

**Appendix 1: Sample photographs taken during the 2008 EK Elk Inventory**



**A group of elk observed in survey block 4-03-02. Observers counted 170 animals from the air while the photo verification revealed that the group consisted of 243 animals. This photo was not used to classify the animals as antlers and rostrum lengths are not visible.**



**A group of elk observed in survey block 4-21-14. Observers counted 43 animals from the air while the photo verification revealed that the group consisted of 44 animals. This photo was blown up to verify counts of calves and bulls.**

**Appendix 2: Model Output from Aerial Survey from the East Kootenay Trench Elk Inventory, 2008.**

Aerial Survey for Windows, Version 1.00 Beta 6.1.4 (12-Feb-2000)

Thursday, July 10, 2008 09:26 AM

Model: Elk, Hiller 12-E, Idaho (with snow)

[Files]

Title = C:\Users\BCCFuser42\Documents\Aerial\_Survey\_6\Aerial  
 Survey\Beta6.1.3\10 July.ttl  
 Summary = C:\Users\BCCFuser42\Documents\Aerial\_Survey\_6\Aerial  
 Survey\Beta6.1.3\10 July.sum

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10 July

Section 1: Summary of Raw Counts

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Stratum Unclas	Units		Number of Each Class Counted						
	Sampled	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull
1	17	501	302	102	75	88	27	58	17
9									
2	31	1888	1152	332	208	298	124	155	53
106									
3	27	3542	2292	409	243	622	166	196	47
219									
Total	75	5931	3746	843	526	1008	317	409	117
334									

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Section 2: Summary of Raw Counts for Perfect Visibility Model

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This table projects the number of animals that would have been counted if every unit had been flown and visibility had been perfect (no animals obscured by vegetation, etc.)

Strat Unclas	No of Units			Number of Each Class Counted						
	Popn	Sample	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull
1	60	17	1768	1066	360	265	311	95	205	60
32										
2	67	31	4081	2490	718	450	644	268	335	115
229										
3	40	27	5247	3396	606	360	921	246	290	70
324										

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Total 167 75 11096 6951 1683 1074 1876 609 830 244  
 585  
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Section 3: Estimates for Total Number

Total

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	2228	172944	4214	25	692
2	67	31	5639	288195	14382	124	905
3	40	27	6248	188086	9549	99	731
Total	167	75	14115	649225	28145	248	1354

Cows

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	1262	73711	1363	5	451
2	67	31	3374	143318	6326	59	636
3	40	27	3945	105267	3831	37	543
Total	167	75	8581	322296	11520	101	950

Bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	553	14540	1290	9	207
2	67	31	1087	28669	2208	14	289
3	40	27	881	8095	1638	18	162
Total	167	75	2521	51304	5136	41	391

Branched-antlered bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	452	13888	1274	9	203
2	67	31	708	17400	1528	8	226
3	40	27	581	6598	1315	12	146
Total	167	75	1741	37886	4117	29	337

Calves

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	378	9053	258	2	159
2	67	31	931	10569	1130	10	178
3	40	27	1087	7253	653	5	146
Total	167	75	2396	26875	2041	17	280

Spikes

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	102	695	11	0	44
2	67	31	379	2979	437	5	96
3	40	27	300	1185	188	4	61
Total	167	75	781	4859	636	9	122

Ragorns

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	359	11764	1132	8	187
2	67	31	538	10143	1002	7	174
3	40	27	480	5171	1143	10	131
Total	167	75	1377	27078	3277	25	287

Adult bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	93	975	94	1	54
2	67	31	170	2441	343	0	87
3	40	27	100	698	119	2	47
Total	167	75	363	4114	556	3	112

Unclassified

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	34	422	5	0	34
2	67	31	246	8839	135	1	156
3	40	27	336	4329	122	0	110
Total	167	75	616	13590	262	1	194

Section 4: Estimates for Proportions

Cows

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	0.56641	0.00081	0.00010	0.00000	0.04965
2	67	31	0.59844	0.00074	0.00004	0.00000	0.04622
3	40	27	0.63136	0.00022	0.00002	0.00000	0.02540
Total	167	75	0.60795	0.00018	0.00001	0.00000	0.02299

Bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	0.24838	0.00260	0.00016	0.00000	0.08650
2	67	31	0.19272	0.00083	0.00005	0.00000	0.04888
3	40	27	0.14093	0.00021	0.00003	0.00000	0.02544
Total	167	75	0.17857	0.00024	0.00002	0.00000	0.02635

Branched-antlered bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	0.20279	0.00278	0.00017	0.00000	0.08948
2	67	31	0.12554	0.00057	0.00004	0.00000	0.04083
3	40	27	0.09294	0.00020	0.00003	0.00000	0.02512
Total	167	75	0.12330	0.00020	0.00002	0.00000	0.02427

Calves

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	0.16977	0.00066	0.00003	0.00000	0.04305
2	67	31	0.16516	0.00012	0.00002	0.00000	0.01900
3	40	27	0.17394	0.00004	0.00001	0.00000	0.01127
Total	167	75	0.16978	0.00004	0.00000	0.00000	0.01134

Spikes

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	

Stratum	Popn.	Sample	Estimate	Sampling	Variance Sightability	Model	Bound 90%
1	60	17	0.04559	0.00008	0.00000	0.00000	0.01525
2	67	31	0.06718	0.00005	0.00001	0.00000	0.01334
3	40	27	0.04799	0.00001	0.00000	0.00000	0.00660
Total	167	75	0.05528	0.00001	0.00000	0.00000	0.00653

Rag horns

Stratum	Popn.	Sample	Estimate	Sampling	Variance Sightability	Model	Bound 90%
1	60	17	0.16102	0.00201	0.00017	0.00000	0.07670
2	67	31	0.09535	0.00033	0.00003	0.00000	0.03094
3	40	27	0.07688	0.00016	0.00002	0.00000	0.02264
Total	167	75	0.09754	0.00013	0.00001	0.00000	0.02000

Adult bulls

Stratum	Popn.	Sample	Estimate	Sampling	Variance Sightability	Model	Bound 90%
1	60	17	0.04177	0.00029	0.00002	0.00000	0.02876
2	67	31	0.03019	0.00008	0.00001	0.00000	0.01574
3	40	27	0.01606	0.00002	0.00000	0.00000	0.00744
Total	167	75	0.02576	0.00002	0.00000	0.00000	0.00842

Unclassified

Stratum	Popn.	Sample	Estimate	Sampling	Variance Sightability	Model	Bound 90%
1	60	17	0.01544	0.00006	0.00000	0.00000	0.01244
2	67	31	0.04368	0.00023	0.00000	0.00000	0.02521
3	40	27	0.05377	0.00011	0.00000	0.00000	0.01740
Total	167	75	0.04369	0.00006	0.00000	0.00000	0.01283

Section 5: Estimates for Ratios

Bulls per 100 Cows

Stratum	Popn.	Sample	Estimate	Sampling	Variance Sightability	Model	Bound 90%
1	60	17	43.9	174.3	2.8	0.1	21.9
2	67	31	32.2	38.1	1.2	0.0	10.3
3	40	27	22.3	6.6	0.8	0.0	4.5
Total	167	75	29.4	11.1	0.4	0.0	5.6

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 Calves per 100 Cows

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	30.0	89.5	0.7	0.0	15.6
2	67	31	27.6	12.6	0.7	0.0	6.0
3	40	27	27.6	0.0	0.4	0.0	1.1
Total	167	75	27.9	3.9	0.2	0.0	3.3

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 Spikes per 100 Cows

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	8.0	6.8	0.0	0.0	4.3
2	67	31	11.2	3.6	0.2	0.0	3.2
3	40	27	7.6	0.0	0.1	0.0	0.5
Total	167	75	9.1	0.7	0.0	0.0	1.4

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 Spikes per 100 Bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	18.4	37.9	0.5	0.0	10.2
2	67	31	34.9	38.5	1.2	0.1	10.4
3	40	27	34.1	11.5	1.8	0.1	6.0
Total	167	75	30.9	10.4	0.5	0.0	5.4

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 Raghorns per 100 Bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	64.8	527.8	1.6	0.4	37.9
2	67	31	49.5	93.5	1.3	0.1	16.0
3	40	27	54.6	0.0	2.5	0.2	2.7
Total	167	75	54.6	42.8	0.6	0.1	10.8

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 Adult bulls per 100 Bulls

Stratum	Number of Units		Estimate	Variance			Bound 90%
	Popn.	Sample		Sampling	Sightability	Model	
1	60	17	16.8	43.7	0.1	0.0	10.9
2	67	31	15.7	21.0	0.0	0.0	7.5

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3	40	27	11.4	6.1	0.3	0.0	4.2
Total	167	75	14.4	6.8	0.0	0.0	4.3

Branched-antlered bulls per 100 Bulls

Stratum	Number of Units Popn. Sample	Estimate	Variance Sampling Sightability	Model	Bound 90%
1	60 17	81.6	692.2 0.5	0.5	43.3
2	67 31	65.1	158.7 1.2	0.1	20.8
3	40 27	65.9	0.0 1.8	0.3	2.3
Total	167 75	69.0	62.8 0.5	0.1	13.1

Spikes per 100 Branched-antlered bulls

Stratum	Number of Units Popn. Sample	Estimate	Variance Sampling Sightability	Model	Bound 90%
1	60 17	22.5	68.5 1.0	0.0	13.7
2	67 31	53.5	124.8 6.9	0.1	18.9
3	40 27	51.6	80.8 9.4	0.2	15.6
Total	167 75	44.8	34.2 2.3	0.0	9.9

Section 6: Summary Statistics

Percent correction from perfect visibility model

Stratum	Units Sampled	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull
1	17	26.0	18.4	53.7	70.7	21.8	6.6	75.2	55.1
2	31	38.2	35.5	51.4	57.5	44.6	41.3	60.5	48.6
3	27	19.1	16.2	45.3	61.3	17.9	21.9	65.4	44.1
Total	75	27.2	23.4	49.7	62.1	27.7	28.2	65.9	48.7

[Total variances (i.e., standard error squared) are in parenthesis]

Total estimates...  
 14115 ( 677618) Total  
 8581 ( 333917) Cows  
 2521 ( 56481) Bulls  
 1741 ( 42032) Branched-antlered bulls  
 2396 ( 28933) Calves



781 ( 5504) Spikes  
 1377 ( 30380) Raghorns  
 363 ( 4673) Adult bulls  
 616 ( 13853) Unclassified

Proportions...

0.6080 (0.000195) Cows  
 0.1786 (0.000257) Bulls  
 0.1233 (0.000218) Branched-antlered bulls  
 0.1698 (0.000048) Calves  
 0.0553 (0.000016) Spikes  
 0.0975 (0.000148) Raghorns  
 0.0258 (0.000026) Adult bulls  
 0.0437 (0.000061) Unclassified

Ratios...

29 ( 11) Bulls per 100 Cows  
 28 ( 4) Calves per 100 Cows  
 9 ( 1) Spikes per 100 Cows  
 31 ( 11) Spikes per 100 Bulls  
 55 ( 43) Raghorns per 100 Bulls  
 14 ( 7) Adult bulls per 100 Bulls  
 69 ( 63) Branched-antlered bulls per 100 Bulls  
 45 ( 37) Spikes per 100 Branched-antlered bulls

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**Appendix 3: Output data for Individual Blocks from Aerial Survey from the East Kootenay Trench Elk Inventory, 2008.**

Aerial Survey for Windows, Version 1.00 Beta 6.1.4 (12-Feb-2000)

Thursday, July 10, 2008 09:26 AM

Model: Elk, Hiller 12-E, Idaho (with snow)

[Files]

Title = C:\Users\BCCFuser42\Documents\Aerial\_Survey\_6\Aerial Survey\Beta6.1.3\10 July.ttl  
 Summary = C:\Users\BCCFuser42\Documents\Aerial\_Survey\_6\Aerial Survey\Beta6.1.3\10 July.sum  
 Data = C:\Users\BCCFuser42\Documents\Aerial\_Survey\_6\Aerial Survey\Beta6.1.3\C:\Users\BCCFuser42\Documents\Elk Monitoring Project\July 10.dat  
 Debug = C:\Users\BCCFuser42\Documents\Aerial\_Survey\_6\Aerial Survey\Beta6.1.3\10 July.bug

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 SUBUNIT 21.19, STRATUM 1

Characteristic	Total	Cows	Bulls	BA Bull	Calves	Spikes	Raghrn	Ad Bull	Unclas
Group 1	37	25	5	0	7	5	0	0	0
Group 2	11	6	3	0	2	3	0	0	0
Group 3	9	7	0	0	2	0	0	0	0
Total Counted	57	38	8	0	11	8	0	0	0

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 Cor. Estimates 58.03 38.70 8.12 0.00 11.21 8.12 0.00 0.00 0.00  
 Cor. Proportions 1.00 0.67 0.14 0.00 0.19 0.14 0.00 0.00 0.00  
 Non-Res Variance 10.91 4.97 0.39 0.00 0.45 0.39 0.00 0.00 0.00

21.00 Bulls per 100 Cows  
 28.97 Calves per 100 Cows  
 21.00 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

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SUBUNIT 21.22, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	0	2	1	0	1	1	0	0
Group 2	1	0	1	1	0	0	1	0	0
Group 3	1	1	0	0	0	0	0	0	0
Group 4	2	0	2	2	0	0	1	1	0
Group 5	76	53	3	2	11	1	1	1	9
Total Counted	82	54	8	6	11	2	4	2	9

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 Cor. Estimates 85.07 54.67 10.40 7.85 11.00 2.55 5.70 2.15 9.00  
 Cor. Proportions 1.00 0.64 0.12 0.09 0.13 0.03 0.07 0.03 0.11  
 Non-Res Variance 7.22 1.12 6.10 3.53 0.00 0.85 3.03 0.17 0.00  
 19.02 Bulls per 100 Cows  
 20.12 Calves per 100 Cows  
 4.67 Spikes per 100 Cows  
 24.54 Spikes per 100 Bulls  
 54.82 Raghorns per 100 Bulls  
 20.65 Adult bulls per 100 Bulls  
 75.46 Branched-antlered bulls per 100 Bulls  
 32.51 Spikes per 100 Branched-antlered bulls

