2008 STATUS REPORT ON DEER MANAGEMENT IN NORTH DAKOTA

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2007 Regular Deer-Gun Season Structure - Regulations for the 2007 regular deer-gun season were applied to all 38 hunting units within the state (Figure 1). Deer licenses are initially issued through a lottery except for landowner gratis licenses. In 1993, a weighted priority lottery system was instituted. The priority system is similar to South Dakota's in which unsuccessful applicants have their name entered more times in the drawing the longer they have been unsuccessful. The licenses are issued for specific deer types (antlered or antlerless white-tailed deer, antlered or antlerless mule deer, and antlered or antlerless any deer). The gratis landowner licenses allow any deer to be taken, but are restrictive in that the holders may only hunt on their own land. A total of 144,464 licenses were issued of the 148,550 licenses made available for the 2007 regular deer-gun season (Table 1a). The distribution of these deer licenses was as follows: 15,086 gratis landowners, 123,171 residents, and 6,207 non-resident lottery licenses.

The deer-gun season throughout the state was 16½ days in length (November 9 to 25). The deer gun season started at noon, CST, November 9, 2007 for all units. The daily hunting hours are from one-half hour before sunrise to one-half hour after sunset.

2007 Deer-Gun Season Harvest - Based upon harvest survey questionnaires it is estimated that 93% of the licensees actively attempted to hunt and harvest a deer. This resulted in the harvest of 89,230 white-tailed deer and 8,888 mule deer. The overall success rate for licensees that actually hunted was 74%. A breakdown of the harvest, by species of deer and hunting unit, is provided in Table 2a.

2007 Muzzleloading Long Gun Season Structure - The muzzleloader season was first mandated by the state legislature for the 1987 season. This season was modified during the 1996-97 state legislature. The change allowed for 2% of the white-tailed deer gun permits to be allocated for muzzleloader season, of which up to one-half may be antlered licenses. In 2007, there were 1,398 antlered and 1,399 antlerless white-tailed deer licenses issued. The season opened at noon, CST, November 30, 2007 and ran from one-half hour before sunrise to one-half hour after sunset each day thereafter through December 16, 2007. Licenses are valid for all of North Dakota. The licenses were issued by lottery. A priority system is in place for the drawing of these licenses. Legal weapons were long guns of .45 caliber or larger, and handguns .50 caliber or larger, loaded through the muzzle, with flint or percussion ignition, firing black powder or black powder substitutes. Smokeless powders are not legal. In-line type percussion locks were legalized in 1994, but telescopic sights remain illegal. No magnification (1x) scopes are legal.

2007 Muzzleloading Long Gun Harvest - All 2,797 muzzleloader licensee's were sent a questionnaire, of which an estimated 2,331 actually hunted during the season (83%). The projected harvest of white-tailed deer was 1,023 deer (540 antlered and 483 antlerless) for an overall success rate of 44% (Table 3a).

2007Archery Season Structure - Archery deer licenses are issued over the counter through license vendors and county auditors with no restrictions on species or sex. The 2007 archery deer season started at noon, CTS, August 31, 2007 and continued from one-half hour before sunrise to one-half hour after sunset each day until January 6, 2008. The deer-bow season is open during the entire deer-gun season with the restriction that all bow hunters must wear blaze orange during the deer gun season. Any deer was legal, with no unit restrictions for residents. Nonresidents are restricted in the number of mule deer licenses available to 15% of the previous season's regular-gun mule deer licenses.

2007Archery Harvest - In total, 19,964 archery licenses were sold in 2007. After the season, 4028 questionnaires were sent to resident and nonresident license holders from the 2006 season. Expanding the sample results projected that 18,960 of the hunters who bought a license actually went hunting (95%). These deer-bow hunters had an overall success rate of 40%, with a total harvest of 7,687 deer (6,792 white-tailed deer and 895 mule deer) (Table 3a).

2007 Youth Deer Gun Season - An experimental youth deer gun season was initiated in 1994. The season is a one time opportunity for youths 14 and 15 years of age at the time of the application deadline. All regular deer gun season regulations and weapon restrictions applied. This includes a half price ($10.00) license for all youths under sixteen. In addition, each youth licensee must be accompanied by at least one unarmed parent, guardian, or adult authorized by their parent or guardian. In 2007, an unlimited number of any white-tailed deer and antlerless mule deer permits were available and a limited number of antlered mule deer permits (i.e., 10% of the total antlered mule deer licenses available, or 340 licenses in 2007. The nine and one-half day season ran from noon, CTS, September 14 and closed September 23, with the option that youth license holders can also hunt during the regular deer-gun season if they are unsuccessful in the youth season.

2007 Youth Deer Gun Season Harvest - After the youth season, questionnaires were sent to all 1898 licensees. An estimated 1,307 teenagers participated in the youth season (69%). They experienced an overall success rate of 45%, with a total harvest of 593 deer (379 white-tailed deer and 214 mule deer) (Table 3a).

2006 Special Herd Reduction Deer Bow Season - There are four areas in North Dakota open for special herd reduction seasons. These areas include: within the city limits of Bismarck; Fargo; USDA-ARS Research facility in Mandan; and Graham's Island State Park near Devils Lake. These areas each have special regulations to fit their individual needs.

In the city of Bismarck, the chief of police issued antlerless white-tailed deer permits for portions of the city as the need arises. The season ran from August 31, 2007 through January 31, 2008. These special hunt permits are above the allotted number of permits allowed by the state during

regular deer-gun season. All the information and paperwork for these hunts are handled by the entity in charge; therefore, it requires a minimum effort by the Game & Fish Department. The harvest from these special hunts has been minimal in recent years, 50-75 animals, but it does help to disperse the deer, and reduce deer depredation conflicts.

