

Additional data

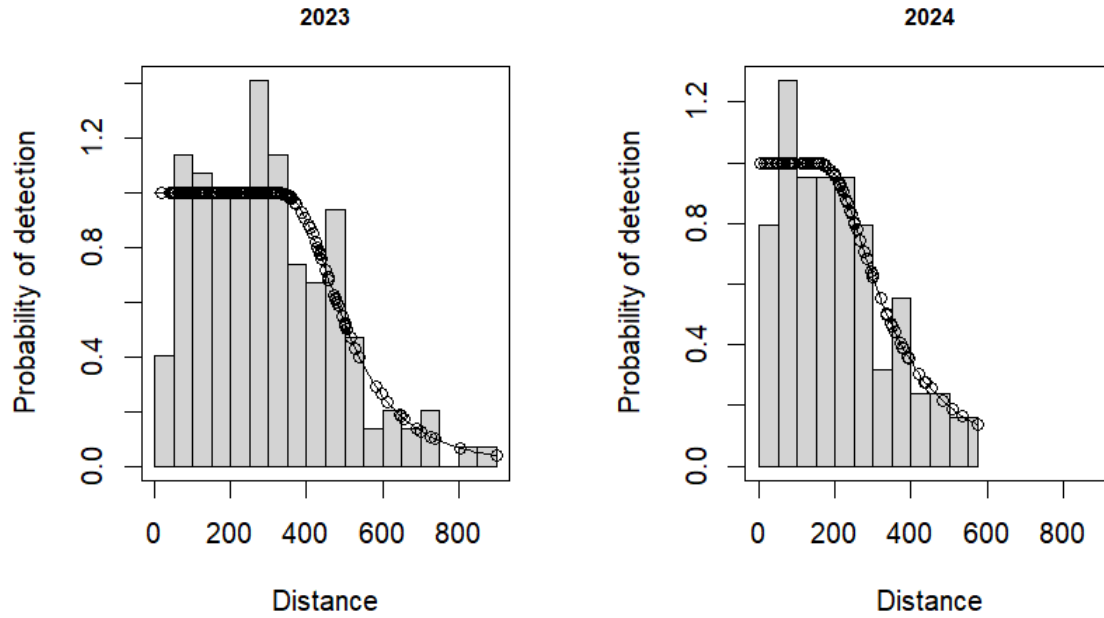
SD1. Direct observation of white-tailed deer in cover types transects in the Antisana Water Conservation Area in 2023 and 2024: A) Observation with rangefinder, B) male white-tailed deer, C) Observation with rangefinder, D) Group of white-tailed deer, E) Data entry on field form, F) female white-tailed deer



SD2. Summary of detection function models fitted to Deer data. “CvM” stands for Cramér-von Mises, $\hat{P}_a$ is average detectability, $se(\hat{P}_a)$ is standard error. Models are sorted in ascending order according to their AIC.

2023						
Model	Key function + Adjustment series	CvM <i>p</i> value	$\hat{P}_a$	$se(\hat{P}_a)$	AIC	Δ AIC
Model 4	Hazard-rate + cos	0.342*	0.599*	0.031	2106.803*	0.000*
Model 6	Hazard-rate + poly	0.342	0.599	0.031	2106.803	0.000
Model 5	Hazard-rate + herm	0.342	0.599	0.031	2106.803	0.000
Model 1	Half-normal + cos	0.088	0.552	0.072	2110.151	3.348
Model 7	Uniform + cos	0.035	0.516	0.013	2111.360	4.557
Model 9	Uniform + poly	0.032	0.515	0.022	2111.712	4.909
Model 2	Half-normal + herm	0.018	0.499	0.035	2114.656	7.853
Model 3	Half-normal + poly	0.018	0.499	0.035	2114.656	7.854
2024						
Model	Key function + Adjustment series	CvM <i>p</i> value	$\hat{P}_a$	$se(\hat{P}_a)$	AIC	Δ AIC
Model 7	Uniform + cos	0.782	0.571	0.036	1143.851	0.000
Model 1	Half-normal + cos	0.827	0.576	0.051	1144.078	0.227
Model 2	Half-normal + herm	0.827	0.576	0.051	1144.078	0.227
Model 3	Half-normal + poly	0.827	0.576	0.051	1144.078	0.227
Model 4	Hazard-rate + cos	0.990*	0.635	0.064	1144.983*	1.132*
Model 6	Hazard-rate + poly	0.990	0.635	0.064	1144.983	1.132
Model 5	Hazard-rate + herm	0.990	0.635	0.064	1144.983	1.132
Model 9	Uniform + poly	0.859	0.582	0.048	1145.652	1.801

SD3. Adjustments to the detection function (Hazard-rate + cos) to the perpendicular distance distribution data for the years 2023 and 2024.



SD4. Database collected in 2023 used to estimate the density of white-tailed deer (*O. virginianus ustus*) using the R-Distance package.

