54
Gymnocercus	M	MHNCI 57	- 25.82	- 48.54
Gymnocercus	M	MHNCI 5706	- 25.44	- 49.97
Gymnocercus	F	MHNCI 6184	- 25.51	- 49.20
Gymnocercus	F	MHNCI 6198	- 25.51	- 49.20
Gymnocercus	Unknown	MN 68361	- 24.32	- 50.62
Gymnocercus	F	MNHN 1055	- 29.68	- 53.81
Gymnocercus	M	MNHN 1119	- 31.70	- 55.97
Gymnocercus	M	MNHN 1140	- 31.70	- 55.97
Gymnocercus	F	MNHN 1254	- 32.84	- 55.90
Gymnocercus	F	MNHN 1287	- 34.52	- 56.28
Gymnocercus	M	MNHN 2420	- 31.73	- 55.98
Gymnocercus	F	MNHN 247	- 34.88	- 54.97
Gymnocercus	Unknown	MNHN 249	- 27.00	- 54.44
Gymnocercus	M	MNHN 251	- 31.73	- 55.98
Gymnocercus	Unknown	MNHN 252	- 31.73	- 55.98
Gymnocercus	Unknown	MNHN 253	- 33.94	- 56.75
Gymnocercus	F	MNHN 2538	- 31.70	- 55.97
Gymnocercus	Unknown	MNHN 2540	- 34.82	- 56.16
Gymnocercus	Unknown	MNHN 255	- 33.40	- 57.54
Gymnocercus	F	MNHN 258	- 31.71	- 55.97
Gymnocercus	F	MNHN 260	- 31.88	- 56.24
Gymnocercus	F	MNHN 262	- 30.95	- 57.52
Gymnocercus	F	MNHN 2643	- 33.23	- 54.36
Gymnocercus	M	MNHN 2645	- 30.65	- 56.59
Gymnocercus	M	MNHN 2646	- 34.88	- 54.97
Gymnocercus	F	MNHN 2649	- 33.55	- 55.71
Gymnocercus	M	MNHN 2650	- 33.55	- 55.71
Gymnocercus	F	MNHN 2651	- 33.55	- 55.71
Gymnocercus	Unknown	MNHN 2680	- 33.93	- 55.68
Gymnocercus	Unknown	MNHN 2695	- 33.53	- 54.94
Gymnocercus	Unknown	MNHN 4716	- 30.91	- 55.55

Gymnocercus	Unknown	MNHN 5478	- 34.72	- 56.07
Gymnocercus	M	MNHN 6260	- 34.55	- 55.94
Gymnocercus	M	MNHN 6262	- 34.55	- 55.94
Gymnocercus	M	MNHN 6273	- 34.55	- 55.94
Gymnocercus	Unknown	MNHN 6410	- 34.40	- 53.79
Gymnocercus	Unknown	MNHN 6437	- 30.91	- 55.55
Gymnocercus	Unknown	MNHN 7111	- 34.80	- 54.91
Gymnocercus	Unknown	MNHN 7352	- 34.80	- 54.91
Gymnocercus	M	MNHN 829	- 31.25	- 56.15
Gymnocercus	F	MNHN 869	- 30.55	- 57.86
Gymnocercus	M	MNHN 954	- 33.80	- 55.53
Gymnocercus	M	MNHN 956	- 31.25	- 56.15
Gymnocercus	F	MNHN 965	- 30.29	- 57.20
Gymnocercus	Unknown	MZUSP 3182	- 28.29	- 53.49
Gymnocercus	Unknown	MZUSP 415	- 31.37	- 51.97
Gymnocercus	M	MZUSP 514	- 31.37	- 51.97
Gymnocercus	M	MZUSP 518	- 31.37	- 51.97
Gymnocercus	Unknown	MZUSP 7149	- 28.29	- 53.49
Gymnocercus	F	UFSC 297	- 27.96	- 48.68
Gymnocercus	F	UFSC 298	- 27.56	- 48.49
Gymnocercus	F	UFSC 348	- 27.57	- 48.98
Gymnocercus	M	UFSC 3791	- 27.40	- 51.23
Gymnocercus	F	UFSC 576	- 27.90	- 49.13
Gymnocercus	Unknown	UFSC 762	- 26.12	- 50.31
Gymnocercus	F	UFSC 773	- 27.48	- 48.53
Gymnocercus	M	UFSC 850	- 27.44	- 48.47
Vetulus	Unknown	MN 25005	- 18.54	- 53.12
Vetulus	F	MN 25589	- 20.72	- 46.61
Vetulus	F	MN 25590	- 20.72	- 46.61
Vetulus	M	MN 25591	- 20.72	- 46.61
Vetulus	Unknown	MN 25606	- 21.23	- 57.13
Vetulus	Unknown	MN 25607	- 21.23	- 57.13
Vetulus	Unknown	MN 25612	- 16.33	- 48.96
Vetulus	Unknown	MN 25683	- 14.67	- 52.35
Vetulus	M	MN 29061	- 14.76	- 43.93
Vetulus	M	MN 29062	- 14.76	- 43.93