2007-2008 Population Trend - White-tailed deer are distributed throughout North Dakota. Population densities vary by region and are influenced by land use patterns, human population densities, habitat types, and climate. In 1958, big game biologists divided the state into 41 subunits with permanent boundaries that most nearly coincide with identified environmental influences. These management subunit's boundaries also coincide with hunting unit boundaries. To provide comparative annual population trend data, permanent aerial winter survey areas have been established within each of the 41 subunits, thus permitting unit specific deer management. Since 1999, population trend data has also been collected on deer sighted per hour of effort by hunters. Additionally, information on deer-vehicle collisions has been compiled on a county-by-county basis across the state. Regular population indices mentioned above, have been used to monitor white-tailed deer population trends. Population trends and indices for white-tailed deer are summarized in Table 4a. Available data suggests increasing white-tailed deer numbers in a band running diagonal from the southwest to the northeastern corner of the state.

The main range of mule deer in North Dakota is the region of the state southwest of the Missouri River. The unitized system of management for white-tailed deer is also the basis for mule deer management. The Badlands region is considered the primary mule deer range and permanent deer population study areas have been established since 1954. Population trend and demographic data for mule deer is obtained from aerial survey areas each spring and fall, respectively. Population trend data for mule deer is also obtained from hunter observations. Population index data for mule deer is summarized in Table 5a. Available data suggests increasing mule deer numbers throughout the badlands and that portion of the state south and west of the Missouri River. Demographic information, based upon hunter observations and aerial surveys, are summarized for white-tailed and mule deer in Tables 6a and 7a, respectively.

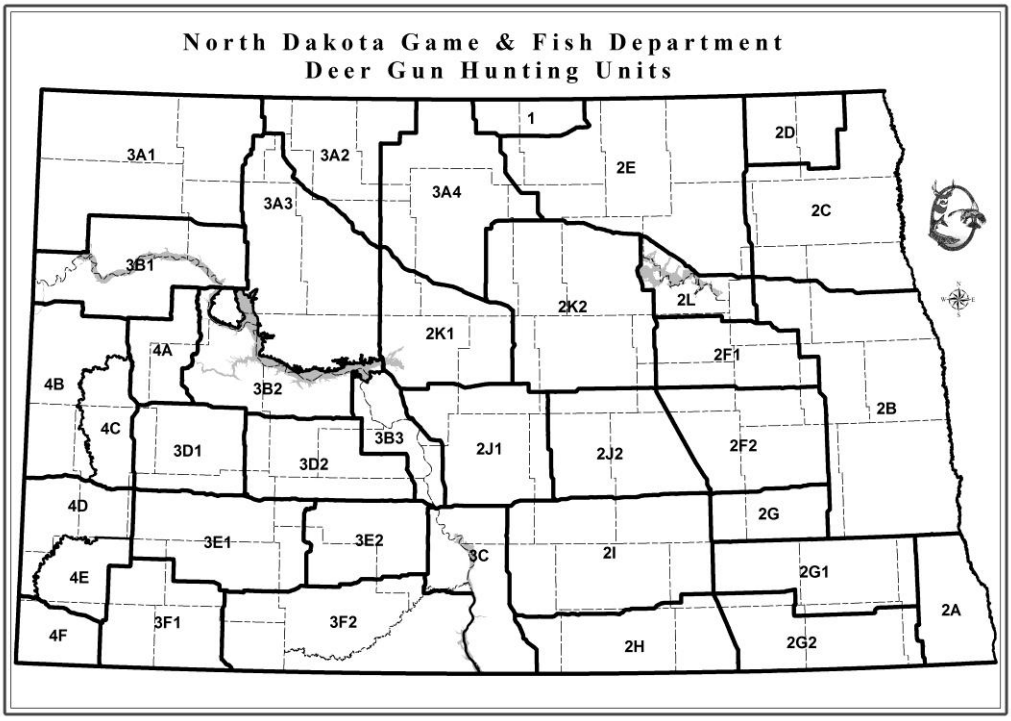

Figure 1. Distribution of deer hunting units in North Dakota.

Appendix A

Summary of 2007-2008 Mule Deer and White-tailed Deer Harvest, Census, and Demographic Data

1. A total of 144,464 licenses were issued of the 148,550 licenses made available for the regular deer-gun season (Table 1a).

2. The overall hunter success for the 2007 regular gun season was 74 percent.

3. Deer-gun hunters harvested an estimated 89,230 white-tailed deer and 8,888 mule deer during the 2007 season (Table 2a).

4. Youth deer hunters in 2007 had a success rate of 45.4 percent during the youth season, and harvested 379 white-tailed deer and 294 mule deer during the youth deer season (Table 3a). During the regular deer-gun season an additional 1,077 white-tailed deer, and 328 mule deer harvested by youth hunters.

5. Muzzleloader hunters in 2007 had a success rate of 43.9 percent, and harvested 1,023 white-tailed deer (Table 3a).

6. Archery hunters in 2007 had a success rate of 40.5 percent, and harvested 6,792 white-tailed deer and 895 mule deer (Table 3a).

7. Population indices for white-tailed deer suggest a stable to increasing population in a band from southwestern corner of the state to the northeastern corner, with decreasing deer numbers in the northwestern and southeastern portion of the state (Table 4a) (See Figures 2 and 3).

8. Population indices for mule deer suggest a stable to increasing population in the badlands and stable to increasing numbers in the Slope and Missouri River Major Management areas (Table 5a) (Figure 4).

9. Based on 2497 useable questionnaires from the 2007 Hunter Observation Survey (40.6% return rate; n=58,148 white-tailed deer classified), overall white-tailed deer population demographics suggest that about 20 percent of the population were antlered deer prior to, or on the opening weekend of the deer-gun season (Table 6a).

10. Based on fall aerial surveys (n=2,126 mule deer classified), and Hunter Observation Survey results (n=19,844 mule deer classified), overall mule deer population demographics suggest that about 18 percent of the population were antlered deer prior to, or on the opening weekend of the deer-gun season (Table 7a).

11. In 2007 information on the number of elk and moose observed during the opening weekend of the deer was added to the hunter observation questionnaire. Maps summarizing the results of the data set for elk and moose are given in Figures 5 and 6.

Table 1a. License numbers for hunting units by license type for the 2007 regular gun season.