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SUBUNIT 21.23, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	35	31	0	0	4	0	0	0	0
Group 2	26	16	1	0	9	1	0	0	0
Group 3	5	4	0	0	1	0	0	0	0
Total Counted	66	51	1	0	14	1	0	0	0

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 Cor. Estimates 66.60 51.48 1.00 0.00 14.12 1.00 0.00 0.00 0.00  
 Cor. Proportions 1.00 0.77 0.02 0.00 0.21 0.02 0.00 0.00 0.00  
 Non-Res Variance 4.09 2.45 0.00 0.00 0.22 0.00 0.00 0.00 0.00  
 1.94 Bulls per 100 Cows  
 27.44 Calves per 100 Cows  
 1.94 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

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SUBUNIT 21.18, STRATUM 1

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	3	3	0	0	0	0	0	0	0	0
Group 2	11	7	2	0	2	2	0	0	0	0
<b>Total Counted</b>	<b>14</b>	<b>10</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

Cor. Estimates 16.47 12.31 2.08 0.00 2.08 2.08 0.00 0.00 0.00  
 Cor. Proportions 1.00 0.75 0.13 0.00 0.13 0.13 0.00 0.00 0.00  
 Non-Res Variance 15.28 12.22 0.17 0.00 0.17 0.17 0.00 0.00 0.00  
 16.92 Bulls per 100 Cows  
 16.92 Calves per 100 Cows  
 16.92 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

SUBUNIT 21.17, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	7	4	0	0	3	0	0	0	0	0
Group 2	23	16	2	0	4	2	0	0	1	0
Group 3	64	39	5	3	8	2	3	0	12	0
Group 4	6	1	5	5	0	0	5	0	0	0
Group 5	18	14	0	0	4	0	0	0	0	0
Group 6	9	7	0	0	2	0	0	0	0	0
Group 7	6	6	0	0	0	0	0	0	0	0
Group 8	2	2	0	0	0	0	0	0	0	0
Group 9	4	3	1	0	0	1	0	0	0	0
Group 10	3	2	0	0	1	0	0	0	0	0
Group 11	1	1	0	0	0	0	0	0	0	0
Group 12	37	29	1	0	3	1	0	0	4	0
Group 13	7	3	1	0	3	1	0	0	0	0
Group 14	7	5	0	0	2	0	0	0	0	0
Group 15	5	4	0	0	1	0	0	0	0	0
Group 16	7	6	0	0	1	0	0	0	0	0
Group 17	5	4	0	0	1	0	0	0	0	0
<b>Total Counted</b>	<b>211</b>	<b>146</b>	<b>15</b>	<b>8</b>	<b>33</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>17</b>	<b>0</b>

Cor. Estimates 229.12 159.38 16.35 8.29 36.39 8.06 8.29 0.00 17.00  
 Cor. Proportions 1.00 0.70 0.07 0.04 0.16 0.04 0.04 0.00 0.07  
 Non-Res Variance 133.81 71.89 3.48 1.52 8.67 1.96 1.52 0.00 0.00  
 10.26 Bulls per 100 Cows  
 22.83 Calves per 100 Cows  
 5.06 Spikes per 100 Cows  
 49.31 Spikes per 100 Bulls  
 50.69 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 50.69 Branched-antlered bulls per 100 Bulls  
 97.28 Spikes per 100 Branched-antlered bulls

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 SUBUNIT 21.15, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	6	4	0	0	2	0	0	0	0
Group 2	17	11	4	0	2	4	0	0	0
Group 3	11	9	0	0	2	0	0	0	0
Total Counted	34	24	4	0	6	4	0	0	0

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 Cor. Estimates 34.76 24.53 4.02 0.00 6.20 4.02 0.00 0.00 0.00  
 Cor. Proportions 1.00 0.71 0.12 0.00 0.18 0.12 0.00 0.00 0.00  
 Non-Res Variance 6.99 3.62 0.10 0.00 0.42 0.10 0.00 0.00 0.00  
 16.40 Bulls per 100 Cows  
 25.26 Calves per 100 Cows  
 16.40 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls  
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SUBUNIT 21.14, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	18	10	0	0	8	0	0	0	0
Group 2	7	6	0	0	1	0	0	0	0
Group 3	6	5	1	0	0	1	0	0	0
Group 4	26	22	0	0	4	0	0	0	0
Group 5	3	2	0	0	1	0	0	0	0
Group 6	3	2	1	0	0	1	0	0	0
Group 7	3	2	0	0	1	0	0	0	0
Group 8	2	0	2	2	0	0	2	0	0
Group 9	1	1	0	0	0	0	0	0	0
Group 10	14	11	0	0	3	0	0	0	0
Group 11	12	10	0	0	2	0	0	0	0
Group 12	4	4	0	0	0	0	0	0	0
Group 13	8	7	1	0	0	1	0	0	0
Group 14	1	0	1	1	0	0	1	0	0
Group 15	51	38	2	0	7	2	0	0	4
Group 16	11	9	2	0	0	2	0	0	0
Group 17	18	10	3	0	3	3	0	0	2
Group 18	33	22	3	3	4	0	3	0	4
Group 19	10	6	4	1	0	3	1	0	0
Group 20	2	2	0	0	0	0	0	0	0
Group 21	3	0	3	3	0	0	3	0	0
Group 22	1	0	1	0	0	1	0	0	0
Group 23	3	2	1	1	0	0	1	0	0
Group 24	1	0	1	1	0	0	1	0	0
Group 25	6	5	0	0	1	0	0	0	0
Group 26	44	40	2	2	2	0	2	0	0
Group 27	1	0	1	1	0	0	1	0	0

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Total Counted	292	216	29	15	37	14	15	0	10
Cor. Estimates	326.66	236.72	40.70	20.46	39.22	20.24	20.46	0.00	10.02
Cor. Proportions	1.00	0.72	0.12	0.06	0.12	0.06	0.06	0.00	0.03
Non-Res Variance	575.79	227.74	86.07	14.52	5.12	43.64	14.52	0.00	0.04
17.19 Bulls per 100 Cows									
16.57 Calves per 100 Cows									
8.55 Spikes per 100 Cows									
49.74 Spikes per 100 Bulls									
50.26 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
50.26 Branched-antlered bulls per 100 Bulls									
98.96 Spikes per 100 Branched-antlered bulls									

SUBUNIT 21.04, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	1	0	0	0	0	0	0	0
Group 2	3	0	3	3	0	0	3	0	0
Group 3	7	3	3	1	0	2	1	0	0
Group 4	2	0	2	2	0	0	2	0	0
Group 5	3	2	1	1	0	0	1	0	0
Group 6	1	0	1	1	0	0	0	1	0
Total Counted	17	6	10	10	1	0	8	2	0
Cor. Estimates	19.58	6.89	11.59	11.59	1.10	0.00	9.33	2.26	0.00
Cor. Proportions	1.00	0.35	0.59	0.59	0.06	0.00	0.48	0.12	0.00
Non-Res Variance	10.99	2.21	4.41	4.41	0.11	0.00	3.70	0.29	0.00
168.22 Bulls per 100 Cows									
15.92 Calves per 100 Cows									
0.00 Spikes per 100 Cows									
0.00 Spikes per 100 Bulls									
80.54 Raghorns per 100 Bulls									
19.46 Adult bulls per 100 Bulls									
100.00 Branched-antlered bulls per 100 Bulls									
0.00 Spikes per 100 Branched-antlered bulls									

SUBUNIT 21.02, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	4	3	0	0	1	0	0	0	0
Group 2	4	4	0	0	0	0	0	0	0
Group 3	1	0	1	1	0	0	0	1	0
Group 4	2	0	2	2	0	0	2	0	0
Group 5	3	0	3	3	0	0	3	0	0
Group 6	4	2	1	1	1	0	1	0	0
Total Counted	18	9	7	7	2	0	6	1	0
Cor. Estimates	34.80	17.03	12.57	12.57	5.19	0.00	10.90	1.67	0.00
Cor. Proportions	1.00	0.49	0.36	0.36	0.15	0.00	0.31	0.05	0.00

Non-Res Variance 213.04 58.28 20.45 20.45 12.29 0.00 19.33 1.12 0.00  
 73.81 Bulls per 100 Cows  
 30.47 Calves per 100 Cows  
 0.00 Spikes per 100 Cows  
 0.00 Spikes per 100 Bulls  
 86.70 Raghorns per 100 Bulls  
 13.30 Adult bulls per 100 Bulls  
 100.00 Branched-antlered bulls per 100 Bulls  
 0.00 Spikes per 100 Branched-antlered bulls

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SUBUNIT 21.01, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	14	14	0	0	0	0	0	0	0	0
Group 2	1	0	1	1	0	0	1	0	0	0
Group 3	3	0	3	3	0	0	3	0	0	0
Group 4	2	2	0	0	0	0	0	0	0	0
Group 5	1	0	1	1	0	0	1	0	0	0
Group 6	3	2	0	0	1	0	0	0	0	0
Group 7	12	9	1	0	2	1	0	0	0	0
Group 8	1	0	1	1	0	0	1	0	0	0
Total Counted	37	27	7	6	3	1	6	0	0	0

Cor. Estimates 42.99 28.83 10.91 9.89 3.25 1.02 9.89 0.00 0.00  
 Cor. Proportions 1.00 0.67 0.25 0.23 0.08 0.02 0.23 0.00 0.00  
 Non-Res Variance 23.55 7.86 13.34 13.32 0.33 0.02 13.32 0.00 0.00  
 37.84 Bulls per 100 Cows  
 11.28 Calves per 100 Cows  
 3.52 Spikes per 100 Cows  
 9.31 Spikes per 100 Bulls  
 90.69 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 90.69 Branched-antlered bulls per 100 Bulls  
 10.27 Spikes per 100 Branched-antlered bulls

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SUBUNIT 21.06, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	9	5	1	0	3	1	0	0	0	0
Group 2	1	1	0	0	0	0	0	0	0	0
Group 3	1	1	0	0	0	0	0	0	0	0
Group 4	11	8	0	0	2	0	0	0	1	0
Group 5	7	5	0	0	2	0	0	0	0	0
Group 6	3	2	0	0	1	0	0	0	0	0
Group 7	2	1	0	0	1	0	0	0	0	0
Group 8	1	1	0	0	0	0	0	0	0	0
Group 9	1	1	0	0	0	0	0	0	0	0
Group 10	3	2	0	0	1	0	0	0	0	0
Group 11	5	5	0	0	0	0	0	0	0	0
Total Counted	44	32	1	0	10	1	0	0	1	0

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Cor. Estimates  55.99 41.39 1.06 0.00 12.50 1.06 0.00 0.00 1.04
Cor. Proportions 1.00 0.74 0.02 0.00 0.22 0.02 0.00 0.00 0.02
Non-Res Variance 100.92 56.26 0.07 0.00 7.42 0.07 0.00 0.00 0.04
  2.57 Bulls per 100 Cows
  30.20 Calves per 100 Cows
  2.57 Spikes per 100 Cows
 100.00 Spikes per 100 Bulls
  0.00 Raghorns per 100 Bulls
  0.00 Adult bulls per 100 Bulls
  0.00 Branched-antlered bulls per 100 Bulls
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SUBUNIT 20.02, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	9	6	0	0	3	0	0	0	0	0
Group 2	2	0	2	2	0	0	2	0	0	0
Group 3	12	10	1	1	1	0	1	0	0	0
Group 4	1	1	0	0	0	0	0	0	0	0
Group 5	12	10	2	0	0	2	0	0	0	0
Group 6	4	4	0	0	0	0	0	0	0	0
Group 7	3	2	0	0	1	0	0	0	0	0
Group 8	2	2	0	0	0	0	0	0	0	0
Group 9	1	0	1	1	0	0	1	0	0	0
Total Counted	46	35	6	4	5	2	4	0	0	0

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Cor. Estimates  62.24 45.95 7.78 5.50 8.52 2.28 5.50 0.00 0.00
Cor. Proportions 1.00 0.74 0.12 0.09 0.14 0.04 0.09 0.00 0.00
Non-Res Variance 156.32 79.06 4.56 3.93 12.71 0.63 3.93 0.00 0.00
 16.92 Bulls per 100 Cows
 18.54 Calves per 100 Cows
  4.96 Spikes per 100 Cows
 29.30 Spikes per 100 Bulls
 70.70 Raghorns per 100 Bulls
  0.00 Adult bulls per 100 Bulls
 70.70 Branched-antlered bulls per 100 Bulls
 41.44 Spikes per 100 Branched-antlered bulls
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SUBUNIT 20.4B, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	6	4	1	0	1	1	0	0	0	0
Group 2	42	0	0	0	0	0	0	0	42	0
Group 3	9	6	0	0	3	0	0	0	0	0
Group 4	5	4	0	0	1	0	0	0	0	0
Group 5	13	3	0	0	3	0	0	0	7	0
Group 6	7	6	0	0	1	0	0	0	0	0
Group 7	21	16	0	0	5	0	0	0	0	0
Group 8	4	3	0	0	1	0	0	0	0	0
Group 9	4	3	0	0	1	0	0	0	0	0
Group 10	12	7	1	0	4	1	0	0	0	0

Group 11	13	0	0	0	0	0	0	0	13
Group 12	9	5	0	0	4	0	0	0	0
Group 13	7	4	2	0	1	2	0	0	0
Group 14	8	4	2	1	2	1	1	0	0
Group 15	5	2	1	0	2	1	0	0	0
Group 16	6	3	0	0	3	0	0	0	0
Group 17	2	0	2	2	0	0	2	0	0
Group 18	6	4	0	0	2	0	0	0	0
Group 19	2	2	0	0	0	0	0	0	0
Group 20	15	13	0	0	2	0	0	0	0
Group 21	10	8	1	1	1	0	1	0	0
Group 22	1	1	0	0	0	0	0	0	0
Group 23	1	1	0	0	0	0	0	0	0

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 Total Counted 208 99 10 4 37 6 4 0 62  
 =====

Cor. Estimates 229.64 113.50 12.04 5.21 41.65 6.83 5.21 0.00 62.44  
 Cor. Proportions 1.00 0.49 0.05 0.02 0.18 0.03 0.02 0.00 0.27  
 Non-Res Variance 219.99 113.97 5.15 3.53 14.48 1.45 3.53 0.00 5.36  
 10.61 Bulls per 100 Cows  
 36.70 Calves per 100 Cows  
 6.02 Spikes per 100 Cows  
 56.77 Spikes per 100 Bulls  
 43.23 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 43.23 Branched-antlered bulls per 100 Bulls  
 131.30 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 21.10, STRATUM 2