Study.Are a	Region.La bel	Area	Sample.L abel	Effort	distance	size
ACHA	TH16-23	72915714.9	TH16-23	2000	432	4
ACHA	TH16-23	72915714.9	TH16-23	2000	332	6
ACHA	TH16-23	72915714.9	TH16-23	2000	423	4
ACHA	TH16-23	72915714.9	TH16-23	2000	98,2	3
ACHA	TH16-23	72915714,9	TH16-23	2000	42,9	3
ACHA	TH16-23	72915714,9	TH16-23	2000	197	3
ACHA	TH16-23	72915714,9	TH16-23	2000	255	2
ACHA	TH11-23	72915714,9	TH11-23	2000	345	3
ACHA	TH11-23	72915714,9	TH11-23	2000	516	2
ACHA	TH11-23	72915714.9	TH11-23	2000	473	20
ACHA	TH11-23	72915714.9	TH11-23	2000	305	5
ACHA	TH11-23	72915714.9	TH11-23	2000	166	5

ACHA	TH11-23	72915714.9	TH11-23	2000	272	17
ACHA	TB1-23	8893474.85	TB1-23	1000	247	12
ACHA	TB1-23	8893474.85	TB1-23	1000	408	2
ACHA	TB1-23	8893474.85	TB1-23	1000	415	14
ACHA	TB1-23	8893474.85	TB1-23	1000	262	5
ACHA	TB1-23	8893474.85	TB1-23	1000	353	14
ACHA	TB1-23	8893474.85	TB1-23	1000	355	6
ACHA	TH15-23	72915714.9	TH15-23	2000	172	2
ACHA	TH15-23	72915714.9	TH15-23	2000	53.9	2
ACHA	TH15-23	72915714.9	TH15-23	2000	95.6	3
ACHA	TH1-23	72915714.9	TH1-23	2000	362	1
ACHA	TH1-23	72915714.9	TH1-23	2000	161	4
ACHA	TH1-23	72915714.9	TH1-23	2000	70.3	1
ACHA	TH3-23	72915714.9	TH3-23	2000	43.6	4
ACHA	TH3-23	72915714.9	TH3-23	2000	80.7	1
ACHA	TH3-23	72915714.9	TH3-23	2000	270	5
ACHA	TH3-23	72915714.9	TH3-23	2000	288	1
ACHA	TH3-23	72915714.9	TH3-23	2000	322	1
ACHA	TH3-23	72915714.9	TH3-23	2000	500	2
ACHA	TH3-23	72915714.9	TH3-23	2000	201	3
ACHA	TH3-23	72915714.9	TH3-23	2000	374	1
ACHA	TH3-23	72915714.9	TH3-23	2000	176	1
ACHA	TE3-23	2431580.34	TE3-23	1000		
ACHA	TB3-23	8893474.85	TB3-23	1000	737	4
ACHA	TB3-23	8893474.85	TB3-23	1000	230	2
ACHA	TB3-23	8893474.85	TB3-23	1000	429	5
ACHA	TB3-23	8893474.85	TB3-23	1000	475	14
ACHA	TB3-23	8893474.85	TB3-23	1000	482	1
ACHA	TB3-23	8893474.85	TB3-23	1000	353	1
ACHA	TB5-23	8893474.85	TB5-23	1000		
ACHA	TH7-23	72915714.9	TH7-23	2000	66.9	11
ACHA	TH7-23	72915714.9	TH7-23	2000	55.2	4

ACHA	TB6-23	8893474.85	TB6-23	1000	612	3
ACHA	TB4-23	8893474.85	TB4-23	1000	318	1
ACHA	TH12-23	72915714.9	TH12-23	2000	348	6
ACHA	TH12-23	72915714.9	TH12-23	2000	245	4
ACHA	TH13-23	72915714.9	TH13-23	2000	92.3	1
ACHA	TH13-23	72915714.9	TH13-23	2000	294	3
ACHA	TH13-23	72915714.9	TH13-23	2000	183	1
ACHA	TE2-23	2431580.34	TE2-23	1000	118.3	3
ACHA	TE2-23	2431580.34	TE2-23	1000	123.8	7
ACHA	TH18-23	72915714.9	TH18-23	2000	215	1
ACHA	TH18-23	72915714.9	TH18-23	2000	50	3
ACHA	TH18-23	72915714.9	TH18-23	2000	434	8
ACHA	TH6-23	72915714.9	TH6-23	2000	86.9	1
ACHA	TH6-23	72915714.9	TH6-23	2000	61.4	1
ACHA	TH6-23	72915714.9	TH6-23	2000	46.6	1
ACHA	TH6-23	72915714.9	TH6-23	2000	280	2
ACHA	TH6-23	72915714.9	TH6-23	2000	482	2
ACHA	TH9-23	72915714.9	TH9-23	2000	439	6
ACHA	TH9-23	72915714.9	TH9-23	2000	235	1
ACHA	TH9-23	72915714.9	TH9-23	2000	69.4	1
ACHA	TH9-23	72915714.9	TH9-23	2000	583	13
ACHA	TH9-23	72915714.9	TH9-23	2000	240	2
ACHA	TH2-23	72915714.9	TH2-23	2000	270	6
ACHA	TH2-23	72915714.9	TH2-23	2000	265	7
ACHA	TH2-23	72915714.9	TH2-23	2000	282	6
ACHA	TH2-23	72915714.9	TH2-23	2000	280	3
ACHA	TH2-23	72915714.9	TH2-23	2000	106.8	3
ACHA	TH2-23	72915714.9	TH2-23	2000	151	2
ACHA	TH2-23	72915714.9	TH2-23	2000	40.9	1
ACHA	TH2-23	72915714.9	TH2-23	2000	249	11
ACHA	TH2-23	72915714.9	TH2-23	2000	236	1
ACHA	TH2-23	72915714.9	TH2-23	2000	359	1