MGMT UNIT	HUNTING UNIT	Any Deer Antlered	Any Deer Antlerless	WT Deer Antlered	WT Deer Antlerless	Mule Deer Antlered	Mule Deer Antlerless
TURTLE MTS	I	1,000	1,500				
RED RIVER	2A	600	600				
	2B	4,600	6,500				
	2C	3,000	8,000				
PEMBINA HILLS	2D	1,600	2,500				
SHEYENNE	2F1	2,600	4,500				
	2F2	2,200	4,500				
	2G	1,000	1,750				
	2G1	2,300	2,800				
	2G2	1,950	2,500				
COTEAU	2E	2,600	6,000				
	2H	1,100	2,500				
	2I	1,800	3,500				
	2J1	800	1,800				
	2J2	2,000	4,200				
	2K1	1,000	2,500				
	2K2	2,800	8,000				
	3A1	1,800	1,800				
	3A3	1,300	2,400				
DEVILS LAKE	2L	800	1,500				
SOURIS	3A2	1,300	2,400				
	3A4	2,300	4,800				
MISSOURI	3B1			700	1,500	500	900
	3B2			200	350	200	250
	3B3	150	200	1,100	1,800		
	3C	100	100	900	1,400		
SLOPE	3D1	250	400	200	200		
	3D2	300	600	250	500		
	3E1	250	800	450	800		
	3E2	300	900	500	1,000		
	3F1	150	500	700	900		
	3F2	200	600	650	650		
BADLANDS	4A			200	450	450	700
	4B			150	150	650	850
	4C			100	100	500	800
	4D			200	200	550	600
	4E			250	250	350	450
	4F			300	300	200	400
	TOTALS	42,150	80,650	6,850	10,550	3,400	4,950

TOTAL LICENSES = 148,550

Table 2a. Summary of 2007 white-tailed deer and mule deer harvest data and buck:doe:fawn ratios, by hunting unit, for all regular deer-gun license holders.

Hunting Unit	White-tailed Deer				Mule Deer			
	Antlered	Antlerless	Total	Ratios (B/D/F)	Antlered	Antlerless	Total	Ratios (B/D/F)
1	566	740	1306	1.04/1/0.36				
2A	343	346	689	1.69/1/0.70				
2B	2757	4089	6846	0.95/1/0.41				
2C	2223	4933	7156	0.62/1/0.38				
2D	960	1235	2195	1.10/1/0.42				
2F1	1778	2606	4384	1.01/1/0.48				
2F2	1576	3288	4864	0.67/1/0.40				
2G	599	1030	1629	0.75/1/0.29				
2G1	1513	2094	3607	0.97/1/0.34				
2G2	1128	1608	2736	1.03/1/0.47				
2E	1534	4156	5690	0.47/1/0.28				
2H	724	1561	2295	0.66/1/0.40				
2I	1317	2278	3595	0.85/1/0.47				
2J1	652	1292	1944	0.73/1/0.44				
2J2	1375	2374	3749	0.98/1/0.69				
2K1	689	1695	2384	0.55/1/0.35				
2K2	2480	5265	7745	0.68/1/0.45				
3A1	1168	1268	2436	1.32/1/0.43				
3A3	862	1470	2332	0.73/1/0.43				
2L	597	912	1509	1.01/1/0.54				
3A2	847	1652	2499	0.73/1/0.43				
3A4	1519	3126	4645	0.68/1/0.39				
3B1	452	812	1264	0.84/1/0.50	357	479	836	0.98/1/0.32
3B2	153	202	355	1.31/1/0.73	212	162	374	1.63/1/0.25
3B3	854	1261	2115	0.95/1/0.40	77	78	155	1.26/1/0.09
3C	748	863	1611	1.19/1/0.37	91	26	117	3.79/1/0.08
3D1	190	214	404	1.24/1/0.40	170	148	318	1.63/1/0.42
3D2	253	449	702	0.90/1/0.59	211	321	532	0.75/1/0.14
3E1	385	848	1233	0.70/1/0.55	199	337	536	0.75/1/0.27
3E2	467	989	1456	0.72/1/0.52	180	358	538	0.65/1/0.30
3F1	613	375	988	2.25/1/0.37	116	210	326	0.66/1/0.19
3F2	489	581	1070	1.11/1/0.31	163	284	447	0.80/1/0.39
4A	131	347	478	0.58/1/0.54	335	497	832	0.78/1/0.16
4B	117	63	180	3.34/1/0.80	493	639	1132	1.01/1/0.31
4C	75	58	133	2.42/1/0.87	371	620	991	0.82/1/0.37
4D	156	114	270	2.56/1/0.87	388	420	808	1.11/1/0.20
4E	173	173	346	1.29/1/0.29	269	302	571	1.16/1/0.31
4F	213	177	390	1.88/1/0.57	151	224	375	0.86/1/0.27
Total	**31781**	**57449**	**89230**	**0.78/1/0.41**	**3780**	**5108**	**8888**	**0.94/1/0.27**

Table 3a. Summary of 2007 Youth Deer Season (N=1596 licenses issued), muzzleloader (N=2,797 licenses issued), and archery season (N=19,964 licenses issued) harvest data and buck:doe:fawn ratios, by license type for those license holders that hunted.

License Type	White-tailed Deer				Mule Deer			
	Antlered	Antlerless	Total	Ratios (B/D/F)	Antlered	Antlerless	Total	Ratios (B/D/F)
Youth Season	294	85	379	7.35/1/1.12	186	28	214	10.94/1/ 0.65
Muzzle-Loader	540	483	1023	1.61/1/0.44				
Archery	5254	1538	6792	4.37/1/0.28	640	255	895	2.82/1/0.12
Total	**6088**	**2106**	**8194**	**3.86/1/0.34**	**826**	**283**	**1109**	**3.39/1/0.16**

Table 4a. Summary of white-tailed deer population indices for2007-2008 (i.e., 2008 winter aerial survey[Deer/ Sq. Mi.], 2007 deer-vehicle collisions, and 2007 white-tailed deer observed by hunters per hour of effort during the first Saturday and Sunday of the 2007 regular deer season).