Characteristic	Total	Cows	Bulls	BA Bull	Calves	Spikes	Raghrn	Ad Bull	Unclas
Group 1	4	4	0	0	0	0	0	0	0
Group 2	9	8	0	0	1	0	0	0	0
Group 3	3	2	0	0	1	0	0	0	0
Group 4	5	3	0	0	2	0	0	0	0
Group 5	2	1	0	0	1	0	0	0	0
Group 6	2	1	0	0	1	0	0	0	0
Group 7	3	3	0	0	0	0	0	0	0
Group 8	22	20	0	0	1	0	0	0	1
Group 9	1	1	0	0	0	0	0	0	0
Group 10	8	6	1	0	1	1	0	0	0
Group 11	3	1	0	0	0	0	0	0	2
Group 12	3	3	0	0	0	0	0	0	0

-----  
 Total Counted 65 53 1 0 8 1 0 0 3  
 =====

Cor. Estimates 79.55 63.90 1.16 0.00 10.57 1.16 0.00 0.00 3.91  
 Cor. Proportions 1.00 0.80 0.01 0.00 0.13 0.01 0.00 0.00 0.05  
 Non-Res Variance 118.90 80.75 0.19 0.00 4.43 0.19 0.00 0.00 2.62  
 1.82 Bulls per 100 Cows  
 16.55 Calves per 100 Cows  
 1.82 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls



0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

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 SUBUNIT 21.11, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	5	1	0	0	1	0	0	0	3	
Group 2	10	0	0	0	0	0	0	0	10	
Group 3	2	1	0	0	1	0	0	0	0	
Total Counted	17	2	0	0	2	0	0	0	13	

-----  
 Cor. Estimates 24.44 3.73 0.00 0.00 3.73 0.00 0.00 0.00 16.98  
 Cor. Proportions 1.00 0.15 0.00 0.00 0.15 0.00 0.00 0.00 0.69  
 Non-Res Variance 60.12 3.35 0.00 0.00 3.35 0.00 0.00 0.00 34.89  
 0.00 Bulls per 100 Cows  
 100.00 Calves per 100 Cows  
 0.00 Spikes per 100 Cows

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 SUBUNIT 20.07, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	21	16	1	0	4	1	0	0	0	
Group 2	129	104	6	4	19	2	4	0	0	
Group 3	18	12	0	0	6	0	0	0	0	
Group 4	22	13	0	0	9	0	0	0	0	
Group 5	6	6	0	0	0	0	0	0	0	
Group 6	13	10	1	0	2	1	0	0	0	
Group 7	2	2	0	0	0	0	0	0	0	
Group 8	2	2	0	0	0	0	0	0	0	
Group 9	16	12	0	0	4	0	0	0	0	
Total Counted	229	177	8	4	44	4	4	0	0	

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 Cor. Estimates 232.69 180.46 8.02 4.00 44.21 4.02 4.00 0.00 0.00  
 Cor. Proportions 1.00 0.78 0.03 0.02 0.19 0.02 0.02 0.00 0.00  
 Non-Res Variance 29.53 22.74 0.02 0.00 1.01 0.02 0.00 0.00 0.00  
 4.44 Bulls per 100 Cows  
 24.50 Calves per 100 Cows  
 2.23 Spikes per 100 Cows  
 50.11 Spikes per 100 Bulls  
 49.89 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 49.89 Branched-antlered bulls per 100 Bulls  
 100.43 Spikes per 100 Branched-antlered bulls

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 SUBUNIT 20.08, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	17	13	0	0	4	0	0	0	0	

Group 2	1	1	0	0	0	0	0	0	0
Group 3	14	10	1	1	3	0	1	0	0
Group 4	21	13	3	2	5	1	2	0	0
Group 5	53	3	1	1	3	0	0	1	46

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 Total Counted 106 40 5 4 15 1 3 1 46  
 =====

Cor. Estimates 110.38 43.90 5.12 4.11 15.36 1.01 3.11 1.00 46.00  
 Cor. Proportions 1.00 0.40 0.05 0.04 0.14 0.01 0.03 0.01 0.42  
 Non-Res Variance 36.63 23.45 0.18 0.13 1.28 0.01 0.13 0.00 0.02  
 11.65 Bulls per 100 Cows  
 34.98 Calves per 100 Cows  
 2.30 Spikes per 100 Cows  
 19.72 Spikes per 100 Bulls  
 60.74 Raghorns per 100 Bulls  
 19.54 Adult bulls per 100 Bulls  
 80.28 Branched-antlered bulls per 100 Bulls  
 24.56 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 20.10, STRATUM 1

Characteristic Total Cows Bulls BABull Calves Spikes Raghrm AdBull Unclas

Group 1	64	43	1	0	14	1	0	0	6
Group 2	20	14	1	0	5	1	0	0	0
Group 3	14	9	0	0	5	0	0	0	0
Group 4	8	6	2	1	0	1	1	0	0

-----  
 Total Counted 106 72 4 1 24 3 1 0 6  
 =====

Cor. Estimates 106.88 72.64 4.16 1.08 24.08 3.08 1.08 0.00 6.00  
 Cor. Proportions 1.00 0.68 0.04 0.01 0.23 0.03 0.01 0.00 0.06  
 Non-Res Variance 9.67 4.97 0.34 0.08 0.40 0.09 0.08 0.00 0.00  
 5.73 Bulls per 100 Cows  
 33.15 Calves per 100 Cows  
 4.25 Spikes per 100 Cows  
 74.09 Spikes per 100 Bulls  
 25.91 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 25.91 Branched-antlered bulls per 100 Bulls  
 285.95 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 20.5E, STRATUM 1

Characteristic Total Cows Bulls BABull Calves Spikes Raghrm AdBull Unclas

Group 1	13	8	0	0	5	0	0	0	0
Group 2	12	6	2	1	4	1	0	1	0
Group 3	2	1	0	0	1	0	0	0	0
Group 4	2	1	0	0	1	0	0	0	0
Group 5	11	8	2	0	1	2	0	0	0
Group 6	4	4	0	0	0	0	0	0	0

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 Total Counted 44 28 4 1 12 3 0 1 0  
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Cor. Estimates  58.85 38.82 4.31 1.07 15.72 3.24 0.00 1.07 0.00
Cor. Proportions 1.00 0.66 0.07 0.02 0.27 0.06 0.00 0.02 0.00
Non-Res Variance 135.95 85.19 0.66 0.07 12.55 0.44 0.00 0.07 0.00
11.09 Bulls per 100 Cows
40.50 Calves per 100 Cows
8.34 Spikes per 100 Cows
75.19 Spikes per 100 Bulls
0.00 Raghorns per 100 Bulls
24.81 Adult bulls per 100 Bulls
24.81 Branched-antlered bulls per 100 Bulls
303.10 Spikes per 100 Branched-antlered bulls
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SUBUNIT 20.5W, STRATUM 1

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Characteristic  Total  Cows  Bulls  BABull  Calves  Spikes  Raghrn  AdBull  Unclas
-----
Group 1         8    3    4    3    1    1    2    1    0
-----
Total Counted   8    3    4    3    1    1    2    1    0
=====
Cor. Estimates   9.29 3.48 4.64 3.48 1.16 1.16 2.32 1.16 0.00
Cor. Proportions 1.00 0.37 0.50 0.37 0.13 0.13 0.25 0.13 0.00
Non-Res Variance 11.97 1.68 2.99 1.68 0.19 0.19 0.75 0.19 0.00
133.33 Bulls per 100 Cows
33.33 Calves per 100 Cows
33.33 Spikes per 100 Cows
25.00 Spikes per 100 Bulls
50.00 Raghorns per 100 Bulls
25.00 Adult bulls per 100 Bulls
75.00 Branched-antlered bulls per 100 Bulls
33.33 Spikes per 100 Branched-antlered bulls
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SUBUNIT 20.21, STRATUM 2

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Characteristic  Total  Cows  Bulls  BABull  Calves  Spikes  Raghrn  AdBull  Unclas
-----
Group 1         1    0    1    1    0    0    1    0    0
Group 2         5    0    5    4    0    1    4    0    0
-----
Total Counted   6    0    6    5    0    1    5    0    0
=====
Cor. Estimates   7.06 0.00 7.06 5.91 0.00 1.15 5.91 0.00 0.00
Cor. Proportions 1.00 0.00 1.00 0.84 0.00 0.16 0.84 0.00 0.00
Non-Res Variance 4.64 0.00 4.64 3.12 0.00 0.17 3.12 0.00 0.00
16.24 Spikes per 100 Bulls
83.76 Raghorns per 100 Bulls
0.00 Adult bulls per 100 Bulls
83.76 Branched-antlered bulls per 100 Bulls
19.39 Spikes per 100 Branched-antlered bulls
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SUBUNIT 20.22, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	13	5	4	0	4	4	0	0	0	0
Group 2	4	0	4	2	0	2	2	0	0	0
Group 3	5	0	5	5	0	0	5	0	0	0
Group 4	5	4	0	0	1	0	0	0	0	0
Group 5	2	0	2	2	0	0	2	0	0	0
Group 6	3	0	3	3	0	0	3	0	0	0
Group 7	7	2	4	4	1	0	4	0	0	0
Group 8	4	0	4	3	0	1	3	0	0	0
Group 9	4	0	4	4	0	0	4	0	0	0
Group 10	1	0	1	1	0	0	0	1	0	0
Group 11	3	0	3	3	0	0	3	0	0	0
Group 12	1	0	1	1	0	0	1	0	0	0
Group 13	10	0	10	6	0	4	6	0	0	0
Group 14	1	0	1	1	0	0	1	0	0	0
Group 15	3	2	0	0	1	0	0	0	0	0
Group 16	11	2	8	2	1	6	2	0	0	0
Group 17	2	0	2	0	0	2	0	0	0	0
Group 18	10	8	0	0	2	0	0	0	0	0

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Total Counted	89	23	56	37	10	19	36	1	0
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Cor. Estimates 118.85 29.81 76.93 53.83 12.11 23.10 52.50 1.33 0.00  
 Cor. Proportions 1.00 0.25 0.65 0.45 0.10 0.19 0.44 0.01 0.00  
 Non-Res Variance 238.18 51.70 145.06 88.49 4.31 18.96 88.05 0.44 0.00  
 258.12 Bulls per 100 Cows  
 40.63 Calves per 100 Cows  
 77.52 Spikes per 100 Cows  
 30.03 Spikes per 100 Bulls  
 68.24 Raghorns per 100 Bulls  
 1.73 Adult bulls per 100 Bulls  
 69.97 Branched-antlered bulls per 100 Bulls  
 42.92 Spikes per 100 Branched-antlered bulls

SUBUNIT 20.18, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	19	14	1	0	4	1	0	0	0	0
Group 2	6	5	0	0	1	0	0	0	0	0
Group 3	5	0	5	5	0	0	0	5	0	0
Group 4	3	3	0	0	0	0	0	0	0	0
Group 5	1	0	1	1	0	0	1	0	0	0
Group 6	11	10	0	0	1	0	0	0	0	0
Group 7	1	0	1	1	0	0	0	1	0	0
Group 8	4	0	4	4	0	0	1	3	0	0
Group 9	3	2	1	1	0	0	0	1	0	0
Group 10	5	3	1	0	1	1	0	0	0	0
Group 11	12	10	0	0	2	0	0	0	0	0
Group 12	173	130	7	5	36	2	3	2	0	0
Group 13	16	0	16	15	0	1	3	12	0	0
Group 14	3	0	3	3	0	0	0	3	0	0
Group 15	5	4	0	0	1	0	0	0	0	0

Total Counted	267	181	40	35	46	5	8	27	0
Cor. Estimates	273.87	183.78	43.71	38.54	46.38	5.17	8.89	29.65	0.00
Cor. Proportions	1.00	0.67	0.16	0.14	0.17	0.02	0.03	0.11	0.00
Non-Res Variance	37.65	15.04	14.90	14.29	0.52	0.19	1.46	10.56	0.00
23.78 Bulls per 100 Cows									
25.23 Calves per 100 Cows									
2.81 Spikes per 100 Cows									
11.82 Spikes per 100 Bulls									
20.35 Raghorns per 100 Bulls									
67.83 Adult bulls per 100 Bulls									
88.18 Branched-antlered bulls per 100 Bulls									
13.41 Spikes per 100 Branched-antlered bulls									

SUBUNIT 20.20, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	31	7	1	0	3	1	0	0	20
Group 2	7	0	7	7	0	0	4	3	0
Group 3	4	0	4	4	0	0	4	0	0
Group 4	9	4	0	0	2	0	0	0	3
Group 5	13	9	4	4	0	0	2	2	0
Group 6	15	10	3	0	2	3	0	0	0
Group 7	1	0	1	1	0	0	1	0	0
Group 8	6	0	5	5	0	0	1	4	1
Group 9	2	0	2	2	0	0	0	2	0
Group 10	4	0	4	2	0	2	2	0	0
Group 11	18	13	0	0	5	0	0	0	0
Group 12	1	0	1	1	0	0	0	1	0
Group 13	3	0	3	3	0	0	0	3	0
Group 14	2	0	2	2	0	0	2	0	0
Group 15	9	0	9	5	0	4	5	0	0
Group 16	1	0	1	1	0	0	1	0	0
Total Counted	126	43	47	37	12	10	22	15	24

Cor. Estimates	140.73	43.91	60.15	48.79	12.22	11.37	29.91	18.88	24.45
Cor. Proportions	1.00	0.31	0.43	0.35	0.09	0.08	0.21	0.13	0.17
Non-Res Variance	91.46	7.71	68.44	53.80	0.53	4.71	30.77	14.66	1.22
137.00 Bulls per 100 Cows									
27.83 Calves per 100 Cows									
25.88 Spikes per 100 Cows									
18.89 Spikes per 100 Bulls									
49.73 Raghorns per 100 Bulls									
31.38 Adult bulls per 100 Bulls									
81.11 Branched-antlered bulls per 100 Bulls									
23.30 Spikes per 100 Branched-antlered bulls									

SUBUNIT 20.19, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	11	7	0	0	4	0	0	0	0