ACHA	TH2-23	72915714.9	TH2-23	2000	145	1
ACHA	TH2-23	72915714.9	TH2-23	2000	226	3
ACHA	TH2-23	72915714.9	TH2-23	2000	482	11
ACHA	TH2-23	72915714.9	TH2-23	2000	480	4
ACHA	TH2-23	72915714.9	TH2-23	2000	528	6
ACHA	TH2-23	72915714.9	TH2-23	2000	539	3
ACHA	TH4-23	72915714.9	TH4-23	2000	226	7
ACHA	TH4-23	72915714.9	TH4-23	2000	343	2
ACHA	TH4-23	72915714.9	TH4-23	2000	155	4
ACHA	TH4-23	72915714.9	TH4-23	2000	349	4
ACHA	TH4-23	72915714.9	TH4-23	2000	259	1
ACHA	TH4-23	72915714.9	TH4-23	2000	229	7
ACHA	TH4-23	72915714.9	TH4-23	2000	66.6	2
ACHA	TH10-23	72915714.9	TH10-23	2000	503	5
ACHA	TH10-23	72915714.9	TH10-23	2000	506	6
ACHA	TH10-23	72915714.9	TH10-23	2000	450	2
ACHA	TH10-23	72915714.9	TH10-23	2000	475	5
ACHA	TH10-23	72915714.9	TH10-23	2000	477	2
ACHA	TH10-23	72915714.9	TH10-23	2000	435	1
ACHA	TH10-23	72915714.9	TH10-23	2000	112.6	1
ACHA	TH10-23	72915714.9	TH10-23	2000	370	7
ACHA	TH10-23	72915714.9	TH10-23	2000	255	2
ACHA	TH10-23	72915714.9	TH10-23	2000	456	2
ACHA	TH10-23	72915714.9	TH10-23	2000	337	3
ACHA	TH10-23	72915714.9	TH10-23	2000	145	3
ACHA	TH10-23	72915714.9	TH10-23	2000	266	5
ACHA	TH10-23	72915714.9	TH10-23	2000	396	3
ACHA	TH10-23	72915714.9	TH10-23	2000	336	4
ACHA	TH10-23	72915714.9	TH10-23	2000	333	1
ACHA	TH10-23	72915714.9	TH10-23	2000	104	1
ACHA	TH10-23	72915714.9	TH10-23	2000	900	4
ACHA	TH10-23	72915714.9	TH10-23	2000	388	6

ACHA	TH10-23	72915714.9	TH10-23	2000	356	4
ACHA	TB2-23	8893474.85	TB2-23	1000	473	5
ACHA	TB2-23	8893474.85	TB2-23	1000	150	1
ACHA	TB2-23	8893474.85	TB2-23	1000	292	1
ACHA	TE1-23	2431580.34	TE1-23	1000	174	2
ACHA	TE1-23	2431580.34	TE1-23	1000	188	1
ACHA	TE1-23	2431580.34	TE1-23	1000	180	2
ACHA	TE1-23	2431580.34	TE1-23	1000	131	4
ACHA	TE1-23	2431580.34	TE1-23	1000	87.4	3
ACHA	TE1-23	2431580.34	TE1-23	1000	210	4
ACHA	TH14-23	72915714.9	TH14-23	2000	216	3
ACHA	TH14-23	72915714.9	TH14-23	2000	691	4
ACHA	TH14-23	72915714.9	TH14-23	2000	648	2
ACHA	TH14-23	72915714.9	TH14-23	2000	645	10
ACHA	TH14-23	72915714.9	TH14-23	2000	473	2
ACHA	TH14-23	72915714.9	TH14-23	2000	193	2
ACHA	TH14-23	72915714.9	TH14-23	2000	502	1
ACHA	TH14-23	72915714.9	TH14-23	2000	304	4
ACHA	TH14-23	72915714.9	TH14-23	2000	459	2
ACHA	TH14-23	72915714.9	TH14-23	2000	324	4
ACHA	TH5-23	72915714.9	TH5-23	2000	493	4
ACHA	TH5-23	72915714.9	TH5-23	2000	804	1
ACHA	TH5-23	72915714.9	TH5-23	2000	729	5
ACHA	TH5-23	72915714.9	TH5-23	2000	503	3
ACHA	TH5-23	72915714.9	TH5-23	2000	701	12
ACHA	TH5-23	72915714.9	TH5-23	2000	656	4
ACHA	TH5-23	72915714.9	TH5-23	2000	597	13
ACHA	TH5-23	72915714.9	TH5-23	2000	93.5	3
ACHA	TH5-23	72915714.9	TH5-23	2000	121.3	9
ACHA	TH5-23	72915714.9	TH5-23	2000	313	2
ACHA	TH5-23	72915714.9	TH5-23	2000	289	16
ACHA	TH5-23	72915714.9	TH5-23	2000	283	2

ACHA	TH5-23	72915714.9	TH5-23	2000	345	6
ACHA	TH5-23	72915714.9	TH5-23	2000	389	2
ACHA	TH5-23	72915714.9	TH5-23	2000	320	3
ACHA	TH5-23	72915714.9	TH5-23	2000	405	1
ACHA	TH5-23	72915714.9	TH5-23	2000	187	12
ACHA	TH5-23	72915714.9	TH5-23	2000	349	1
ACHA	TH8-23	72915714.9	TH8-23	2000	89.7	1
ACHA	TH8-23	72915714.9	TH8-23	2000	18	1
ACHA	TH8-23	72915714.9	TH8-23	2000	129	1
ACHA	TH8-23	72915714.9	TH8-23	2000	125	2
ACHA	TH8-23	72915714.9	TH8-23	2000	115.4	3
ACHA	TH8-23	72915714.9	TH8-23	2000	172	1
ACHA	TH8-23	72915714.9	TH8-23	2000	155	1
ACHA	TH8-23	72915714.9	TH8-23	2000	91.5	1
ACHA	TH8-23	72915714.9	TH8-23	2000	128	1
ACHA	TH8-23	72915714.9	TH8-23	2000	136	1
ACHA	TH8-23	72915714.9	TH8-23	2000	143	1
ACHA	TH8-23	72915714.9	TH8-23	2000	276	2
ACHA	TH8-23	72915714.9	TH8-23	2000	272	1
ACHA	TH17-23	72915714.9	TH17-23	2000	54.4	3
ACHA	TH17-23	72915714.9	TH17-23	2000	208	1
ACHA	TH17-23	72915714.9	TH17-23	2000	281	1
ACHA	TH17-23	72915714.9	TH17-23	2000	285	1