Hunting Unit	2008 Winter Aerial Survey (Sample Size)	2007 Deer-Vehicle Collisions (MD & WTD)	2007 Hunter Obs. WTD/Hr. ± s.d. (Sample Size)
Turtle Mountains 1	NA	Decreasing	2.02 ± 1.89 (41) Increasing
Red River All Units	NA	Stable to Decreasing	NA
2A	NA	Decreasing	1.67 ± 1.921 (64) Stable to Increase
2B	NA	Stable to Decreasing	1.41 ± 1.376 (80) Decreasing
2C	NA	Stable	3.55 ± 3.387 (68) Stable
Pembina Hills 2D	NA	Stable to Decreasing	2.55 ± 3.012 (50) Stable to Decreasing
Sheyenne-James River All Units	NA	Stable to Decreasing	NA
2F1	NA	Stable to Increasing	2.72 ± 2.187 (66) Decrease
2F2	NA	Decreasing	2.82 ± 3.970 (68) Decreasing
2G	NA	Decreasing	1.90 ± 2.253 (64) Decreasing
2G1	NA	Stable	2.16 ± 2.519 (68) Increasing
2G2	NA	Stable to Increasing	2.35 ± 2.289 (65) Stable to Decrease
Devils Lake 2L	NA	NA	4.43 ± 3.874 (52) Stable to Decrease
Coteau Hills All Units	NA	Stable to Increasing	NA
2E	NA	Stable	1.95 ± 1.600 (52) Decreasing
2H	NA	Increasing	2.72 ± 2.707 (65) Decreasing
2I	NA	Stable to Increasing	2.03 ± 1.854 (70) Decreasing
2J1	NA	Stable	2.58 ± 1.794 (57) Decreasing
2J2	NA	Stable to Increasing	2.37 ± 2.291 (64) Decreasing

Table 4a. (Continued)

Hunting Unit	2007 Winter Aerial Survey (Sample Size)	2007 Deer-Vehicle Collisions (MD & WTD)	2007 Hunter Obs. WTD/Hr. ± s.d. (Sample Size)
Coteau Hills 2K1	NA	Stable to Decreasing	2.21 ± 1.997 (65) Decreasing
2K2	NA	Increasing	4.23 ± 3.722 (68) Decreasing
3A1	NA	Increasing	2.53 ± 1.995 (48) Stable to Decrease
3A3	NA	Increasing	3.36 ± 3.965 (59) Stable to Increase
Souris Des Lacs All Units	NA	Stable to Decreasing	NA
3A2	NA	Stable to Decreasing	1.90 ± 1.342 (53) Decreasing
3A4	NA	Stable to Decreasing	2.22 ± 1.980 (59) Decreasing
Missouri River All Units	NA	Stable to Increasing	NA
3B1	NA	NA	2.13 ± 1.772 (45) Stable to Decrease
3B2	NA	Stable	NA (No Sample)
3B3	NA	NA	2.25 ± 2.073 (57) Stable to Decrease
3C	NA	Stable to Increasing	2.40 ± 2.589 (69) Stable
Slope All Units	NA	Increasing	NA
3D1	NA	Stable to Increasing	NA (Small Sample)
3D2	NA	Increasing	NA (No Sample)
3E1	NA	Increasing	3.325 ± 2.129 (42) Decreasing
3E2	NA	Increasing	2.71 ± 1.892 (42) Decreasing
3F1	NA	Stable	NA (Small Sample)
3F2	NA	Stable to Increasing	NA (No Sample)

Table 4a. (Continued)

Hunting Unit	2007 Winter Aerial Survey (Sample Size)	2007 Deer-Vehicle Collisions (MD & WTD)	2007 Hunter Obs. Deer/Hr. ± s.d. (Sample Size)
Badlands All Units	NA	Stable to Increasing	NA
4A	NA	NA	2.34 ± 3.670 (33) Increasing (Mule Deer Hunter Observations)
4B	NA	Stable to Increasing	0.77 ± 0.825 (24)*** Stable (Mule Deer Hunter Observations)
4C	NA	Increasing	0.68 ± 0.834 (25)*** Stable to Decrease (Mule Deer Hunter Observations)
4D	NA	NA	0.74 ± 0.953 (22)***Stable to Decreasing (Mule Deer Hunter Observations)
4E	NA	Stable to Increasing	6.86 ± 15.982 (24) Increasing (White-tailed Deer Hunter Observations)
4F	NA	Stable to Increasing	5.60 ± 6.372 (40) Decreasing (White-tailed Deer Hunter Observations)

***** Small Sample**

Table 5a. Summary of mule deer population indices for 2007-2008 (i.e., 2008 winter/spring aerial survey, 2007 Deer-vehicle collisions, and 2007 mule deer observed by hunters per hour of effort during the first Saturday and Sunday of the 2007 regular deer season).

Hunting Unit	2008 Winter(*) or Spring Aerial Survey (Sample Size)	2007 Deer-Vehicle Collisions (MD & WTD)	2007 Hunter Obs. MD/Hr. ± s.d. (Sample Size)
Missouri River All Units	NA	Stable to Increasing	NA
3B1	NA	NA	2.27 ± 4.371 (77) Stable to Decrease All Hunters
3B2	NA	Stable to Increasing	NA (No Sample)
3B3	NA	NA	0.98 ± 0.821 (17)*** Stable to Increase WTD Hunters
3C	NA	Stable to Increasing	1.20 ± 1.234 (37) Stable to Decrease All Hunters
Slope All Units	NA	Stable to Increasing	NA
3D1	NA	Increasing	NA (No Sample)
3D2	NA	Increasing	NA (Small Sample)
3E1	NA	Increasing	1.64 + 2.011 (36) Decrease All Hunters
3E2	NA	Increasing	1.50 ± 1.167 (34) Stable to Decrease All Hunters
3F1	NA	Stable	NA (Small Sample)
3F2	NA	Stable to Increasing	NA (Small Sample)

Table 5a. (Continued)

Hunting Unit	2008 Spring Aerial Survey (Sample Size)	2007 Deer-Vehicle Collisions (MD & WTD)	2006 Hunter Obs. MD/Hr. ± s.d. (Sample Size)
Badlands All Units	9.1 (2649) Stable to Decreasing	Stable to Increasing	NA
4A	17.7 (486) Stable to Increasing	NA	4.41 ± 4.997 (54) Decreasing MD Hunters
4B	8.3 (451) Stable to Decreasing	Stable to Increasing	3.91 ± 3.703 (53) Decreasing MD Hunters
4C	10.8 (275) Increasing	Stable to Increasing	3.64 ± 2.783 (50) Stable to Increase MD Hunters
4D	8.5 (754) Decreasing	NA	3.17 ± 2.301 (47) Decreasing MD Hunters
4E	7.6 (432) Increasing	Stable to Increasing	4.11 ± 3.449 (49) Decrease MD Hunters
4F	6.5 (251) Decreasing	Stable to Increasing	6.83 ± 6.951 (8)*** Stable to Increasing MD Hunters

***** Small Sample**

Table 6a. Summary of white-tailed deer buck:doe:fawn ratios based upon observations by white-tailed deer hunters during the first Saturday and Sunday of the 2007 regular deer season.