Group 2	10	6	0	0	4	0	0	0	0
Group 3	4	3	0	0	1	0	0	0	0
Group 4	2	2	0	0	0	0	0	0	0
Group 5	13	6	0	0	2	0	0	0	5
Group 6	15	10	1	0	4	1	0	0	0
Group 7	11	11	0	0	0	0	0	0	0
Group 8	8	5	0	0	3	0	0	0	0
Group 9	7	6	0	0	1	0	0	0	0

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 Total Counted 81 56 1 0 19 1 0 0 5

=====  
 Cor. Estimates 85.99 59.69 1.02 0.00 20.15 1.02 0.00 0.00 5.13  
 Cor. Proportions 1.00 0.69 0.01 0.00 0.23 0.01 0.00 0.00 0.06  
 Non-Res Variance 43.47 22.75 0.02 0.00 3.49 0.02 0.00 0.00 0.69  
 1.70 Bulls per 100 Cows  
 33.75 Calves per 100 Cows  
 1.70 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

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 SUBUNIT 03.02, STRATUM 3

Characteristic Total Cows Bulls BABull Calves Spikes Raghmn AdBull Unclas

Group 1	30	17	3	0	10	3	0	0	0
Group 2	21	15	1	0	5	1	0	0	0
Group 3	243	195	12	1	36	11	1	0	0
Group 4	3	2	0	0	1	0	0	0	0
Group 5	4	0	4	0	0	4	0	0	0
Group 6	6	4	1	0	1	1	0	0	0
Group 7	7	5	0	0	2	0	0	0	0
Group 8	2	2	0	0	0	0	0	0	0

-----  
 Total Counted 316 240 21 1 55 20 1 0 0

=====  
 Cor. Estimates 329.56 248.76 21.85 1.00 58.95 20.85 1.00 0.00 0.00  
 Cor. Proportions 1.00 0.75 0.07 0.00 0.18 0.06 0.00 0.00 0.00  
 Non-Res Variance 172.01 76.01 3.54 0.00 17.90 3.54 0.00 0.00 0.00  
 8.78 Bulls per 100 Cows  
 23.70 Calves per 100 Cows  
 8.38 Spikes per 100 Cows  
 95.42 Spikes per 100 Bulls  
 4.58 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 4.58 Branched-antlered bulls per 100 Bulls  
 2085.01 Spikes per 100 Branched-antlered bulls

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 SUBUNIT 03.05, STRATUM 2

Characteristic Total Cows Bulls BABull Calves Spikes Raghmn AdBull Unclas

Group 1	4	0	4	1	0	3	1	0	0
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Group 2	13	10	1	0	2	1	0	0	0
Group 3	13	7	2	0	4	2	0	0	0
Group 4	5	0	5	5	0	0	0	5	0
Group 5	6	0	6	6	0	0	3	3	0
Group 6	4	2	2	0	0	2	0	0	0
Group 7	10	0	10	10	0	0	6	4	0
Group 8	1	0	1	1	0	0	0	1	0

-----  
 Total Counted 56 19 31 23 6 8 10 13 0

=====  
 Cor. Estimates 70.75 19.85 44.76 35.05 6.13 9.71 13.32 21.73 0.00  
 Cor. Proportions 1.00 0.28 0.63 0.50 0.09 0.14 0.19 0.31 0.00  
 Non-Res Variance 156.48 4.02 145.66 136.60 0.49 6.03 24.01 80.45 0.00  
 225.45 Bulls per 100 Cows  
 30.89 Calves per 100 Cows  
 48.90 Spikes per 100 Cows  
 21.69 Spikes per 100 Bulls  
 29.76 Raghorns per 100 Bulls  
 48.55 Adult bulls per 100 Bulls  
 78.31 Branched-antlered bulls per 100 Bulls  
 27.70 Spikes per 100 Branched-antlered bulls

-----  
 SUBUNIT 03.07, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	2	0	0	0	0	0	0	0
Group 2	6	0	6	1	0	5	1	0	0
Group 3	3	0	3	3	0	0	3	0	0
Group 4	7	3	3	0	1	3	0	0	0
Group 5	2	0	2	2	0	0	1	1	0
Group 6	4	0	4	4	0	0	2	2	0
Group 7	5	0	5	5	0	0	3	2	0
Group 8	11	7	1	0	3	1	0	0	0
Group 9	1	1	0	0	0	0	0	0	0
Group 10	2	0	2	2	0	0	1	1	0

-----  
 Total Counted 43 13 26 17 4 9 11 6 0

=====  
 Cor. Estimates 52.89 13.93 34.85 25.32 4.11 9.52 15.84 9.48 0.00  
 Cor. Proportions 1.00 0.26 0.66 0.48 0.08 0.18 0.30 0.18 0.00  
 Non-Res Variance 56.63 2.63 51.03 47.85 0.23 2.40 16.05 10.08 0.00  
 250.07 Bulls per 100 Cows  
 29.47 Calves per 100 Cows  
 68.34 Spikes per 100 Cows  
 27.33 Spikes per 100 Bulls  
 45.46 Raghorns per 100 Bulls  
 27.21 Adult bulls per 100 Bulls  
 72.67 Branched-antlered bulls per 100 Bulls  
 37.60 Spikes per 100 Branched-antlered bulls

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 SUBUNIT 03.06, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	1	1	0	0	0	0	0	0	0
Group 2	6	3	0	0	3	0	0	0	0
Group 3	5	4	0	0	1	0	0	0	0
-----									
Total Counted	12	8	0	0	4	0	0	0	0
=====									
Cor. Estimates	19.03	13.44	0.00	0.00	5.59	0.00	0.00	0.00	0.00
Cor. Proportions	1.00	0.71	0.00	0.00	0.29	0.00	0.00	0.00	0.00
Non-Res Variance	73.59	45.29	0.00	0.00	3.95	0.00	0.00	0.00	0.00
0.00 Bulls per 100 Cows									
41.58 Calves per 100 Cows									
0.00 Spikes per 100 Cows									
-----									

SUBUNIT 03.03, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
-----										
Group 1	5	4	0	0	1	0	0	0	0	0
Group 2	9	6	0	0	3	0	0	0	0	0
Group 3	13	10	1	0	2	1	0	0	0	0
Group 4	3	2	0	0	1	0	0	0	0	0
Group 5	16	13	0	0	3	0	0	0	0	0
Group 6	2	1	0	0	1	0	0	0	0	0
Group 7	3	2	0	0	1	0	0	0	0	0
Group 8	4	1	1	0	2	1	0	0	0	0
Group 9	6	0	6	0	0	6	0	0	0	0
Group 10	5	3	0	0	2	0	0	0	0	0
Group 11	1	1	0	0	0	0	0	0	0	0
Group 12	8	4	2	0	2	2	0	0	0	0
Group 13	3	2	0	0	1	0	0	0	0	0
Group 14	2	1	0	0	1	0	0	0	0	0
-----										
Total Counted	80	50	10	0	20	10	0	0	0	0
=====										
Cor. Estimates	116.42	70.72	12.19	0.00	33.51	12.19	0.00	0.00	0.00	0.00
Cor. Proportions	1.00	0.61	0.10	0.00	0.29	0.10	0.00	0.00	0.00	0.00
Non-Res Variance	370.51	133.83	15.02	0.00	56.33	15.02	0.00	0.00	0.00	0.00
17.24 Bulls per 100 Cows										
47.38 Calves per 100 Cows										
17.24 Spikes per 100 Cows										
100.00 Spikes per 100 Bulls										
0.00 Raghorns per 100 Bulls										
0.00 Adult bulls per 100 Bulls										
0.00 Branched-antlered bulls per 100 Bulls										
-----										

SUBUNIT 03.08, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
-----										
Group 1	8	6	0	0	2	0	0	0	0	0
Group 2	8	4	0	0	4	0	0	0	0	0
Group 3	1	0	1	1	0	0	1	0	0	0
Group 4	5	3	1	0	1	1	0	0	0	0



Group 5	25	19	1	0	5	1	0	0	0
Group 6	11	0	1	0	3	1	0	0	7
-----									
Total Counted	58	32	4	1	15	3	1	0	7
=====									
Cor. Estimates	78.62	41.72	4.66	1.16	22.81	3.50	1.16	0.00	9.44
Cor. Proportions	1.00	0.53	0.06	0.01	0.29	0.04	0.01	0.00	0.12
Non-Res Variance	328.73	90.65	0.82	0.18	57.86	0.64	0.18	0.00	23.07
-----									
11.16 Bulls per 100 Cows									
54.67 Calves per 100 Cows									
8.38 Spikes per 100 Cows									
75.11 Spikes per 100 Bulls									
24.89 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
24.89 Branched-antlered bulls per 100 Bulls									
301.82 Spikes per 100 Branched-antlered bulls									
-----									

SUBUNIT 03.12, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
-----									
Total Counted	0	0	0	0	0	0	0	0	0
=====									
Cor. Estimates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-Res Variance	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
-----									

SUBUNIT 04.02, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
-----									
Group 1	11	8	0	0	3	0	0	0	0
Group 2	2	1	0	0	1	0	0	0	0
Group 3	20	13	3	1	4	2	1	0	0
Group 4	1	1	0	0	0	0	0	0	0
Group 5	2	2	0	0	0	0	0	0	0
Group 6	7	6	0	0	1	0	0	0	0
Group 7	12	11	1	0	0	1	0	0	0
Group 8	3	0	3	3	0	0	3	0	0
-----									
Total Counted	58	42	7	4	9	3	4	0	0
=====									
Cor. Estimates	88.86	55.26	18.15	15.07	15.45	3.08	15.07	0.00	0.00
Cor. Proportions	1.00	0.62	0.20	0.17	0.17	0.03	0.17	0.00	0.00
Non-Res Variance	398.49	116.94	155.42	155.20	30.79	0.13	155.20	0.00	0.00
-----									
32.84 Bulls per 100 Cows									
27.96 Calves per 100 Cows									
5.57 Spikes per 100 Cows									
16.97 Spikes per 100 Bulls									
83.03 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
83.03 Branched-antlered bulls per 100 Bulls									
20.43 Spikes per 100 Branched-antlered bulls									
-----									

SUBUNIT 03.10, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	6	4	0	0	2	0	0	0	0	0
Group 2	11	6	2	0	3	2	0	0	0	0
Group 3	4	2	0	0	2	0	0	0	0	0
Group 4	9	5	1	1	3	0	1	0	0	0
Group 5	21	14	3	0	4	3	0	0	0	0
Group 6	37	29	1	0	7	1	0	0	0	0
Group 7	34	27	4	0	3	4	0	0	0	0
Total Counted	122	87	11	1	24	10	1	0	0	0

Cor. Estimates 146.95 100.63 13.48 2.07 32.83 11.41 2.07 0.00 0.00  
 Cor. Proportions 1.00 0.68 0.09 0.01 0.22 0.08 0.01 0.00 0.00  
 Non-Res Variance 397.91 120.01 7.02 2.21 47.02 4.80 2.21 0.00 0.00  
 13.40 Bulls per 100 Cows  
 32.62 Calves per 100 Cows  
 11.34 Spikes per 100 Cows  
 84.65 Spikes per 100 Bulls  
 15.35 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 15.35 Branched-antlered bulls per 100 Bulls  
 551.54 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.01, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	3	2	0	0	1	0	0	0	0	0
Group 2	11	7	0	0	4	0	0	0	0	0
Group 3	17	9	3	1	5	2	1	0	0	0
Group 4	4	4	0	0	0	0	0	0	0	0
Group 5	6	4	0	0	2	0	0	0	0	0
Group 6	17	11	4	1	2	3	1	0	0	0
Group 7	5	0	5	5	0	0	5	0	0	0
Group 8	11	9	0	0	2	0	0	0	0	0
Total Counted	74	46	12	7	16	5	7	0	0	0

Cor. Estimates 84.65 53.02 13.61 8.54 18.02 5.08 8.54 0.00 0.00  
 Cor. Proportions 1.00 0.63 0.16 0.10 0.21 0.06 0.10 0.00 0.00  
 Non-Res Variance 88.16 44.89 10.15 9.80 6.24 0.19 9.80 0.00 0.00  
 25.68 Bulls per 100 Cows  
 33.99 Calves per 100 Cows  
 9.58 Spikes per 100 Cows  
 37.30 Spikes per 100 Bulls  
 62.70 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 62.70 Branched-antlered bulls per 100 Bulls  
 59.49 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.03, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	0	1	1	0	0	1	0	0	
Group 2	2	0	2	2	0	0	2	0	0	
Group 3	10	0	10	10	0	0	10	0	0	
Group 4	4	3	0	0	1	0	0	0	0	
Group 5	2	0	2	2	0	0	1	1	0	
Group 6	54	31	7	2	4	5	2	0	12	
Group 7	3	2	0	0	1	0	0	0	0	
Group 8	12	6	2	1	4	1	1	0	0	
Group 9	1	0	1	1	0	0	1	0	0	
Group 10	2	0	2	2	0	0	2	0	0	
Group 11	1	0	1	1	0	0	1	0	0	
Total Counted	92	42	28	22	10	6	21	1	12	

Cor. Estimates 127.17 52.34 49.09 43.02 13.74 6.07 41.89 1.13 12.00  
 Cor. Proportions 1.00 0.41 0.39 0.34 0.11 0.05 0.33 0.01 0.09  
 Non-Res Variance 332.82 113.94 123.46 123.24 13.90 0.07 122.80 0.15 0.00  
 93.78 Bulls per 100 Cows  
 26.24 Calves per 100 Cows  
 11.59 Spikes per 100 Cows  
 12.36 Spikes per 100 Bulls  
 85.34 Raghorns per 100 Bulls  
 2.30 Adult bulls per 100 Bulls  
 87.64 Branched-antlered bulls per 100 Bulls  
 14.11 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.04, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	6	5	0	0	1	0	0	0	0	
Group 2	74	60	4	1	10	3	1	0	0	
Total Counted	80	65	4	1	11	3	1	0	0	