SD5. Database collected in 2023 used to estimate the density of white-tailed deer (*O. virginianus ustus*) in cover types (TH: grassland, TB: shrubland, TE: sandy areas) using the R-Distance package.

Study.Area	Region.Label	Area	Sample.Label	Effort	distance	size
ACHA	grassland	72915714.9	TH16-23	2000	432	4
ACHA	grassland	72915714.9	TH16-23	2000	332	6
ACHA	grassland	72915714.9	TH16-23	2000	423	4

ACHA	grassland	72915714.9	TH16-23	2000	98.2	3
ACHA	grassland	72915714.9	TH16-23	2000	42.9	3
ACHA	grassland	72915714.9	TH16-23	2000	197	3
ACHA	grassland	72915714.9	TH16-23	2000	255	2
ACHA	grassland	72915714.9	TH11-23	2000	345	3
ACHA	grassland	72915714.9	TH11-23	2000	516	2
ACHA	grassland	72915714.9	TH11-23	2000	473	20
ACHA	grassland	72915714.9	TH11-23	2000	305	5
ACHA	grassland	72915714.9	TH11-23	2000	166	5
ACHA	grassland	72915714.9	TH11-23	2000	272	17
ACHA	shrubland	8893474.85	TB1-23	1000	247	12
ACHA	shrubland	8893474.85	TB1-23	1000	408	2
ACHA	shrubland	8893474.85	TB1-23	1000	415	14
ACHA	shrubland	8893474.85	TB1-23	1000	262	5
ACHA	shrubland	8893474.85	TB1-23	1000	353	14
ACHA	shrubland	8893474.85	TB1-23	1000	355	6
ACHA	grassland	72915714.9	TH15-23	2000	172	2
ACHA	grassland	72915714.9	TH15-23	2000	53.9	2
ACHA	grassland	72915714.9	TH15-23	2000	95.6	3
ACHA	grassland	72915714.9	TH1-23	2000	362	1
ACHA	grassland	72915714.9	TH1-23	2000	161	4
ACHA	grassland	72915714.9	TH1-23	2000	70.3	1
ACHA	grassland	72915714.9	TH3-23	2000	43.6	4
ACHA	grassland	72915714.9	TH3-23	2000	80.7	1
ACHA	grassland	72915714.9	TH3-23	2000	270	5
ACHA	grassland	72915714.9	TH3-23	2000	288	1
ACHA	grassland	72915714.9	TH3-23	2000	322	1
ACHA	grassland	72915714.9	TH3-23	2000	500	2
ACHA	grassland	72915714.9	TH3-23	2000	201	3
ACHA	grassland	72915714.9	TH3-23	2000	374	1
ACHA	grassland	72915714.9	TH3-23	2000	176	1
ACHA	sandy areas	2431580.34	TE3-23	1000		

ACHA	grassland	8893474.85	TB3-23	1000	737	4
ACHA	grassland	8893474.85	TB3-23	1000	230	2
ACHA	grassland	8893474.85	TB3-23	1000	429	5
ACHA	grassland	8893474.85	TB3-23	1000	475	14
ACHA	grassland	8893474.85	TB3-23	1000	482	1
ACHA	grassland	8893474.85	TB3-23	1000	353	1
ACHA	grassland	8893474.85	TB5-23	1000		
ACHA	shrubland	72915714.9	TH7-23	2000	66.9	11
ACHA	shrubland	72915714.9	TH7-23	2000	55.2	4
ACHA	grassland	8893474.85	TB6-23	1000	612	3
ACHA	grassland	8893474.85	TB4-23	1000	318	1
ACHA	shrubland	72915714.9	TH12-23	2000	348	6
ACHA	shrubland	72915714.9	TH12-23	2000	245	4
ACHA	shrubland	72915714.9	TH13-23	2000	92.3	1
ACHA	shrubland	72915714.9	TH13-23	2000	294	3
ACHA	shrubland	72915714.9	TH13-23	2000	183	1
ACHA	sandy areas	2431580.34	TE2-23	1000	118.3	3
ACHA	sandy areas	2431580.34	TE2-23	1000	123.8	7
ACHA	grassland	72915714.9	TH18-23	2000	215	1
ACHA	grassland	72915714.9	TH18-23	2000	50	3
ACHA	grassland	72915714.9	TH18-23	2000	434	8
ACHA	grassland	72915714.9	TH6-23	2000	86.9	1
ACHA	grassland	72915714.9	TH6-23	2000	61.4	1
ACHA	grassland	72915714.9	TH6-23	2000	46.6	1
ACHA	grassland	72915714.9	TH6-23	2000	280	2
ACHA	grassland	72915714.9	TH6-23	2000	482	2
ACHA	grassland	72915714.9	TH9-23	2000	439	6
ACHA	grassland	72915714.9	TH9-23	2000	235	1
ACHA	grassland	72915714.9	TH9-23	2000	69.4	1
ACHA	grassland	72915714.9	TH9-23	2000	583	13
ACHA	grassland	72915714.9	TH9-23	2000	240	2
ACHA	grassland	72915714.9	TH2-23	2000	270	6