Hunting Unit	2007 Hunter Obs. Buck:Doe:Fawn (Sample Size)
Turtle Mountains 1	0.26:1:0.47 (96-364-172)
Red River All Units	046.:1:0.60 (1271-2755-1645)
2A	0.41:1:0.58 (260-633-367)
2B	0.46:1:0.35 (373:813:286)
2C	0.49:1:0.76 (638-1309-992)
Pembina Hills 2D	0.42:1:0.74 (289-682-503)
Sheyenne-James River All Units	0.44:1:0.60 (2282-5174-3089)
2F1	0.44:1:0.62 (516-1183-741)
2F2	0.46:1:0.66 (598-1292-858)
2G	0.46:1:0.51 (390-856-436)
2G1	0.43:1:0.52 (381-881-461)
2G2	0.42:1:0.62 (397-962-593)
Devils Lake 2L	0.37:1:0.68 (433-1176-799)
Coteau Hills All Units	0.44:1:0.57 (3862-8748-4946)
2E	0.43:1:0.63 (258-607-382)
2H	0.47:1:0.71 (476-1001-707)
2I	0.45:1:0.52 (398-884-463)
2J1	0.49:1:0.63 (460-934-584)
2J2	0.49:1:0.50 (472-971-490)
2J1 & 2J2	0.49:1:0.56 (932-1905-1074)

Table 6a (Continued).

Hunting Unit	2007 Hunter Obs. Buck:Doe:Fawn (Sample Size)
Coteau Hills 2K1	0.43:1:0.59 (352-823-486)
2K2	0.43:1:0.54 (861-2011-1094)
2K1 & 2K2	0.43:1:0.56 (1213-2834-1580)
3A1	0.36:1:0.43 (318-894-386)
3A3	0.43:1:0.57 (267-623-354)
Souris Des Lacs All Units	0.32:1:0.62 (667-2056-1280)
3A2	0.25:1:0.48 (302-1185-704)
3A4	0.42:1:0.66 (365-871-576)
Missouri River All Units	0.42:1:0.53 (1134-2693-1417)
3B1	0.35:1:0.42 (383-1080-452)
3B2	NA (No Sample)
3B3	0.40:1:0.61 (281-700-430)
3C	0.51:1:0.59 (470-913-535)
Slope All Units	0.43:1:0.63 (675-1557-918)
3D1	NA (No Sample)
3D2	0.17:1:0.08 (2-12-1)***
3E1	0.44:1:0.62 (365-835-521)
3E2	0.43:1:0.53 (272-630-334)
3F1	0.08:1:1.00 (4-50-50) ***
3F2	1.07:1:0.40 (32-30-12) ***

Table 6a. (Continued).

Hunting Unit	2006 Hunter Obs. Buck:Doe:Fawn (Sample Size)
Badlands All Units (All Hunters)	0.31:1:0.55 (1234-4014-2217)
4A (All Hunters)	0.27:1:0.65 (83-308-201)
4B (All Hunters)	0.31:1:0.62 (37-119-74) ***
4C (All Hunters)	0.29:1:0.74 (31-105-78) ***
4D (All Hunters)	0.27:1:0.37 (74-270-99) ***
4E (All Hunters)	0.39:1:0.65 (417-1063-687)
4F (All Hunters)	0.28:1:0.50 (592-2149-1078)
Statewide (All Hunter Observations)	**0.41:1:0.58 (11943-29219-16986)**

***** Small Sample**

Table 7a. Summary of mule deer buck:doe:fawn ratios based upon fall 2007 aerial survey and observations by hunters during the first Saturday and Sunday of the 2007 regular deer season.

Hunting Unit	Fall 2007 Aerial Survey Buck:Doe:Fawn (Sample Size)	2007 Hunter Obs. Buck:Doe:Fawn (Sample Size)
Missouri River All Units	NA	0.30:1:0.38 (545-1830-694)
3B1	NA	0.31:1:0.41 (399-1293-525)
3B2	NA	NA (No Sample)
3B3	NA	0.24:1:0.34 (29-119-40)***
3C	NA	0.28:1:0.31 (117-418-129)
Slope All Units	NA	0.37:1:0.50 (283-773-387) (All Hunters)
3D1	NA	NA (No Sample)
3D2	NA	NA (No Sample)
3E1	NA	0.33:1:0.54 (143-426-228)
3E2	NA	0.40:1:0.44 (131-330-145)
3F1	NA	0.30:1:0.90 (3-10-9)***
3F2	NA	0.86:1:0.71 (6-7-5) ***

***** Small Sample**

Table 7a. (Continued).