Cor. Estimates 81.47 66.22 4.00 1.00 11.24 3.00 1.00 0.00 0.00  
 Cor. Proportions 1.00 0.81 0.05 0.01 0.14 0.04 0.01 0.00 0.00  
 Non-Res Variance 10.96 7.61 0.00 0.00 0.30 0.00 0.00 0.00 0.00  
 6.04 Bulls per 100 Cows  
 16.98 Calves per 100 Cows  
 4.53 Spikes per 100 Cows  
 75.00 Spikes per 100 Bulls  
 25.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 25.00 Branched-antlered bulls per 100 Bulls  
 300.00 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.05, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	125	68	9	6	25	3	6	0	23
Group 2	3	0	3	2	0	1	2	0	0
Group 3	12	6	5	3	1	2	3	0	0
Group 4	1	1	0	0	0	0	0	0	0
Group 5	43	27	5	2	7	3	2	0	4
Group 6	2	1	0	0	1	0	0	0	0
Group 7	5	2	3	0	0	3	0	0	0
Group 8	4	3	0	0	1	0	0	0	0
Group 9	1	1	0	0	0	0	0	0	0
Total Counted	196	109	25	13	35	12	13	0	27
Cor. Estimates	203.60	112.78	27.83	13.65	35.99	14.19	13.65	0.00	27.00
Cor. Proportions	1.00	0.55	0.14	0.07	0.18	0.07	0.07	0.00	0.13
Non-Res Variance	49.66	12.59	13.10	1.73	1.43	9.41	1.73	0.00	0.00
24.68 Bulls per 100 Cows									
31.91 Calves per 100 Cows									
12.58 Spikes per 100 Cows									
50.98 Spikes per 100 Bulls									
49.02 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
49.02 Branched-antlered bulls per 100 Bulls									
103.98 Spikes per 100 Branched-antlered bulls									

SUBUNIT 22.07, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	1	0	0	0	0	0	0	0
Group 2	41	29	1	0	9	1	0	0	2
Group 3	4	2	0	0	2	0	0	0	0
Group 4	7	7	0	0	0	0	0	0	0
Group 5	1	1	0	0	0	0	0	0	0
Total Counted	54	40	1	0	11	1	0	0	2
Cor. Estimates	60.28	45.55	1.00	0.00	11.74	1.00	0.00	0.00	2.00
Cor. Proportions	1.00	0.76	0.02	0.00	0.19	0.02	0.00	0.00	0.03
Non-Res Variance	31.24	25.14	0.00	0.00	2.02	0.00	0.00	0.00	0.00
2.20 Bulls per 100 Cows									
25.77 Calves per 100 Cows									
2.20 Spikes per 100 Cows									
100.00 Spikes per 100 Bulls									
0.00 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
0.00 Branched-antlered bulls per 100 Bulls									

SUBUNIT 22.12, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	12	9	0	0	3	0	0	0	0
Group 2	5	3	1	0	1	1	0	0	0

Group 3	2	2	0	0	0	0	0	0	0
Group 4	2	1	0	0	1	0	0	0	0
Group 5	3	2	1	0	0	1	0	0	0
Group 6	1	1	0	0	0	0	0	0	0
Group 7	1	1	0	0	0	0	0	0	0
Group 8	9	7	1	0	1	1	0	0	0
Group 9	22	15	1	0	6	1	0	0	0
Group 10	5	0	0	0	1	0	0	0	4
Group 11	4	2	1	0	1	1	0	0	0
Group 12	1	1	0	0	0	0	0	0	0
Group 13	3	3	0	0	0	0	0	0	0
Group 14	4	2	1	1	1	0	1	0	0
Group 15	3	3	0	0	0	0	0	0	0
Group 16	3	2	0	0	1	0	0	0	0
Group 17	2	2	0	0	0	0	0	0	0
Group 18	2	1	0	0	1	0	0	0	0
Group 19	3	3	0	0	0	0	0	0	0
Group 20	3	2	0	0	1	0	0	0	0
Group 21	4	2	0	0	2	0	0	0	0
Group 22	1	1	0	0	0	0	0	0	0
Group 23	24	17	0	0	6	0	0	0	1
Group 24	1	1	0	0	0	0	0	0	0
Group 25	1	0	1	1	0	0	1	0	0
Group 26	3	2	1	0	0	1	0	0	0
Group 27	4	2	2	1	0	1	1	0	0
Group 28	10	5	0	0	5	0	0	0	0
Group 29	8	5	1	0	2	1	0	0	0
Group 30	3	3	0	0	0	0	0	0	0
Group 31	4	3	0	0	1	0	0	0	0
Group 32	53	35	5	0	9	5	0	0	4
Group 33	4	2	0	0	2	0	0	0	0
Group 34	5	3	0	0	2	0	0	0	0
Group 35	10	9	0	0	1	0	0	0	0
Group 36	5	2	3	1	0	2	1	0	0
Group 37	2	1	1	0	0	1	0	0	0
Group 38	1	1	0	0	0	0	0	0	0
Group 39	13	12	0	0	1	0	0	0	0
Group 40	4	3	1	0	0	1	0	0	0
Group 41	17	11	1	0	5	1	0	0	0
Group 42	1	0	1	1	0	0	1	0	0
Group 43	8	5	2	1	1	1	0	1	0
Group 44	2	2	0	0	0	0	0	0	0
Group 45	1	1	0	0	0	0	0	0	0
Group 46	3	2	0	0	1	0	0	0	0
Group 47	4	2	2	0	0	2	0	0	0
Group 48	7	4	3	1	0	2	1	0	0
Group 49	9	5	0	0	4	0	0	0	0
Group 50	1	0	1	0	0	1	0	0	0
Group 51	5	3	2	1	0	1	1	0	0
Group 52	4	0	4	3	0	1	2	1	0
Group 53	1	1	0	0	0	0	0	0	0

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 Total Counted 313 207 37 11 60 26 9 2 9

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 Cor. Estimates 389.29 258.68 50.46 15.59 70.56 34.86 12.56 3.03 9.59  
 Cor. Proportions 1.00 0.66 0.13 0.04 0.18 0.09 0.03 0.01 0.02

Non-Res Variance 538.92 249.55 42.88 10.05 35.37 19.95 6.43 1.60 2.69  
 19.50 Bulls per 100 Cows  
 27.28 Calves per 100 Cows  
 13.48 Spikes per 100 Cows  
 69.09 Spikes per 100 Bulls  
 24.90 Raghorns per 100 Bulls  
 6.00 Adult bulls per 100 Bulls  
 30.91 Branched-antlered bulls per 100 Bulls  
 223.56 Spikes per 100 Branched-antlered bulls

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SUBUNIT 22.11, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	4	0	4	4	0	0	4	0	0	0
Group 2	6	0	6	6	0	0	6	0	0	0
Group 3	5	0	5	5	0	0	4	1	0	0
Group 4	1	0	1	1	0	0	1	0	0	0
Group 5	3	0	3	3	0	0	3	0	0	0
Group 6	6	2	4	2	0	2	2	0	0	0
Group 7	5	0	5	4	0	1	4	0	0	0
Group 8	2	0	2	2	0	0	2	0	0	0
Group 9	1	0	1	1	0	0	0	1	0	0
Group 10	2	1	1	1	0	0	1	0	0	0
Group 11	1	0	1	1	0	0	0	1	0	0
Group 12	4	0	4	4	0	0	4	0	0	0
Group 13	3	0	3	3	0	0	3	0	0	0
Group 14	1	0	1	1	0	0	1	0	0	0
Group 15	1	0	1	1	0	0	0	1	0	0
Group 16	1	0	1	1	0	0	1	0	0	0
Group 17	5	0	5	5	0	0	5	0	0	0
Group 18	2	0	2	2	0	0	1	1	0	0
Group 19	1	0	1	1	0	0	1	0	0	0
Group 20	3	0	3	3	0	0	3	0	0	0
Total Counted	57	3	54	51	0	3	46	5	0	0

Cor. Estimates 90.91 5.37 85.54 82.36 0.00 3.19 74.52 7.83 0.00  
 Cor. Proportions 1.00 0.06 0.94 0.91 0.00 0.04 0.82 0.09 0.00  
 Non-Res Variance 247.43 7.57 224.23 222.81 0.00 0.32 208.71 4.52 0.00  
 1593.60 Bulls per 100 Cows  
 0.00 Calves per 100 Cows  
 59.35 Spikes per 100 Cows  
 3.72 Spikes per 100 Bulls  
 87.12 Raghorns per 100 Bulls  
 9.16 Adult bulls per 100 Bulls  
 96.28 Branched-antlered bulls per 100 Bulls  
 3.87 Spikes per 100 Branched-antlered bulls

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SUBUNIT 03.18, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	0	2	2	0	0	2	0	0	0

Group 2	2	1	1	1	0	0	1	0	0
Group 3	9	6	1	0	2	1	0	0	0
Group 4	2	1	0	0	1	0	0	0	0
Group 5	1	0	1	1	0	0	1	0	0
Group 6	1	0	1	1	0	0	1	0	0
Group 7	3	1	0	0	2	0	0	0	0
Group 8	1	0	1	1	0	0	1	0	0
Group 9	27	17	4	0	6	4	0	0	0
Group 10	6	3	3	2	0	1	2	0	0
Group 11	2	1	0	0	1	0	0	0	0
Group 12	4	3	1	1	0	0	1	0	0
Group 13	1	1	0	0	0	0	0	0	0
Group 14	5	5	0	0	0	0	0	0	0
Group 15	7	6	1	1	0	0	1	0	0

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 Total Counted 73 45 16 10 12 6 10 0 0  
 =====

Cor. Estimates 96.06 55.78 23.66 17.40 16.63 6.26 17.40 0.00 0.00  
 Cor. Proportions 1.00 0.58 0.25 0.18 0.17 0.07 0.18 0.00 0.00  
 Non-Res Variance 142.74 48.65 34.84 33.99 15.36 0.31 33.99 0.00 0.00  
 42.42 Bulls per 100 Cows  
 29.81 Calves per 100 Cows  
 11.22 Spikes per 100 Cows  
 26.45 Spikes per 100 Bulls  
 73.55 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 73.55 Branched-antlered bulls per 100 Bulls  
 35.96 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 22.09, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	8	0	8	7	0	1	5	2	0
Group 2	3	0	3	2	0	1	1	1	0
Group 3	1	0	1	1	0	0	0	1	0
Group 4	2	0	2	2	0	0	2	0	0
Group 5	3	0	3	3	0	0	3	0	0

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 Total Counted 17 0 17 15 0 2 11 4 0  
 =====

Cor. Estimates 20.79 0.00 20.79 18.65 0.00 2.14 14.30 4.34 0.00  
 Cor. Proportions 1.00 0.00 1.00 0.90 0.00 0.10 0.69 0.21 0.00  
 Non-Res Variance 20.15 0.00 20.15 18.97 0.00 0.16 17.49 0.46 0.00  
 10.31 Spikes per 100 Bulls  
 68.81 Raghorns per 100 Bulls  
 20.88 Adult bulls per 100 Bulls  
 89.69 Branched-antlered bulls per 100 Bulls  
 11.50 Spikes per 100 Branched-antlered bulls  
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SUBUNIT 22.14, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	1	0	1	1	0	0	0	1	0
Group 2	1	0	1	1	0	0	0	1	0
Group 3	1	1	0	0	0	0	0	0	0
Group 4	1	0	1	1	0	0	1	0	0
Group 5	6	3	0	0	3	0	0	0	0
Group 6	4	0	4	4	0	0	0	4	0
Group 7	2	0	2	2	0	0	1	1	0
Group 8	3	0	3	3	0	0	3	0	0
Group 9	1	0	1	1	0	0	1	0	0
Group 10	1	0	1	1	0	0	1	0	0
Group 11	4	0	4	3	0	1	3	0	0
Group 12	1	0	1	1	0	0	1	0	0
Group 13	1	0	1	1	0	0	1	0	0
Group 14	5	0	5	3	0	2	3	0	0
Group 15	2	2	0	0	0	0	0	0	0
Group 16	9	8	0	0	1	0	0	0	0

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 Total Counted 43 14 25 22 4 3 15 7 0  
 =====

Cor. Estimates 55.09 18.20 31.37 28.14 5.52 3.23 18.74 9.40 0.00  
 Cor. Proportions 1.00 0.33 0.57 0.51 0.10 0.06 0.34 0.17 0.00  
 Non-Res Variance 57.97 15.37 21.96 20.09 6.73 0.40 10.12 9.28 0.00  
 172.32 Bulls per 100 Cows  
 30.34 Calves per 100 Cows  
 17.74 Spikes per 100 Cows  
 10.29 Spikes per 100 Bulls  
 59.74 Raghorns per 100 Bulls  
 29.96 Adult bulls per 100 Bulls  
 89.71 Branched-antlered bulls per 100 Bulls  
 11.47 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 03.21, STRATUM 1

Characteristic	Total	Cows	Bulls	BA Bull	Calves	Spikes	Raghrn	Ad Bull	Unclas
Group 1	1	0	1	1	0	0	1	0	0
Group 2	2	0	2	2	0	0	2	0	0

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 Total Counted 3 0 3 3 0 0 3 0 0  
 =====

Cor. Estimates 10.25 0.00 10.25 10.25 0.00 0.00 10.25 0.00 0.00  
 Cor. Proportions 1.00 0.00 1.00 1.00 0.00 0.00 1.00 0.00 0.00  
 Non-Res Variance 39.59 0.00 39.59 39.59 0.00 0.00 39.59 0.00 0.00  
 0.00 Spikes per 100 Bulls  
 100.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 100.00 Branched-antlered bulls per 100 Bulls  
 0.00 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 22.17, STRATUM 2

Characteristic	Total	Cows	Bulls	BA Bull	Calves	Spikes	Raghrn	Ad Bull	Unclas
Group 1	6	4	0	0	2	0	0	0	0



Group 2	2	1	0	0	1	0	0	0	0
Group 3	3	3	0	0	0	0	0	0	0
Group 4	9	6	0	0	3	0	0	0	0
Group 5	4	4	0	0	0	0	0	0	0
Group 6	8	8	0	0	0	0	0	0	0
Group 7	3	2	0	0	1	0	0	0	0
Group 8	4	2	1	0	1	1	0	0	0
Group 9	1	1	0	0	0	0	0	0	0
Group 10	1	1	0	0	0	0	0	0	0
Group 11	1	1	0	0	0	0	0	0	0
Group 12	2	1	0	0	1	0	0	0	0
Group 13	3	2	0	0	1	0	0	0	0
Group 14	4	3	0	0	1	0	0	0	0
Group 15	2	0	2	0	0	2	0	0	0
Group 16	4	4	0	0	0	0	0	0	0