ACHA	grassland	72915714.9	TH2-23	2000	265	7
ACHA	grassland	72915714.9	TH2-23	2000	282	6
ACHA	grassland	72915714.9	TH2-23	2000	280	3
ACHA	grassland	72915714.9	TH2-23	2000	106.8	3
ACHA	grassland	72915714.9	TH2-23	2000	151	2
ACHA	grassland	72915714.9	TH2-23	2000	40.9	1
ACHA	grassland	72915714.9	TH2-23	2000	249	11
ACHA	grassland	72915714.9	TH2-23	2000	236	1
ACHA	grassland	72915714.9	TH2-23	2000	359	1
ACHA	grassland	72915714.9	TH2-23	2000	145	1
ACHA	grassland	72915714.9	TH2-23	2000	226	3
ACHA	grassland	72915714.9	TH2-23	2000	482	11
ACHA	grassland	72915714.9	TH2-23	2000	480	4
ACHA	grassland	72915714.9	TH2-23	2000	528	6
ACHA	grassland	72915714.9	TH2-23	2000	539	3
ACHA	grassland	72915714.9	TH4-23	2000	226	7
ACHA	grassland	72915714.9	TH4-23	2000	343	2
ACHA	grassland	72915714.9	TH4-23	2000	155	4
ACHA	grassland	72915714.9	TH4-23	2000	349	4
ACHA	grassland	72915714.9	TH4-23	2000	259	1
ACHA	grassland	72915714.9	TH4-23	2000	229	7
ACHA	grassland	72915714.9	TH4-23	2000	66.6	2
ACHA	grassland	72915714.9	TH10-23	2000	503	5
ACHA	grassland	72915714.9	TH10-23	2000	506	6
ACHA	grassland	72915714.9	TH10-23	2000	450	2
ACHA	grassland	72915714.9	TH10-23	2000	475	5
ACHA	grassland	72915714.9	TH10-23	2000	477	2
ACHA	grassland	72915714.9	TH10-23	2000	435	1
ACHA	grassland	72915714.9	TH10-23	2000	112.6	1
ACHA	grassland	72915714.9	TH10-23	2000	370	7
ACHA	grassland	72915714.9	TH10-23	2000	255	2
ACHA	grassland	72915714.9	TH10-23	2000	456	2

ACHA	grassland	72915714.9	TH10-23	2000	337	3
ACHA	grassland	72915714.9	TH10-23	2000	145	3
ACHA	grassland	72915714.9	TH10-23	2000	266	5
ACHA	grassland	72915714.9	TH10-23	2000	396	3
ACHA	grassland	72915714.9	TH10-23	2000	336	4
ACHA	grassland	72915714.9	TH10-23	2000	333	1
ACHA	grassland	72915714.9	TH10-23	2000	104	1
ACHA	grassland	72915714.9	TH10-23	2000	900	4
ACHA	grassland	72915714.9	TH10-23	2000	388	6
ACHA	grassland	72915714.9	TH10-23	2000	356	4
ACHA	shrubland	8893474.85	TB2-23	1000	473	5
ACHA	shrubland	8893474.85	TB2-23	1000	150	1
ACHA	shrubland	8893474.85	TB2-23	1000	292	1
ACHA	sandy areas	2431580.34	TE1-23	1000	174	2
ACHA	sandy areas	2431580.34	TE1-23	1000	188	1
ACHA	sandy areas	2431580.34	TE1-23	1000	180	2
ACHA	sandy areas	2431580.34	TE1-23	1000	131	4
ACHA	sandy areas	2431580.34	TE1-23	1000	87.4	3
ACHA	sandy areas	2431580.34	TE1-23	1000	210	4
ACHA	grassland	72915714.9	TH14-23	2000	216	3
ACHA	grassland	72915714.9	TH14-23	2000	691	4
ACHA	grassland	72915714.9	TH14-23	2000	648	2
ACHA	grassland	72915714.9	TH14-23	2000	645	10
ACHA	grassland	72915714.9	TH14-23	2000	473	2
ACHA	grassland	72915714.9	TH14-23	2000	193	2
ACHA	grassland	72915714.9	TH14-23	2000	502	1
ACHA	grassland	72915714.9	TH14-23	2000	304	4
ACHA	grassland	72915714.9	TH14-23	2000	459	2
ACHA	grassland	72915714.9	TH14-23	2000	324	4
ACHA	grassland	72915714.9	TH5-23	2000	493	4
ACHA	grassland	72915714.9	TH5-23	2000	804	1
ACHA	grassland	72915714.9	TH5-23	2000	729	5