Hunting Unit	Fall 2007 Aerial Survey Buck:Doe:Fawn (Sample Size)	2007 Hunter Obs. Buck:Doe:Fawn (Sample Size)
Badlands All Units	0.42:1:0.88 (391-925-810)	0.34:1:0.53 (2807-8204-4321)
4A	0.37:1:0.88 (51-137-121)	0.30:1:0.56 (409-1370-773)
4B	0.38:1:0.77 (27-71-55)	0.34:1:0.45 (572-1694-756)
4C	0.35:1:0.78 (38-109-85)	0.39:1:0.66 (422-1090-714)
4D	0.44:1:0.83 (148-339-280)	0.33:1:0.40 (365-1123-451)
4E	0.44:1:1.01 (86-195-198)	0.35:1:0.53 (676-1932-1018)
4F	0.55:1:0.96 (41-74-71)	0.36:1:0.61 (363-995-609)
Statewide	NA	**0.34:1:0.50 (3635-10807-5402) (All Hunters)**

***** Small Sample**

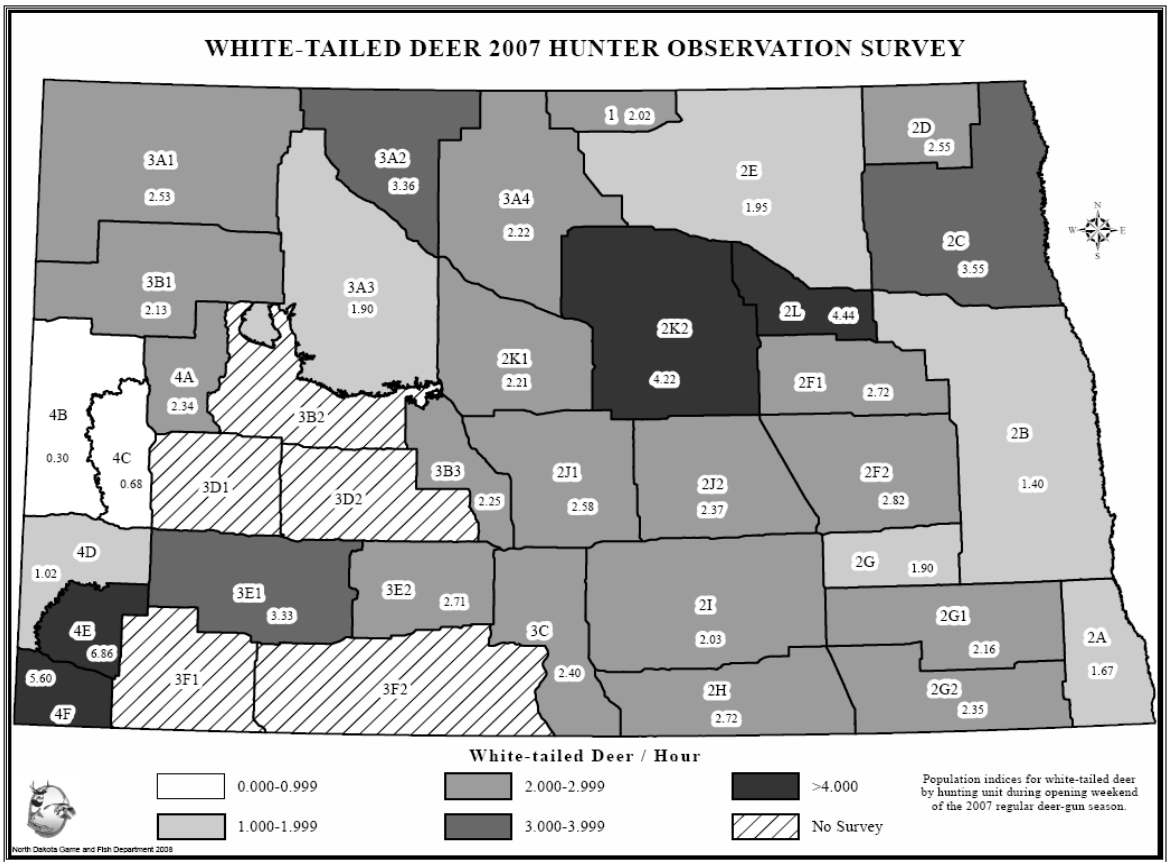

Figure 2. Map of North Dakota illustrating the use of observation rates by hunters (white-tailed deer sighted/hour of effort spent hunting) as a population index for each deer-hunting unit. Hunter observations were made during the first Saturday and Sunday of the regular 2007 deer-gun season. Year-to-year changes in hunter observation rates have been monitored statewide for white-tailed deer population trends since 2004.