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 Total Counted 57 43 3 0 11 3 0 0 0  
 =====

Cor. Estimates 91.71 66.92 4.77 0.00 20.02 4.77 0.00 0.00 0.00  
 Cor. Proportions 1.00 0.73 0.05 0.00 0.22 0.05 0.00 0.00 0.00  
 Non-Res Variance 271.55 126.08 4.37 0.00 24.07 4.37 0.00 0.00 0.00  
 7.12 Bulls per 100 Cows  
 29.91 Calves per 100 Cows  
 7.12 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls  
 -----

SUBUNIT 22.20, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	1	0	0	1	0	0	0	0
Group 2	2	1	0	0	1	0	0	0	0
Group 3	2	1	1	1	0	0	0	1	0

-----  
 Total Counted 6 3 1 1 2 0 0 1 0  
 =====

Cor. Estimates 11.87 5.93 3.25 3.25 2.68 0.00 0.00 3.25 0.00  
 Cor. Proportions 1.00 0.50 0.27 0.27 0.23 0.00 0.00 0.27 0.00  
 Non-Res Variance 33.32 8.33 7.33 7.33 1.00 0.00 0.00 7.33 0.00  
 54.82 Bulls per 100 Cows  
 45.18 Calves per 100 Cows  
 0.00 Spikes per 100 Cows  
 0.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 100.00 Adult bulls per 100 Bulls  
 100.00 Branched-antlered bulls per 100 Bulls  
 0.00 Spikes per 100 Branched-antlered bulls  
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SUBUNIT 22.38, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	8	4	0	0	4	0	0	0	0
Group 2	15	8	3	2	4	1	2	0	0
Group 3	4	3	1	1	0	0	1	0	0
Group 4	2	0	2	2	0	0	2	0	0
Group 5	3	1	1	1	1	0	1	0	0
Group 6	3	2	0	0	1	0	0	0	0
Group 7	1	0	1	1	0	0	1	0	0
Group 8	2	0	2	2	0	0	2	0	0
Group 9	1	1	0	0	0	0	0	0	0
Group 10	5	3	0	0	2	0	0	0	0
Group 11	3	1	1	0	1	1	0	0	0
Group 12	2	1	0	0	1	0	0	0	0
Group 13	10	7	0	0	3	0	0	0	0
Group 14	2	1	1	1	0	0	1	0	0
Group 15	2	0	2	2	0	0	2	0	0
Group 16	2	2	0	0	0	0	0	0	0
Group 17	1	0	1	1	0	0	1	0	0
Group 18	2	0	2	1	0	1	1	0	0

Total Counted	68	34	17	14	17	3	14	0	0
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Cor. Estimates	144.21	67.94	44.05	34.97	32.21	9.08	34.97	0.00	0.00
Cor. Proportions	1.00	0.47	0.31	0.24	0.22	0.06	0.24	0.00	0.00
Non-Res Variance	688.89	206.12	138.14	98.09	67.24	24.74	98.09	0.00	0.00
64.84 Bulls per 100 Cows									
47.41 Calves per 100 Cows									
13.37 Spikes per 100 Cows									
20.61 Spikes per 100 Bulls									
79.39 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
79.39 Branched-antlered bulls per 100 Bulls									
25.96 Spikes per 100 Branched-antlered bulls									

SUBUNIT 22.24, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	2	0	0	0	0	0	0	0
Group 2	1	1	0	0	0	0	0	0	0
Group 3	3	1	1	0	1	1	0	0	0
Group 4	6	3	0	0	3	0	0	0	0
Group 5	2	2	0	0	0	0	0	0	0
Group 6	13	8	0	0	5	0	0	0	0
Group 7	1	1	0	0	0	0	0	0	0
Group 8	1	1	0	0	0	0	0	0	0
Group 9	4	4	0	0	0	0	0	0	0
Group 10	9	6	0	0	3	0	0	0	0
Group 11	2	2	0	0	0	0	0	0	0
Group 12	1	1	0	0	0	0	0	0	0
Group 13	2	0	2	2	0	0	2	0	0
Group 14	1	1	0	0	0	0	0	0	0
Total Counted	48	33	3	2	12	1	2	0	0

Cor. Estimates 71.43 49.92 6.15 4.24 15.36 1.92 4.24 0.00 0.00  
 Cor. Proportions 1.00 0.70 0.09 0.06 0.22 0.03 0.06 0.00 0.00  
 Non-Res Variance 131.70 68.37 11.24 9.48 12.89 1.76 9.48 0.00 0.00  
 12.33 Bulls per 100 Cows  
 30.77 Calves per 100 Cows  
 3.84 Spikes per 100 Cows  
 31.14 Spikes per 100 Bulls  
 68.86 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 68.86 Branched-antlered bulls per 100 Bulls  
 45.21 Spikes per 100 Branched-antlered bulls

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SUBUNIT 22.30, STRATUM 3

Characteristic Total Cows Bulls BABull Calves Spikes Raghrn AdBull Unclas

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Group 1	6	4	0	0	2	0	0	0	0
Group 2	13	7	2	0	4	2	0	0	0
Group 3	2	1	0	0	1	0	0	0	0
Group 4	2	1	0	0	1	0	0	0	0
Group 5	4	3	0	0	1	0	0	0	0
Group 6	2	1	0	0	1	0	0	0	0
Group 7	3	2	0	0	1	0	0	0	0
Group 8	6	5	0	0	1	0	0	0	0
Group 9	2	2	0	0	0	0	0	0	0
Group 10	2	1	0	0	1	0	0	0	0
Group 11	10	5	0	0	5	0	0	0	0
Group 12	2	1	0	0	1	0	0	0	0
Group 13	3	1	0	0	2	0	0	0	0
Group 14	5	2	0	0	1	0	0	0	2
Group 15	14	10	1	0	3	1	0	0	0
Group 16	3	2	0	0	1	0	0	0	0
Group 17	4	3	1	0	0	1	0	0	0
Group 18	8	5	0	0	3	0	0	0	0
Group 19	2	1	0	0	1	0	0	0	0
Group 20	2	1	1	1	0	0	1	0	0
Group 21	1	1	0	0	0	0	0	0	0
Group 22	1	1	0	0	0	0	0	0	0
Group 23	1	0	0	0	1	0	0	0	0
Group 24	2	1	0	0	1	0	0	0	0

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Total Counted 100 61 5 1 32 4 1 0 2

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Cor. Estimates 161.44 93.86 7.91 3.25 56.44 4.66 3.25 0.00 3.22  
 Cor. Proportions 1.00 0.58 0.05 0.02 0.35 0.03 0.02 0.00 0.02  
 Non-Res Variance 530.27 161.25 8.28 7.33 115.93 0.95 7.33 0.00 3.93  
 8.43 Bulls per 100 Cows  
 60.13 Calves per 100 Cows  
 4.96 Spikes per 100 Cows  
 58.89 Spikes per 100 Bulls  
 41.11 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 41.11 Branched-antlered bulls per 100 Bulls  
 143.25 Spikes per 100 Branched-antlered bulls

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SUBUNIT 02.10, STRATUM 1

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	1	1	0	0	0	0	0	0	0	0
Group 2	2	2	0	0	0	0	0	0	0	0
Group 3	7	5	0	0	2	0	0	0	0	0
Group 4	3	0	3	3	0	0	3	0	0	0
Total Counted	13	8	3	3	2	0	3	0	0	0

Cor. Estimates 15.61 9.17 4.35 4.35 2.09 0.00 4.35 0.00 0.00  
 Cor. Proportions 1.00 0.59 0.28 0.28 0.13 0.00 0.28 0.00 0.00  
 Non-Res Variance 10.00 2.94 5.89 5.89 0.20 0.00 5.89 0.00 0.00  
 47.49 Bulls per 100 Cows  
 22.84 Calves per 100 Cows  
 0.00 Spikes per 100 Cows  
 0.00 Spikes per 100 Bulls  
 100.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 100.00 Branched-antlered bulls per 100 Bulls  
 0.00 Spikes per 100 Branched-antlered bulls

SUBUNIT 02.12, STRATUM 1

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	1	0	1	1	0	0	0	1	0	0
Group 2	1	0	1	1	0	0	1	0	0	0
Group 3	6	0	6	6	0	0	6	0	0	0
Group 4	1	0	1	1	0	0	1	0	0	0
Group 5	5	0	5	5	0	0	5	0	0	0
Group 6	4	4	0	0	0	0	0	0	0	0
Group 7	4	2	1	0	0	1	0	0	1	0
Group 8	2	0	2	2	0	0	2	0	0	0
Group 9	2	0	2	2	0	0	2	0	0	0
Group 10	4	4	0	0	0	0	0	0	0	0
Group 11	5	5	0	0	0	0	0	0	0	0
Group 12	36	25	5	3	4	2	3	0	2	0
Total Counted	71	40	24	21	4	3	20	1	3	0

Cor. Estimates 93.01 45.66 39.60 35.85 4.00 3.75 34.01 1.84 3.75  
 Cor. Proportions 1.00 0.49 0.43 0.39 0.04 0.04 0.37 0.02 0.04  
 Non-Res Variance 138.02 32.04 91.54 90.23 0.00 1.31 88.68 1.55 1.31  
 86.74 Bulls per 100 Cows  
 8.76 Calves per 100 Cows  
 8.21 Spikes per 100 Cows  
 9.47 Spikes per 100 Bulls  
 85.88 Raghorns per 100 Bulls  
 4.65 Adult bulls per 100 Bulls  
 90.53 Branched-antlered bulls per 100 Bulls  
 10.46 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.31, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	3	1	1	1	1	0	1	0	0	0
Group 2	4	4	0	0	0	0	0	0	0	0
Group 3	8	7	1	0	0	1	0	0	0	0
Group 4	1	0	1	1	0	0	1	0	0	0
Group 5	3	1	2	2	0	0	2	0	0	0
Group 6	4	3	0	0	1	0	0	0	0	0
Group 7	13	8	0	0	5	0	0	0	0	0
Group 8	8	5	0	0	3	0	0	0	0	0
Group 9	4	3	1	0	0	1	0	0	0	0
Group 10	16	10	0	0	6	0	0	0	0	0
Group 11	6	5	0	0	1	0	0	0	0	0
Group 12	7	4	0	0	3	0	0	0	0	0
Group 13	3	3	0	0	0	0	0	0	0	0
Group 14	8	0	0	0	0	0	0	0	0	8
Group 15	2	1	0	0	1	0	0	0	0	0
Group 16	9	6	1	0	2	1	0	0	0	0
Group 17	2	2	0	0	0	0	0	0	0	0
Group 18	9	6	0	0	3	0	0	0	0	0
Group 19	2	2	0	0	0	0	0	0	0	0
Group 20	3	2	1	0	0	1	0	0	0	0
Total Counted	115	73	8	4	26	4	4	0	8	8

Cor. Estimates 159.06 99.37 12.62 7.89 33.79 4.73 7.89 0.00 13.29  
 Cor. Proportions 1.00 0.62 0.08 0.05 0.21 0.03 0.05 0.00 0.08  
 Non-Res Variance 475.39 209.23 16.06 15.10 28.01 0.96 15.10 0.00 70.23  
 12.70 Bulls per 100 Cows  
 34.00 Calves per 100 Cows  
 4.76 Spikes per 100 Cows  
 37.45 Spikes per 100 Bulls  
 62.55 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 62.55 Branched-antlered bulls per 100 Bulls  
 59.88 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.13, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	0	1	1	0	0	0	1	0	0
Group 2	1	0	1	1	0	0	1	0	0	0
Group 3	1	1	0	0	0	0	0	0	0	0
Group 4	2	0	2	2	0	0	2	0	0	0
Group 5	1	1	0	0	0	0	0	0	0	0
Group 6	4	3	0	0	1	0	0	0	0	0
Group 7	20	15	3	2	2	1	2	0	0	0
Group 8	2	2	0	0	0	0	0	0	0	0
Group 9	10	6	2	1	2	1	1	0	0	0
Group 10	6	0	6	6	0	0	1	5	0	0
Group 11	1	0	1	0	0	1	0	0	0	0

Group 12	3	2	0	0	1	0	0	0	0
Group 13	2	2	0	0	0	0	0	0	0
Group 14	3	2	1	0	0	1	0	0	0
Group 15	3	3	0	0	0	0	0	0	0
Group 16	1	0	1	0	0	1	0	0	0
Group 17	4	1	2	0	1	2	0	0	0
Group 18	3	3	0	0	0	0	0	0	0
Group 19	6	6	0	0	0	0	0	0	0
Group 20	1	0	1	0	0	1	0	0	0
-----									
Total Counted	75	47	21	13	7	8	7	6	0
=====									
Cor. Estimates	114.14	69.49	33.80	21.46	10.85	12.34	12.88	8.59	0.00
Cor. Proportions	1.00	0.61	0.30	0.19	0.10	0.11	0.11	0.08	0.00
Non-Res Variance	266.36	128.39	55.34	45.28	9.59	8.77	31.40	10.83	0.00
-----									
48.64 Bulls per 100 Cows									
15.61 Calves per 100 Cows									
17.76 Spikes per 100 Cows									
36.50 Spikes per 100 Bulls									
38.09 Raghorns per 100 Bulls									
25.40 Adult bulls per 100 Bulls									
63.50 Branched-antlered bulls per 100 Bulls									
57.49 Spikes per 100 Branched-antlered bulls									
-----									

SUBUNIT 22.27, STRATUM 2

Characteristic	Total	Cows	Bulls	BA Bull	Calves	Spikes	Raghrn	Ad Bull	Unclas
Group 1	1	1	0	0	0	0	0	0	0
Group 2	1	1	0	0	0	0	0	0	0
Group 3	1	0	1	1	0	0	1	0	0
Group 4	3	2	1	0	0	1	0	0	0
Group 5	1	1	0	0	0	0	0	0	0
Group 6	1	1	0	0	0	0	0	0	0
Group 7	3	3	0	0	0	0	0	0	0
Group 8	1	1	0	0	0	0	0	0	0
Group 9	1	1	0	0	0	0	0	0	0
Group 10	15	11	1	1	3	0	1	0	0
Group 11	1	1	0	0	0	0	0	0	0
Group 12	4	1	1	0	2	1	0	0	0
Group 13	7	4	0	0	3	0	0	0	0
-----									
Total Counted	40	28	4	2	8	2	2	0	0
=====									
Cor. Estimates	57.69	37.52	8.02	4.82	12.16	3.20	4.82	0.00	0.00
Cor. Proportions	1.00	0.65	0.14	0.08	0.21	0.06	0.08	0.00	0.00
Non-Res Variance	133.47	43.50	12.32	10.36	19.23	1.96	10.36	0.00	0.00
-----									
21.37 Bulls per 100 Cows									
32.40 Calves per 100 Cows									
8.53 Spikes per 100 Cows									
39.91 Spikes per 100 Bulls									
60.09 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
60.09 Branched-antlered bulls per 100 Bulls									
66.42 Spikes per 100 Branched-antlered bulls									