ACHA	grassland	72915714.9	TH5-23	2000	503	3
ACHA	grassland	72915714.9	TH5-23	2000	701	12
ACHA	grassland	72915714.9	TH5-23	2000	656	4
ACHA	grassland	72915714.9	TH5-23	2000	597	13
ACHA	grassland	72915714.9	TH5-23	2000	93.5	3
ACHA	grassland	72915714.9	TH5-23	2000	121.3	9
ACHA	grassland	72915714.9	TH5-23	2000	313	2
ACHA	grassland	72915714.9	TH5-23	2000	289	16
ACHA	grassland	72915714.9	TH5-23	2000	283	2
ACHA	grassland	72915714.9	TH5-23	2000	345	6
ACHA	grassland	72915714.9	TH5-23	2000	389	2
ACHA	grassland	72915714.9	TH5-23	2000	320	3
ACHA	grassland	72915714.9	TH5-23	2000	405	1
ACHA	grassland	72915714.9	TH5-23	2000	187	12
ACHA	grassland	72915714.9	TH5-23	2000	349	1
ACHA	grassland	72915714.9	TH8-23	2000	89.7	1
ACHA	grassland	72915714.9	TH8-23	2000	18	1
ACHA	grassland	72915714.9	TH8-23	2000	129	1
ACHA	grassland	72915714.9	TH8-23	2000	125	2
ACHA	grassland	72915714.9	TH8-23	2000	115.4	3
ACHA	grassland	72915714.9	TH8-23	2000	172	1
ACHA	grassland	72915714.9	TH8-23	2000	155	1
ACHA	grassland	72915714.9	TH8-23	2000	91.5	1
ACHA	grassland	72915714.9	TH8-23	2000	128	1
ACHA	grassland	72915714.9	TH8-23	2000	136	1
ACHA	grassland	72915714.9	TH8-23	2000	143	1
ACHA	grassland	72915714.9	TH8-23	2000	276	2
ACHA	grassland	72915714.9	TH8-23	2000	272	1
ACHA	grassland	72915714.9	TH17-23	2000	54.4	3
ACHA	grassland	72915714.9	TH17-23	2000	208	1
ACHA	grassland	72915714.9	TH17-23	2000	281	1
ACHA	grassland	72915714.9	TH17-23	2000	285	1

SD6. Database collected in 2024 used to estimate the density of white-tailed deer (*O. virginianus ustus*) using the R-Distance package.

Study.Area	Region.Label	Area	Sample.Label	Effort	distance	size
ACHA	TH9-24	72915714.9	TH9-24	2000		
ACHA	TH18-24	72915714.9	TH18-24	2000	371	4
ACHA	TH18-24	72915714.9	TH18-24	2000	437	4
ACHA	TH18-24	72915714.9	TH18-24	2000	336	8
ACHA	TH18-24	72915714.9	TH18-24	2000	267	2
ACHA	TH18-24	72915714.9	TH18-24	2000	337	2
ACHA	TH2-24	72915714.9	TH2-24	2000	241	9
ACHA	TH2-24	72915714.9	TH2-24	2000	221	11
ACHA	TH2-24	72915714.9	TH2-24	2000	144	7
ACHA	TH2-24	72915714.9	TH2-24	2000	251	3
ACHA	TH2-24	72915714.9	TH2-24	2000	157	3
ACHA	TE2-24	2431580.34	TE2-24	1000	252	3
ACHA	TE2-24	2431580.34	TE2-24	1000	51	3
ACHA	TH7-24	72915714.9	TH7-24	2000	217	6
ACHA	TH7-24	72915714.9	TH7-24	2000	154	5
ACHA	TH6-24	72915714.9	TH6-24	2000	44.9	5
ACHA	TH6-24	72915714.9	TH6-24	2000	483	2
ACHA	TH6-24	72915714.9	TH6-24	2000	210	1
ACHA	TH10-24	72915714.9	TH10-24	2000	575	3
ACHA	TH10-24	72915714.9	TH10-24	2000	81	2
ACHA	TH10-24	72915714.9	TH10-24	2000	92	1
ACHA	TH10-24	72915714.9	TH10-24	2000	110	1
ACHA	TH10-24	72915714.9	TH10-24	2000	510	5
ACHA	TH10-24	72915714.9	TH10-24	2000	535	6
ACHA	TH10-24	72915714.9	TH10-24	2000	171	4
ACHA	TH10-24	72915714.9	TH10-24	2000	394	2
ACHA	TE1-24	2431580.34	TE1-24	1000	151	1
ACHA	TE1-24	2431580.34	TE1-24	1000	150	1

ACHA	TB2-24	8893474.85	TB2-24	1000	213	1
ACHA	TB2-24	8893474.85	TB2-24	1000	420	8
ACHA	TB1-24	8893474.85	TB1-24	1000	4	1
ACHA	TB1-24	8893474.85	TB1-24	1000	51	14
ACHA	TB1-24	8893474.85	TB1-24	1000	78	1
ACHA	TB1-24	8893474.85	TB1-24	1000	28	3
ACHA	TB1-24	8893474.85	TB1-24	1000	92	2
ACHA	TB1-24	8893474.85	TB1-24	1000	135	11
ACHA	TB1-24	8893474.85	TB1-24	1000	127	5
ACHA	TH17-24	72915714.9	TH17-24	2000	118	9
ACHA	TH17-24	72915714.9	TH17-24	2000	4	4
ACHA	TH17-24	72915714.9	TH17-24	2000	483	24
ACHA	TH1-24	72915714.9	TH1-24	2000		
ACHA	TH14-24	72915714.9	TH14-24	2000	36	25
ACHA	TH14-24	72915714.9	TH14-24	2000	392	7
ACHA	TH14-24	72915714.9	TH14-24	2000	119	46
ACHA	TH14-24	72915714.9	TH14-24	2000	80	7
ACHA	TB6-24	8893474.85	TB6-24	1000	45	1
ACHA	TB6-24	8893474.85	TB6-24	1000	347	2
ACHA	TH11-24	72915714.9	TH11-24	2000	452	49
ACHA	TH11-24	72915714.9	TH11-24	2000	357	2
ACHA	TH11-24	72915714.9	TH11-24	2000	320	1
ACHA	TH11-24	72915714.9	TH11-24	2000	197	1
ACHA	TH11-24	72915714.9	TH11-24	2000	20	2
ACHA	TH11-24	72915714.9	TH11-24	2000	200	14
ACHA	TH11-24	72915714.9	TH11-24	2000	377	1
ACHA	TH11-24	72915714.9	TH11-24	2000	233	5
ACHA	TH11-24	72915714.9	TH11-24	2000	60.7	1
ACHA	TH11-24	72915714.9	TH11-24	2000	196	1
ACHA	TB5-24	8893474.85	TB5-24	1000	87.5	1
ACHA	TB5-24	8893474.85	TB5-24	1000	210	1
ACHA	TB5-24	8893474.85	TB5-24	1000	257	1