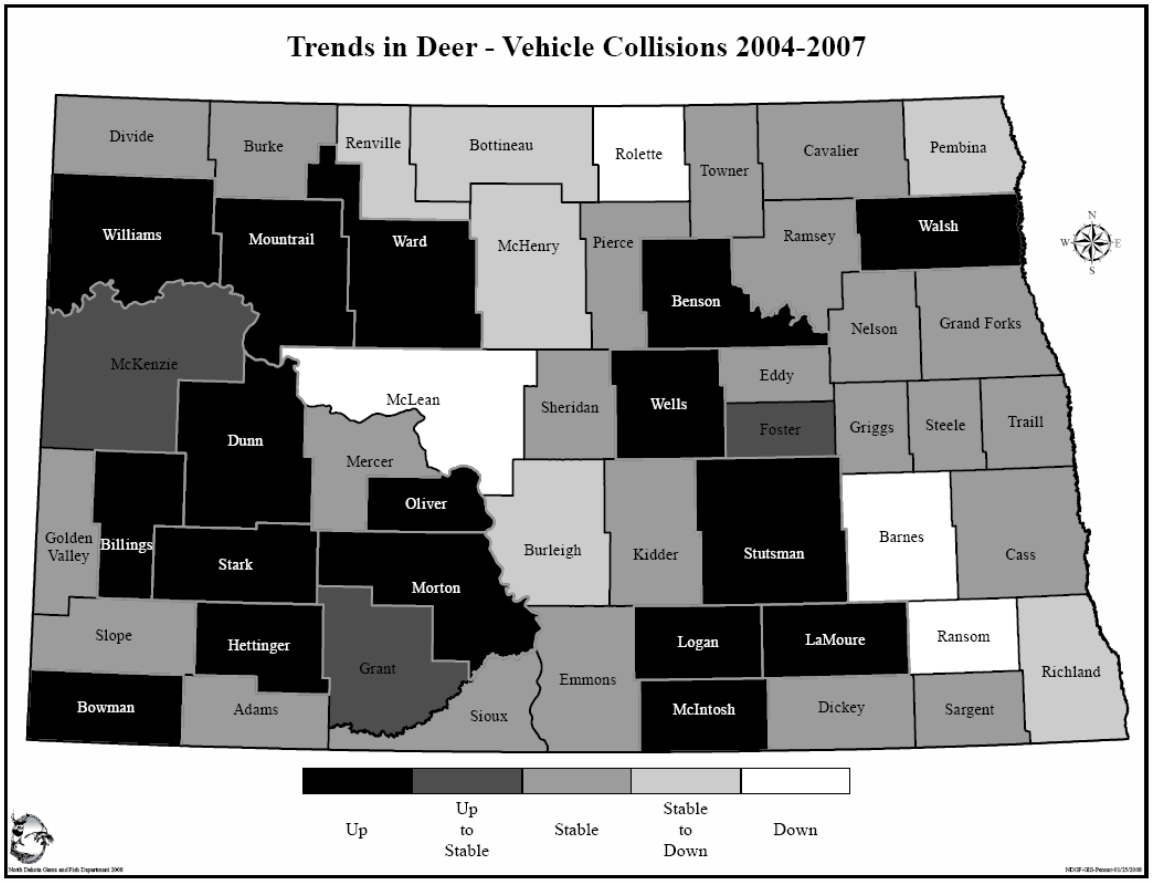

Figure 3. Map of North Dakota illustrating the use of trends in Deer-Vehicle Collisions (DVC) as a population index for each county. Year-to-year changes in DVC rates have been monitored statewide for deer population trends since 2001.

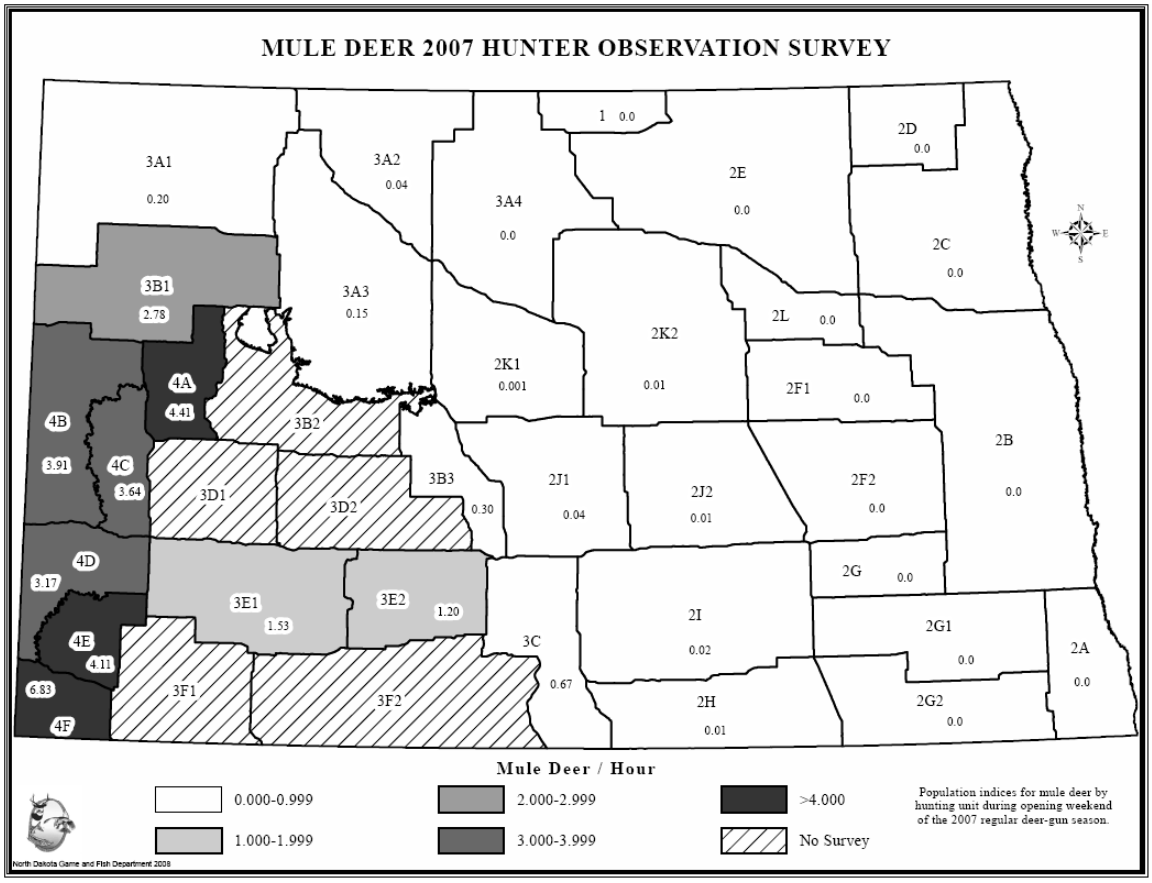

Figure 4. Map of North Dakota illustrating the use of observation rates by hunters (mule deer sighted/hour of effort spent hunting) as a population index for each deer-hunting unit. Hunter observations were made during the first Saturday and Sunday of the regular 2007 deer-gun season. Year-to- year changes in hunter observation rates have been monitored for mule deer population trends in the Badlands units (4A – 4F) since 1998, and statewide since 2004.