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 SUBUNIT 22.28, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	1	0	0	0	0	0	0	0	0
Group 2	1	0	1	1	0	0	1	0	0	0
Group 3	2	2	0	0	0	0	0	0	0	0
Group 4	6	4	0	0	2	0	0	0	0	0
Group 5	4	3	0	0	1	0	0	0	0	0
Group 6	7	7	0	0	0	0	0	0	0	0
Group 7	4	1	3	1	0	2	1	0	0	0
Group 8	2	2	0	0	0	0	0	0	0	0
Group 9	7	7	0	0	0	0	0	0	0	0
Group 10	2	0	2	1	0	1	1	0	0	0
Group 11	3	2	0	0	1	0	0	0	0	0
Group 12	1	0	1	1	0	0	1	0	0	0

Total Counted	40	29	7	4	4	3	4	0	0	0
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Cor. Estimates	56.87	39.16	12.62	8.34	5.08	4.29	8.34	0.00	0.00	0.00
Cor. Proportions	1.00	0.69	0.22	0.15	0.09	0.08	0.15	0.00	0.00	0.00
Non-Res Variance	92.07	58.72	19.36	12.77	1.99	2.87	12.77	0.00	0.00	0.00
32.24 Bulls per 100 Cows										
12.97 Calves per 100 Cows										
10.95 Spikes per 100 Cows										
33.96 Spikes per 100 Bulls										
66.04 Raghorns per 100 Bulls										
0.00 Adult bulls per 100 Bulls										
66.04 Branched-antlered bulls per 100 Bulls										
51.43 Spikes per 100 Branched-antlered bulls										

SUBUNIT 03.22, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	4	2	1	0	1	1	0	0	0	0
Group 2	3	2	0	0	1	0	0	0	0	0
Group 3	5	4	0	0	1	0	0	0	0	0
Group 4	6	6	0	0	0	0	0	0	0	0

Total Counted	18	14	1	0	3	1	0	0	0	0
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Cor. Estimates	33.30	28.16	1.37	0.00	3.78	1.37	0.00	0.00	0.00	0.00
Cor. Proportions	1.00	0.85	0.04	0.00	0.11	0.04	0.00	0.00	0.00	0.00
Non-Res Variance	235.15	224.99	0.50	0.00	1.01	0.50	0.00	0.00	0.00	0.00
4.86 Bulls per 100 Cows										
13.41 Calves per 100 Cows										
4.86 Spikes per 100 Cows										
100.00 Spikes per 100 Bulls										
0.00 Raghorns per 100 Bulls										
0.00 Adult bulls per 100 Bulls										
0.00 Branched-antlered bulls per 100 Bulls										

SUBUNIT 22.18, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	1	0	0	1	0	0	0	0	0
Group 2	2	1	0	0	1	0	0	0	0	0
Group 3	2	1	1	1	0	0	1	0	0	0
Group 4	2	1	0	0	1	0	0	0	0	0
Group 5	2	2	0	0	0	0	0	0	0	0
Group 6	5	3	0	0	2	0	0	0	0	0
Group 7	5	3	1	0	1	1	0	0	0	0
Group 8	2	1	0	0	1	0	0	0	0	0
Group 9	2	1	0	0	1	0	0	0	0	0
Group 10	9	7	1	0	1	1	0	0	0	0
Group 11	1	1	0	0	0	0	0	0	0	0
Group 12	1	0	1	0	0	1	0	0	0	0
Group 13	2	1	0	0	1	0	0	0	0	0
Group 14	8	8	0	0	0	0	0	0	0	0
Group 15	4	3	0	0	1	0	0	0	0	0
Group 16	1	1	0	0	0	0	0	0	0	0
Group 17	1	1	0	0	0	0	0	0	0	0
Group 18	2	1	0	0	1	0	0	0	0	0
Group 19	1	1	0	0	0	0	0	0	0	0
Group 20	2	2	0	0	0	0	0	0	0	0
Group 21	1	1	0	0	0	0	0	0	0	0
Group 22	1	1	0	0	0	0	0	0	0	0
Group 23	1	1	0	0	0	0	0	0	0	0
Group 24	3	2	0	0	1	0	0	0	0	0

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 Total Counted    62   45   4   1   13   3   1   0   0

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Cor. Estimates    184.99 125.84 12.52 3.25 46.62 9.27 3.25 0.00 0.00  
 Cor. Proportions    1.00 0.68 0.07 0.02 0.25 0.05 0.02 0.00 0.00  
 Non-Res Variance 1473.29 721.70 28.32 7.33 164.03 20.99 7.33 0.00 0.00  
 9.95 Bulls per 100 Cows  
 37.05 Calves per 100 Cows  
 7.37 Spikes per 100 Cows  
 74.03 Spikes per 100 Bulls  
 25.97 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 25.97 Branched-antlered bulls per 100 Bulls  
 285.06 Spikes per 100 Branched-antlered bulls

SUBUNIT 22.23, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	0	1	0	0	1	0	0	0	0
Group 2	2	1	0	0	1	0	0	0	0	0
Group 3	1	0	1	1	0	0	1	0	0	0
Group 4	1	1	0	0	0	0	0	0	0	0
Group 5	4	3	0	0	1	0	0	0	0	0
Group 6	2	2	0	0	0	0	0	0	0	0
Group 7	2	2	0	0	0	0	0	0	0	0



Group 8	4	2	1	0	1	1	0	0	0
Group 9	1	1	0	0	0	0	0	0	0
-----									
Total Counted	18	12	3	1	3	2	1	0	0
=====									
Cor. Estimates	42.16	29.76	6.60	3.75	5.81	2.85	3.75	0.00	0.00
Cor. Proportions	1.00	0.71	0.16	0.09	0.14	0.07	0.09	0.00	0.00
Non-Res Variance	154.13	106.59	11.62	10.28	6.37	1.34	10.28	0.00	0.00
-----									
22.17 Bulls per 100 Cows									
19.51 Calves per 100 Cows									
9.58 Spikes per 100 Cows									
43.22 Spikes per 100 Bulls									
56.78 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
56.78 Branched-antlered bulls per 100 Bulls									
76.13 Spikes per 100 Branched-antlered bulls									
-----									

SUBUNIT 02.02, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	2	0	0	0	0	0	0	0
Group 2	4	4	0	0	0	0	0	0	0
Group 3	4	3	0	0	1	0	0	0	0
Group 4	3	2	0	0	1	0	0	0	0
Group 5	2	1	1	1	0	0	1	0	0
Group 6	3	3	0	0	0	0	0	0	0
Group 7	2	1	0	0	1	0	0	0	0
Group 8	4	2	0	0	2	0	0	0	0
Group 9	2	2	0	0	0	0	0	0	0
Group 10	5	4	0	0	1	0	0	0	0
Group 11	2	1	0	0	1	0	0	0	0
Group 12	7	4	1	0	2	1	0	0	0
-----									
Total Counted	40	29	2	1	9	1	1	0	0
=====									
Cor. Estimates	57.72	41.65	4.35	3.25	11.72	1.10	3.25	0.00	0.00
Cor. Proportions	1.00	0.72	0.08	0.06	0.20	0.02	0.06	0.00	0.00
Non-Res Variance	94.17	50.73	7.43	7.33	4.96	0.11	7.33	0.00	0.00
-----									
10.44 Bulls per 100 Cows									
28.13 Calves per 100 Cows									
2.63 Spikes per 100 Cows									
25.22 Spikes per 100 Bulls									
74.78 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
74.78 Branched-antlered bulls per 100 Bulls									
33.72 Spikes per 100 Branched-antlered bulls									
-----									

SUBUNIT 02.06, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	3	3	0	0	0	0	0	0	0
Group 2	5	3	0	0	2	0	0	0	0

Group 3	7	4	0	0	3	0	0	0	0
Group 4	8	6	0	0	2	0	0	0	0
-----									
Total Counted	23	16	0	0	7	0	0	0	0
=====									
Cor. Estimates	27.35	19.11	0.00	0.00	8.24	0.00	0.00	0.00	0.00
Cor. Proportions	1.00	0.70	0.00	0.00	0.30	0.00	0.00	0.00	0.00
Non-Res Variance	38.32	19.94	0.00	0.00	3.37	0.00	0.00	0.00	0.00
0.00 Bulls per 100 Cows									
43.11 Calves per 100 Cows									
0.00 Spikes per 100 Cows									
-----									

SUBUNIT 02.05, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	3	2	0	0	1	0	0	0	0
Group 2	6	5	0	0	1	0	0	0	0
Group 3	7	7	0	0	0	0	0	0	0
Group 4	3	3	0	0	0	0	0	0	0
Group 5	4	2	0	0	2	0	0	0	0
Group 6	3	3	0	0	0	0	0	0	0
Group 7	3	2	0	0	1	0	0	0	0
Group 8	6	3	3	2	0	1	2	0	0
Group 9	1	1	0	0	0	0	0	0	0
Group 10	16	11	0	0	5	0	0	0	0
Group 11	2	1	1	1	0	0	0	1	0
Group 12	1	1	0	0	0	0	0	0	0
Group 13	3	3	0	0	0	0	0	0	0
Group 14	5	3	0	0	2	0	0	0	0
-----									
Total Counted	63	47	4	3	12	1	2	1	0
=====									
Cor. Estimates	131.71	95.49	12.26	9.26	23.96	3.00	6.00	3.25	0.00
Cor. Proportions	1.00	0.73	0.09	0.07	0.18	0.02	0.05	0.02	0.00
Non-Res Variance	798.47	378.26	61.39	31.36	56.49	6.01	24.03	7.33	0.00
12.84 Bulls per 100 Cows									
25.09 Calves per 100 Cows									
3.14 Spikes per 100 Cows									
24.49 Spikes per 100 Bulls									
48.97 Raghorns per 100 Bulls									
26.54 Adult bulls per 100 Bulls									
75.51 Branched-antlered bulls per 100 Bulls									
32.43 Spikes per 100 Branched-antlered bulls									
-----									

SUBUNIT 03.40, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	9	9	0	0	0	0	0	0	0
Group 2	1	0	1	1	0	0	0	1	0
Group 3	1	1	0	0	0	0	0	0	0
Group 4	2	1	0	0	1	0	0	0	0
Group 5	1	1	0	0	0	0	0	0	0

Group 6	14	11	1	0	2	1	0	0	0
Group 7	1	0	1	1	0	0	1	0	0
Group 8	2	2	0	0	0	0	0	0	0
Group 9	57	2	2	0	0	2	0	0	53
Group 10	2	0	2	1	0	1	1	0	0
Group 11	9	9	0	0	0	0	0	0	0
Group 12	3	2	0	0	1	0	0	0	0
Group 13	3	2	0	0	1	0	0	0	0
Group 14	4	3	0	0	1	0	0	0	0
Group 15	6	3	1	1	2	0	1	0	0
Group 16	6	5	0	0	1	0	0	0	0
Group 17	11	10	0	0	1	0	0	0	0
Group 18	11	9	1	0	1	1	0	0	0
Group 19	2	2	0	0	0	0	0	0	0
Group 20	1	0	1	0	0	1	0	0	0
Group 21	6	5	0	0	1	0	0	0	0
Group 22	1	0	1	1	0	0	1	0	0
Group 23	1	1	0	0	0	0	0	0	0
Group 24	3	2	0	0	1	0	0	0	0
Group 25	4	2	1	1	1	0	1	0	0
Group 26	5	2	2	0	1	2	0	0	0
Group 27	4	0	4	4	0	0	2	2	0

-----  
 Total Counted 170 84 18 10 15 8 7 3 53  
 =====

Cor. Estimates 250.85 131.01 42.66 24.25 24.18 18.41 20.53 3.72 53.00  
 Cor. Proportions 1.00 0.52 0.17 0.10 0.10 0.07 0.08 0.01 0.21  
 Non-Res Variance 786.51 388.17 171.51 75.18 26.78 46.93 71.96 1.36 0.01  
 32.56 Bulls per 100 Cows  
 18.46 Calves per 100 Cows  
 14.06 Spikes per 100 Cows  
 43.16 Spikes per 100 Bulls  
 48.13 Raghorns per 100 Bulls  
 8.71 Adult bulls per 100 Bulls  
 56.84 Branched-antlered bulls per 100 Bulls  
 75.93 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 03.37, STRATUM 2

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	1	1	0	0	0	0	0	0	0	0
Group 2	3	2	0	0	1	0	0	0	0	0
Group 3	2	1	0	0	1	0	0	0	0	0
Group 4	5	4	0	0	1	0	0	0	0	0
Group 5	2	1	1	1	0	0	1	0	0	0
Group 6	4	1	3	1	0	2	1	0	0	0
Group 7	1	1	0	0	0	0	0	0	0	0
Group 8	1	0	1	0	0	1	0	0	0	0
Group 9	1	0	1	1	0	0	1	0	0	0
Group 10	3	0	3	0	0	3	0	0	0	0
Group 11	2	2	0	0	0	0	0	0	0	0
Group 12	3	1	1	0	1	1	0	0	0	0
Group 13	3	3	0	0	0	0	0	0	0	0
Group 14	1	1	0	0	0	0	0	0	0	0

Group 15	6	5	0	0	1	0	0	0	0
Group 16	1	1	0	0	0	0	0	0	0
Group 17	1	1	0	0	0	0	0	0	0
Group 18	1	0	1	1	0	0	1	0	0
Group 19	1	1	0	0	0	0	0	0	0