ACHA	TB5-24	8893474.85	TB5-24	1000	438	1
ACHA	TB3-24	8893474.85	TB3-24	1000		
ACHA	TB4-24	8893474.85	TB4-24	1000	145	5
ACHA	TH3-24	72915714.9	TH3-24	2000	88.6	3
ACHA	TH3-24	72915714.9	TH3-24	2000	351	3
ACHA	TH3-24	72915714.9	TH3-24	2000	137	1
ACHA	TH3-24	72915714.9	TH3-24	2000	188	3
ACHA	TH3-24	72915714.9	TH3-24	2000	380	3
ACHA	TH15-24	72915714.9	TH15-24	2000	46.9	4
ACHA	TH15-24	72915714.9	TH15-24	2000	215	1
ACHA	TH8-24	72915714.9	TH8-24	2000	85.5	6
ACHA	TH8-24	72915714.9	TH8-24	2000	86.9	4
ACHA	TH8-24	72915714.9	TH8-24	2000	14.4	3
ACHA	TH8-24	72915714.9	TH8-24	2000	126	1
ACHA	TH8-24	72915714.9	TH8-24	2000	64.1	12
ACHA	TH8-24	72915714.9	TH8-24	2000	57	2
ACHA	TH16-24	72915714.9	TH16-24	2000	15.5	2
ACHA	TH12-24	72915714.9	TH12-24	2000	244	3
ACHA	TE3-24	2431580.34	TE3-24	1000	136	5
ACHA	TH5-24	72915714.9	TH5-24	2000	257	3
ACHA	TH5-24	72915714.9	TH5-24	2000	297	1
ACHA	TH5-24	72915714.9	TH5-24	2000	277	3
ACHA	TH14-24	72915714.9	TH14-24	2000	230	8
ACHA	TH14-24	72915714.9	TH14-24	2000	300	4
ACHA	TH14-24	72915714.9	TH14-24	2000	283	2
ACHA	TH14-24	72915714.9	TH14-24	2000	294	11
ACHA	TH14-24	72915714.9	TH14-24	2000	174	6
ACHA	TH14-24	72915714.9	TH14-24	2000	233	1
ACHA	TH14-24	72915714.9	TH14-24	2000	213	1
ACHA	TH14-24	72915714.9	TH14-24	2000	199	1
ACHA	TH14-24	72915714.9	TH14-24	2000	196	3
ACHA	TH14-24	72915714.9	TH14-24	2000	110	2

ACHA	TH14-24	72915714.9	TH14-24	2000	79.5	2
ACHA	TH14-24	72915714.9	TH14-24	2000	164	4
ACHA	TH13-24	72915714.9	TH13-24	2000	80.4	1

SD7. Database collected in 2024 used to estimate the density of white-tailed deer (*O. virginianus ustus*) in cover types (TH: grassland, TB: shrubland, TE: sandy areas) using the R-Distance package.

Study.Area	Region.Label	Area	Sample.Label	Effort	distance	size
ACHA	grassland	72915714.9	TH9-24	2000		
ACHA	grassland	72915714.9	TH18-24	2000	371	4
ACHA	grassland	72915714.9	TH18-24	2000	437	4
ACHA	grassland	72915714.9	TH18-24	2000	336	8
ACHA	grassland	72915714.9	TH18-24	2000	267	2
ACHA	grassland	72915714.9	TH18-24	2000	337	2
ACHA	grassland	72915714.9	TH2-24	2000	241	9
ACHA	grassland	72915714.9	TH2-24	2000	221	11
ACHA	grassland	72915714.9	TH2-24	2000	144	7
ACHA	grassland	72915714.9	TH2-24	2000	251	3
ACHA	grassland	72915714.9	TH2-24	2000	157	3
ACHA	sandy areas	2431580.34	TE2-24	1000	252	3
ACHA	sandy areas	2431580.34	TE2-24	1000	51	3
ACHA	grassland	72915714.9	TH7-24	2000	217	6
ACHA	grassland	72915714.9	TH7-24	2000	154	5
ACHA	grassland	72915714.9	TH6-24	2000	44.9	5
ACHA	grassland	72915714.9	TH6-24	2000	483	2
ACHA	grassland	72915714.9	TH6-24	2000	210	1
ACHA	grassland	72915714.9	TH10-24	2000	575	3
ACHA	grassland	72915714.9	TH10-24	2000	81	2
ACHA	grassland	72915714.9	TH10-24	2000	92	1
ACHA	grassland	72915714.9	TH10-24	2000	110	1
ACHA	grassland	72915714.9	TH10-24	2000	510	5