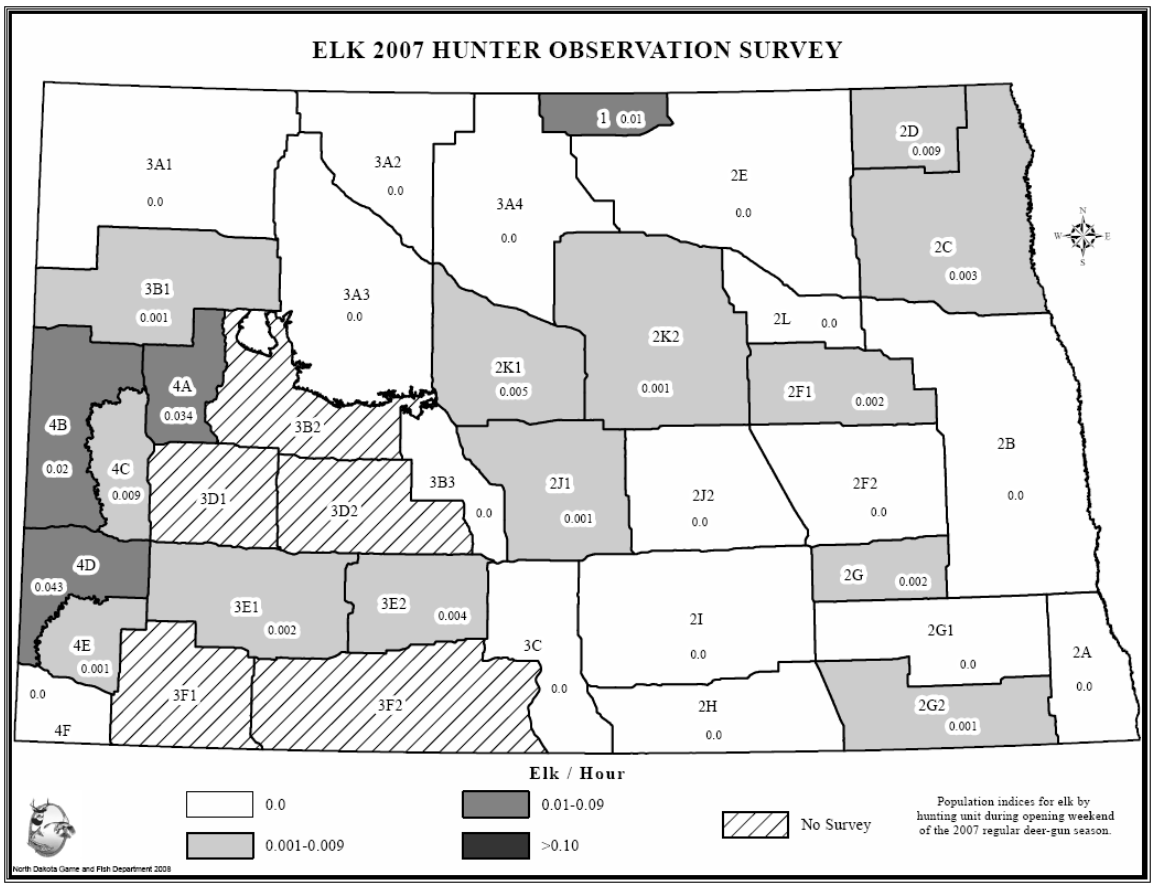

Figure 5. Map of North Dakota illustrating the use of observation rates by hunters (elk sighted/hour of effort spent hunting) as a population index for each deer-hunting unit. Hunter observations were made during the first Saturday and Sunday of the regular 2007 deer-gun season. Year-to-year changes in hunter observation rates have been monitored statewide for elk population trends since 2007.

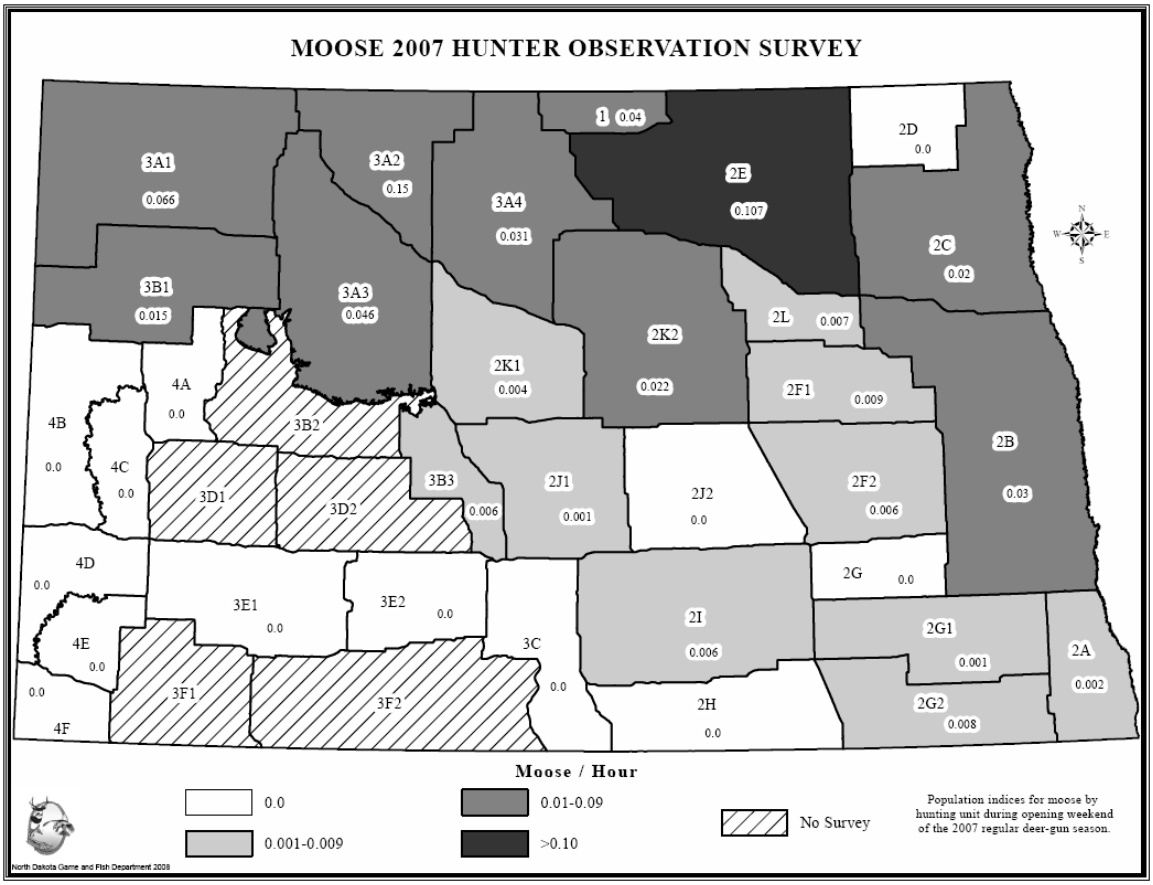

Figure 6. Map of North Dakota illustrating the use of observation rates by hunters (moose sighted/hour of effort spent hunting) as a population index for each deer-hunting unit. Hunter observations were made during the first Saturday and Sunday of the regular 2007 deer-gun season. Year-to-year changes in hunter observation rates have been monitored statewide for moose population trends since 2007.