-----  
 Total Counted 42 26 11 4 5 7 4 0 0  
 =====

Cor. Estimates 96.79 58.68 27.29 8.72 10.82 18.57 8.72 0.00 0.00  
 Cor. Proportions 1.00 0.61 0.28 0.09 0.11 0.19 0.09 0.00 0.00  
 Non-Res Variance 371.53 191.17 80.57 13.57 15.68 61.77 13.57 0.00 0.00  
 46.50 Bulls per 100 Cows  
 18.43 Calves per 100 Cows  
 31.64 Spikes per 100 Cows  
 68.05 Spikes per 100 Bulls  
 31.95 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 31.95 Branched-antlered bulls per 100 Bulls  
 213.01 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 26.01, STRATUM 2

Characteristic Total Cows Bulls BABull Calves Spikes Raghrn AdBull Unclas

Group 1	3	3	0	0	0	0	0	0	0
Group 2	3	1	2	2	0	0	2	0	0
Group 3	5	3	0	0	2	0	0	0	0
Group 4	12	10	0	0	2	0	0	0	0
Group 5	3	1	0	0	2	0	0	0	0
Group 6	1	1	0	0	0	0	0	0	0
Group 7	1	1	0	0	0	0	0	0	0
Group 8	1	1	0	0	0	0	0	0	0
Group 9	1	0	1	1	0	0	1	0	0
Group 10	4	2	0	0	2	0	0	0	0
Group 11	2	1	0	0	1	0	0	0	0
Group 12	1	1	0	0	0	0	0	0	0

-----  
 Total Counted 37 25 3 3 9 0 3 0 0  
 =====

Cor. Estimates 49.24 32.26 4.57 4.57 12.41 0.00 4.57 0.00 0.00  
 Cor. Proportions 1.00 0.66 0.09 0.09 0.25 0.00 0.09 0.00 0.00  
 Non-Res Variance 61.73 23.93 3.74 3.74 10.05 0.00 3.74 0.00 0.00  
 14.18 Bulls per 100 Cows  
 38.46 Calves per 100 Cows  
 0.00 Spikes per 100 Cows  
 0.00 Spikes per 100 Bulls  
 100.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 100.00 Branched-antlered bulls per 100 Bulls  
 0.00 Spikes per 100 Branched-antlered bulls  
 -----

SUBUNIT 26.07, STRATUM 2

Characteristic Total Cows Bulls BABull Calves Spikes Raghrn AdBull Unclas

Group 1	2	1	0	0	1	0	0	0	0
Group 2	6	6	0	0	0	0	0	0	0
Group 3	4	4	0	0	0	0	0	0	0
Group 4	16	15	0	0	1	0	0	0	0
Group 5	4	3	0	0	1	0	0	0	0
Group 6	25	23	0	0	2	0	0	0	0
Group 7	2	2	0	0	0	0	0	0	0
Group 8	14	12	0	0	2	0	0	0	0
Group 9	16	12	0	0	4	0	0	0	0
Group 10	3	3	0	0	0	0	0	0	0
Group 11	7	5	1	0	1	1	0	0	0
Group 12	7	7	0	0	0	0	0	0	0
Group 13	5	2	2	1	1	1	1	0	0
Group 14	42	30	0	0	12	0	0	0	0
Group 15	2	1	0	0	1	0	0	0	0
Group 16	6	5	1	0	0	1	0	0	0
Group 17	8	8	0	0	0	0	0	0	0
Group 18	25	18	0	0	7	0	0	0	0
Group 19	22	18	1	0	3	1	0	0	0
Group 20	20	15	2	0	3	2	0	0	0
Total Counted	236	190	7	1	39	6	1	0	0
Cor. Estimates	248.59	199.97	7.83	1.30	40.79	6.53	1.30	0.00	0.00
Cor. Proportions	1.00	0.80	0.03	0.01	0.16	0.03	0.01	0.00	0.00
Non-Res Variance	86.58	60.29	1.83	0.39	2.97	0.66	0.39	0.00	0.00
3.92 Bulls per 100 Cows									
20.40 Calves per 100 Cows									
3.27 Spikes per 100 Cows									
83.39 Spikes per 100 Bulls									
16.61 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
16.61 Branched-antlered bulls per 100 Bulls									
502.20 Spikes per 100 Branched-antlered bulls									

SUBUNIT 25.02, STRATUM 2

Characteristic	Total	Cows	Bulls	BA Bull	Calves	Spikes	Raghrn	Ad Bull	Unclas
Group 1	2	0	2	2	0	0	1	1	0
Group 2	15	10	3	1	2	2	1	0	0
Group 3	7	0	7	7	0	0	7	0	0
Group 4	2	2	0	0	0	0	0	0	0
Group 5	4	0	4	4	0	0	1	3	0
Total Counted	30	12	16	14	2	2	10	4	0
Cor. Estimates	50.35	15.20	32.78	30.42	2.36	2.36	19.64	10.78	0.00
Cor. Proportions	1.00	0.30	0.65	0.60	0.05	0.05	0.39	0.21	0.00
Non-Res Variance	215.30	26.17	164.17	162.45	0.86	0.86	83.74	41.37	0.00
215.69 Bulls per 100 Cows									
15.55 Calves per 100 Cows									
15.55 Spikes per 100 Cows									
7.21 Spikes per 100 Bulls									

59.92 Raghorns per 100 Bulls  
 32.87 Adult bulls per 100 Bulls  
 92.79 Branched-antlered bulls per 100 Bulls  
 7.77 Spikes per 100 Branched-antlered bulls

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SUBUNIT 26.14, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	15	11	4	3	0	1	3	0	0
Group 2	2	0	2	2	0	0	0	2	0
Group 3	2	0	2	2	0	0	1	1	0
Group 4	2	0	2	2	0	0	2	0	0
Group 5	3	0	3	3	0	0	2	1	0
Group 6	2	0	2	2	0	0	1	1	0
Group 7	2	0	2	2	0	0	2	2	0
Total Counted	28	11	17	16	0	1	9	7	0

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Cor. Estimates 32.27 11.09 21.18 20.17 0.00 1.01 11.02 9.15 0.00  
 Cor. Proportions 1.00 0.34 0.66 0.63 0.00 0.03 0.34 0.28 0.00  
 Non-Res Variance 14.37 1.01 12.62 12.56 0.00 0.01 4.97 5.12 0.00  
 190.95 Bulls per 100 Cows  
 0.00 Calves per 100 Cows  
 9.09 Spikes per 100 Cows  
 4.76 Spikes per 100 Bulls  
 52.04 Raghorns per 100 Bulls  
 43.20 Adult bulls per 100 Bulls  
 95.24 Branched-antlered bulls per 100 Bulls  
 5.00 Spikes per 100 Branched-antlered bulls

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SUBUNIT 25.10, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	2	1	1	0	0	1	0	0	0
Total Counted	2	1	1	0	0	1	0	0	0

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Cor. Estimates 2.26 1.13 1.13 0.00 0.00 1.13 0.00 0.00 0.00  
 Cor. Proportions 1.00 0.50 0.50 0.00 0.00 0.50 0.00 0.00 0.00  
 Non-Res Variance 0.59 0.15 0.15 0.00 0.00 0.15 0.00 0.00 0.00  
 100.00 Bulls per 100 Cows  
 0.00 Calves per 100 Cows  
 100.00 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

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SUBUNIT 25.08, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	1	0	1	1	0	0	0	1	0
Group 2	3	0	3	3	0	0	1	2	0
Group 3	6	4	0	0	2	0	0	0	0
-----									
Total Counted	10	4	4	4	2	0	1	3	0
=====									
Cor. Estimates	17.85	6.49	8.11	8.11	3.25	0.00	2.15	5.96	0.00
Cor. Proportions	1.00	0.36	0.45	0.45	0.18	0.00	0.12	0.33	0.00
Non-Res Variance	59.65	16.17	23.27	23.27	4.04	0.00	2.46	10.97	0.00
-----									
124.96 Bulls per 100 Cows									
50.00 Calves per 100 Cows									
0.00 Spikes per 100 Cows									
0.00 Spikes per 100 Bulls									
26.46 Raghorns per 100 Bulls									
73.54 Adult bulls per 100 Bulls									
100.00 Branched-antlered bulls per 100 Bulls									
0.00 Spikes per 100 Branched-antlered bulls									

SUBUNIT 25.01, STRATUM 1

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
-----									
Group 1	6	3	1	0	2	1	0	0	0
Group 2	4	2	0	0	2	0	0	0	0
Group 3	6	4	0	0	2	0	0	0	0
Group 4	5	3	1	1	1	0	1	0	0
Group 5	20	10	1	0	9	1	0	0	0
Group 6	5	5	0	0	0	0	0	0	0
-----									
Total Counted	46	27	3	1	16	2	1	0	0
=====									
Cor. Estimates	55.34	32.92	3.27	1.15	19.15	2.12	1.15	0.00	0.00
Cor. Proportions	1.00	0.59	0.06	0.02	0.35	0.04	0.02	0.00	0.00
Non-Res Variance	92.24	38.99	0.30	0.17	10.96	0.14	0.17	0.00	0.00
-----									
9.93 Bulls per 100 Cows									
58.17 Calves per 100 Cows									
6.45 Spikes per 100 Cows									
64.92 Spikes per 100 Bulls									
35.08 Raghorns per 100 Bulls									
0.00 Adult bulls per 100 Bulls									
35.08 Branched-antlered bulls per 100 Bulls									
185.07 Spikes per 100 Branched-antlered bulls									

SUBUNIT 25.05, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
-----									
Group 1	3	3	0	0	0	0	0	0	0
Group 2	15	10	1	0	4	1	0	0	0
Group 3	22	17	2	0	3	2	0	0	0
Group 4	11	5	2	0	4	2	0	0	0
Group 5	3	2	1	0	0	1	0	0	0
Group 6	2	2	0	0	0	0	0	0	0

Group 7	7	5	1	0	1	1	0	0	0
Group 8	5	3	1	0	1	1	0	0	0
Group 9	7	4	0	0	3	0	0	0	0
Group 10	25	19	1	0	5	1	0	0	0
Group 11	14	14	0	0	0	0	0	0	0
Group 12	9	8	0	0	1	0	0	0	0
Group 13	3	2	0	0	1	0	0	0	0
Group 14	21	12	4	0	5	4	0	0	0
Group 15	6	4	1	0	1	1	0	0	0
Group 16	13	7	0	0	5	0	0	0	1
Group 17	21	18	0	0	3	0	0	0	0
Group 18	2	0	2	2	0	0	2	0	0
Group 19	1	0	1	1	0	0	0	1	0
Group 20	2	2	0	0	0	0	0	0	0
Group 21	9	8	0	0	1	0	0	0	0

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 Total Counted 201 145 17 3 38 14 2 1 1  
 =====

Cor. Estimates 243.07 172.79 23.69 6.85 45.36 16.84 3.10 3.75 1.23  
 Cor. Proportions 1.00 0.71 0.10 0.03 0.19 0.07 0.01 0.02 0.01  
 Non-Res Variance 414.51 210.56 18.96 13.70 24.83 5.26 3.42 10.28 0.28  
 13.71 Bulls per 100 Cows  
 26.25 Calves per 100 Cows  
 9.75 Spikes per 100 Cows  
 71.09 Spikes per 100 Bulls  
 13.09 Raghorns per 100 Bulls  
 15.81 Adult bulls per 100 Bulls  
 28.91 Branched-antlered bulls per 100 Bulls  
 245.95 Spikes per 100 Branched-antlered bulls  
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SUBUNIT 26.19, STRATUM 2

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
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 Total Counted 0 0 0 0 0 0 0 0 0  
 =====

Cor. Estimates 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00  
 Non-Res Variance 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00  
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SUBUNIT 25.06, STRATUM 3

Characteristic	Total	Cows	Bulls	BABull	Calves	Spikes	Raghrn	AdBull	Unclas
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Group 1	5	3	0	0	2	0	0	0	0
Group 2	7	5	0	0	2	0	0	0	0
Group 3	4	3	0	0	1	0	0	0	0
Group 4	58	43	0	0	10	0	0	0	5
Group 5	20	13	3	0	4	3	0	0	0
Group 6	30	20	0	0	10	0	0	0	0
Group 7	9	5	0	0	4	0	0	0	0

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 Total Counted 133 92 3 0 33 3 0 0 5  
 =====



Cor. Estimates 154.45 106.38 3.14 0.00 39.93 3.14 0.00 0.00 5.00  
 Cor. Proportions 1.00 0.69 0.02 0.00 0.26 0.02 0.00 0.00 0.03  
 Non-Res Variance 255.72 115.65 0.44 0.00 27.66 0.44 0.00 0.00 0.00  
 2.95 Bulls per 100 Cows  
 37.53 Calves per 100 Cows  
 2.95 Spikes per 100 Cows  
 100.00 Spikes per 100 Bulls  
 0.00 Raghorns per 100 Bulls  
 0.00 Adult bulls per 100 Bulls  
 0.00 Branched-antlered bulls per 100 Bulls

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SUBUNIT 25.04, STRATUM 3

Characteristic	Total	Cows	Bulls	BA	Bull	Calves	Spikes	Raghrn	AdBull	Unclas
Group 1	3	2	1	0	0	1	0	0	0	0
Group 2	82	56	7	2	10	5	2	0	9	
Group 3	1	1	0	0	0	0	0	0	0	
Group 4	3	3	0	0	0	0	0	0	0	
Group 5	4	2	0	0	2	0	0	0	0	
Group 6	22	15	3	2	4	1	2	0	0	
Group 7	2	0	2	2	0	0	2	0	0	
Group 8	4	1	3	3	0	0	3	0	0	
Group 9	1	0	1	1	0	0	0	1	0	

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Total Counted 122 80 17 10 16 7 9 1 9

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Cor. Estimates 169.33 101.01 41.59 33.62 17.73 7.97 27.14 6.48 9.00  
 Cor. Proportions 1.00 0.60 0.25 0.20 0.10 0.05 0.16 0.04 0.05  
 Non-Res Variance 559.57 203.68 245.28 243.22 6.22 1.82 207.74 35.48 0.00  
 41.18 Bulls per 100 Cows  
 17.55 Calves per 100 Cows  
 7.89 Spikes per 100 Cows  
 19.17 Spikes per 100 Bulls  
 65.25 Raghorns per 100 Bulls  
 15.57 Adult bulls per 100 Bulls  
 80.83 Branched-antlered bulls per 100 Bulls  
 23.72 Spikes per 100 Branched-antlered bulls

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