ACHA	grassland	72915714.9	TH10-24	2000	535	6
ACHA	grassland	72915714.9	TH10-24	2000	171	4
ACHA	grassland	72915714.9	TH10-24	2000	394	2
ACHA	sandy areas	2431580.34	TE1-24	1000	151	1
ACHA	sandy areas	2431580.34	TE1-24	1000	150	1
ACHA	shrubland	8893474.85	TB2-24	1000	213	1
ACHA	shrubland	8893474.85	TB2-24	1000	420	8
ACHA	shrubland	8893474.85	TB1-24	1000	4	1
ACHA	shrubland	8893474.85	TB1-24	1000	51	14
ACHA	shrubland	8893474.85	TB1-24	1000	78	1
ACHA	shrubland	8893474.85	TB1-24	1000	28	3
ACHA	shrubland	8893474.85	TB1-24	1000	92	2
ACHA	shrubland	8893474.85	TB1-24	1000	135	11
ACHA	shrubland	8893474.85	TB1-24	1000	127	5
ACHA	grassland	72915714.9	TH17-24	2000	118	9
ACHA	grassland	72915714.9	TH17-24	2000	4	4
ACHA	grassland	72915714.9	TH17-24	2000	483	24
ACHA	grassland	72915714.9	TH1-24	2000		
ACHA	grassland	72915714.9	TH14-24	2000	36	25
ACHA	grassland	72915714.9	TH14-24	2000	392	7
ACHA	grassland	72915714.9	TH14-24	2000	119	46
ACHA	grassland	72915714.9	TH14-24	2000	80	7
ACHA	shrubland	8893474.85	TB6-24	1000	45	1
ACHA	shrubland	8893474.85	TB6-24	1000	347	2
ACHA	grassland	72915714.9	TH11-24	2000	452	49
ACHA	grassland	72915714.9	TH11-24	2000	357	2
ACHA	grassland	72915714.9	TH11-24	2000	320	1
ACHA	grassland	72915714.9	TH11-24	2000	197	1
ACHA	grassland	72915714.9	TH11-24	2000	20	2
ACHA	grassland	72915714.9	TH11-24	2000	200	14
ACHA	grassland	72915714.9	TH11-24	2000	377	1
ACHA	grassland	72915714.9	TH11-24	2000	233	5

ACHA	grassland	72915714.9	TH11-24	2000	60.7	1
ACHA	grassland	72915714.9	TH11-24	2000	196	1
ACHA	shrubland	8893474.85	TB5-24	1000	87.5	1
ACHA	shrubland	8893474.85	TB5-24	1000	210	1
ACHA	shrubland	8893474.85	TB5-24	1000	257	1
ACHA	shrubland	8893474.85	TB5-24	1000	438	1
ACHA	shrubland	8893474.85	TB3-24	1000		
ACHA	shrubland	8893474.85	TB4-24	1000	145	5
ACHA	grassland	72915714.9	TH3-24	2000	88.6	3
ACHA	grassland	72915714.9	TH3-24	2000	351	3
ACHA	grassland	72915714.9	TH3-24	2000	137	1
ACHA	grassland	72915714.9	TH3-24	2000	188	3
ACHA	grassland	72915714.9	TH3-24	2000	380	3
ACHA	grassland	72915714.9	TH15-24	2000	46.9	4
ACHA	grassland	72915714.9	TH15-24	2000	215	1
ACHA	grassland	72915714.9	TH8-24	2000	85.5	6
ACHA	grassland	72915714.9	TH8-24	2000	86.9	4
ACHA	grassland	72915714.9	TH8-24	2000	14.4	3
ACHA	grassland	72915714.9	TH8-24	2000	126	1
ACHA	grassland	72915714.9	TH8-24	2000	64.1	12
ACHA	grassland	72915714.9	TH8-24	2000	57	2
ACHA	grassland	72915714.9	TH16-24	2000	15.5	2
ACHA	grassland	72915714.9	TH12-24	2000	244	3
ACHA	sandy areas	2431580.34	TE3-24	1000	136	5
ACHA	grassland	72915714.9	TH5-24	2000	257	3
ACHA	grassland	72915714.9	TH5-24	2000	297	1
ACHA	grassland	72915714.9	TH5-24	2000	277	3
ACHA	grassland	72915714.9	TH14-24	2000	230	8
ACHA	grassland	72915714.9	TH14-24	2000	300	4
ACHA	grassland	72915714.9	TH14-24	2000	283	2
ACHA	grassland	72915714.9	TH14-24	2000	294	11
ACHA	grassland	72915714.9	TH14-24	2000	174	6

ACHA	grassland	72915714.9	TH14-24	2000	233	1
ACHA	grassland	72915714.9	TH14-24	2000	213	1
ACHA	grassland	72915714.9	TH14-24	2000	199	1
ACHA	grassland	72915714.9	TH14-24	2000	196	3
ACHA	grassland	72915714.9	TH14-24	2000	110	2
ACHA	grassland	72915714.9	TH14-24	2000	79.5	2
ACHA	grassland	72915714.9	TH14-24	2000	164	4
ACHA	grassland	72915714.9	TH13-24	2000	80.4	1

SD8. R scripts used for density estimates and construction of white-tailed deer figures.

<https://github.com/Michuarn/POPULATION-DENSITY-OF-WHITE-TAILED-DEER-IN-A-PROTECTED-AREA-OF-THE-ECUADORIAN-ANDES>