Vetulus	Unknown	MN 3036	- 19.28	- 44.41
Vetulus	F	MN 4242	- 19.63	- 43.89
Vetulus	M	MN 4243	- 19.63	- 43.89
Vetulus	Unknown	MN 46810	- 15.48	- 43.60
Vetulus	F	MN 4891	- 16.33	- 48.96
Vetulus	Unknown	MN 4908	- 21.62	- 55.17
Vetulus	Unknown	MN 63491	- 8.84	- 42.50
Vetulus	Unknown	MN 63517	- 9.01	- 42.70
Vetulus	M	MN 71092	- 14.67	- 52.35
Vetulus	Unknown	MN 75981	- 8.33	- 42.31
Vetulus	M	MNHN 706	- 21.72	- 57.89
Vetulus	F	MNHN 707	- 21.72	- 57.89
Vetulus	Unknown	MZUSP 19738	- 19.54	- 54.05
Vetulus	M	MZUSP 19742	- 13.51	- 48.36
Vetulus	M	MZUSP 19757	- 10.47	- 40.18
Vetulus	Unknown	MZUSP 19847	- 16.26	- 56.62
Vetulus	M	MZUSP 2594	- 10.47	- 40.18
Vetulus	F	MZUSP 2595	- 10.47	- 40.18
Vetulus	M	MZUSP 2596	- 10.47	- 40.18
Vetulus	F	MZUSP 2598	- 10.47	- 40.18
Vetulus	F	MZUSP 2599	- 10.47	- 40.18
Vetulus	M	MZUSP 2600	- 10.47	- 40.18
Vetulus	M	MZUSP 2601	- 10.47	- 40.18
Vetulus	F	MZUSP 2602	- 10.47	- 40.18
Vetulus	M	MZUSP 2834	- 21.46	- 49.95
Vetulus	M	MZUSP 2917	- 20.55	- 47.41
Vetulus	M	MZUSP 2918	- 20.55	- 47.41
Vetulus	F	MZUSP 2919	- 20.55	- 47.41
Vetulus	M	MZUSP 3031	- 17.34	- 44.92
Vetulus	M	MZUSP 3032	- 17.34	- 44.92
Vetulus	M	MZUSP 3033	- 17.34	- 44.92
Vetulus	F	MZUSP 3034	- 17.34	- 44.92
Vetulus	M	MZUSP 3038	- 17.75	- 44.37
Vetulus	F	MZUSP 3039	- 17.34	- 44.92
Vetulus	F	MZUSP 3042	- 17.34	- 44.92
Vetulus	M	MZUSP 3043	- 17.34	- 44.92

Vetulus	F	MZUSP 3098	- 17.34	- 44.92
Vetulus	M	MZUSP 3101	- 17.34	- 44.92
Vetulus	F	MZUSP 3104	- 17.34	- 44.92
Vetulus	M	MZUSP 3372	- 19.01	- 57.66
Vetulus	M	MZUSP 3373	- 19.01	- 57.66
Vetulus	Unknown	MZUSP 34772	- 19.12	- 51.74
Vetulus	Unknown	MZUSP 34775	- 19.12	- 51.74
Vetulus	Unknown	MZUSP 34776	- 19.12	- 51.74
Vetulus	M	MZUSP 3777	- 20.24	- 56.36
Vetulus	M	MZUSP 4215	- 13.51	- 48.36
Vetulus	M	MZUSP 4216	- 13.51	- 48.36
Vetulus	M	MZUSP 4217	- 13.39	- 46.33
Vetulus	M	MZUSP 4219	- 13.51	- 48.36
Vetulus	M	MZUSP 4220	- 15.46	- 44.32
Vetulus	F	MZUSP 4221	- 13.51	- 48.36
Vetulus	M	MZUSP 6314	- 15.60	- 56.09
Vetulus	M	MZUSP 6315	- 15.60	- 56.09
Vetulus	Unknown	MZUSP 6640	- 17.79	- 50.92
Vetulus	Unknown	UFSC 3728	- 19.21	- 57.65
