

**SUBJECT:** Secretary's order relating to 2008 deer hunting regulations in select deer management units.

**FOR:** APRIL **BOARD MEETING**

**TO BE PRESENTED BY:** Keith Warnke, Big Game Biologist

**SUMMARY:**

The department annually recommends deer season frameworks in management units where standard hunting seasons will not reduce the population to established goals. The recommendations contained in this secretary's order are for units that are not in a CWD management area.

The department recommends that the NRB approve the following:

Herd Control Seasons (56 units)

1, 1M, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 23A, 24, 25, 26, 27, 31, 32, 33, 42, 46, 47, 51A, 51B, 53, 54A, 55, 56, 57, 57A, 57B, 57C, 57D, 58, 59A, 59E, 60A, 62A, 63B, 65A, 69, 69C, 77E, 77M, and 78.

Earn-a-buck Seasons (35 units)

22A, 54B, 54C, 59B, 59C, 59D, 59M, 60B, 60M, 61, 61A, 62B, 63A, 64, 64A, 64M, 65B, 66, 67A, 67B, 68A, 68B, 72, 72A, 73A, 73B, 73D, 74A, 74B, 77C, 77D, 80A, 80B, 80C and 81.

October Antlerless Deer only Seasons (87 units)

1, 1M, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 22A, 23, 24, 25, 26, 27, 31, 32, 33, 42, 46, 47, 51A, 51B, 57D, 54B, 54C, 57, 57A, 57B, 57C, 59A, 59B, 59C, 59D, 59M, 60A, 60B, 60M, 61, 62A, 62B, 63A, 63B, 64, 64M, 65A, 65B, 66, 67A, 67B, 68A, 68B, 69, 72, 73B, 73D, 74A, 74B, 77C, 77M, 78, 80A, 80B and 81.

**RECOMMENDATION:** Adoption of Secretary's order relating to modification of deer hunting regulations in select deer management units.

**LIST OF ATTACHED MATERIALS:**

- No  Fiscal Estimate Required
- No  Environmental Assessment or Impact Statement Required
- No  Background Memo

- Yes  Attached
- Yes  Attached
- Yes  Attached

**APPROVED:**

/s/

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Bureau Director, Tom Hauge

/s/

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Administrator, Laurie Osterndorf

/s/

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Secretary, Matt Frank

4/04/08

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Date

4/04/08

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Date

4/11/08

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Date

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|---------------------------------------|-----------------------------|--------------------------|
| cc: Laurie J. Ross - AD/5             | GLIFWC & Tribes - 14 - WM/6 | Carol Turner - LS/5      |
| Cons. Congress Exec. Cmte. - 4 - LS/5 | Diane Brookbank - CS/GEF 3  | Reg. WM Sups. - 5 - WM/6 |
| Kurt Thiede - 6 - LS/5                | Kevin Huggins - CS/GEF 3    | Reg. LE Sups. - 5 - WM/6 |
| Tom Hauge - WM/6                      | Tim Andryk - LS/5           | Bob Manwell - CE/8       |
| Randy Stark - LE/5                    | Peter Biermeier - PR/6      | Barbara Zellmer - WM/6   |

DATE: April 14, 2008

TO: Natural Resources Board Members

FROM: Matt Frank

SUBJECT: 2008 Deer season recommendations

FILE REF: 2300

### Recommendation:

The department recommends that the Board approve the following units for herd control and Earn-a-Buck (EAB) for the 2008 deer season (Figure 1). 50 Herd Control units: 1, 1M, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 31, 32, 33, 42, 46, 47, 51A, 51B, 53, 54A, 55, 56, 57, 57A, 57B, 57C, 58, 59A, 60A, 62A, 63B, 65A, 69, 77M, and 78; and 29 Earn-a-Buck units: 22A, 54B, 54C, 59B, 59C, 59D, 59M, 60B, 60M, 61, 62B, 63A, 64, 64M, 65B, 66, 67A, 67B, 68A, 68B, 72, 73B, 73D, 74A, 74B, 77C, 80A, 80B and 81.

### Background:

The 2007 deer season total harvest was 518,573 (Table 1). This is the second highest total in history. The top four deer harvests have come since 2000. There were 50 Herd Control units, 34 EAB units, and the southern third of the state remained under CWD regulations. Harvest during the 9-day gun season was strong and was aided greatly by an early opening day (Nov. 17), late rut, and high deer populations. About 328,000 individual hunters killed at least one deer in 2007.

Table 1. Deer Harvest by Season Compared to Prior Years

	2001	2002	2003	2004	2005	2006	2007
Archery Season Harvest	83,120	54,093	95,607	103,569	78,028	113,884	116,042
Total Gun Harvest	361,264	317,888	388,344	413,559	385,907	393,063	402,531
Muzzleloader Season Harvest	4,891	3,905	6,092	7,074	8,476	10,231	10,417
Total Oct and Dec gun Harvest	58,107	36,228	57,792	86,627	85,049	23,029*	34,260*
Total Antlerless Harvest	261,539	216,249	291,017	350,153	274,364	326,065	345,143
Total Buck Harvest	182,809	155,792	192,934	166,796	183,135	177,293	171,142
Total Deer Harvest	444,384	372,021	483,951	517,128	463,935	506,947	518,573

\*The October gun season was held in CWD units only in 2006 and 2007

### Population Model

The registered harvest was used with the Sex-Age-Kill and accounting style population models to develop an estimate of the deer population prior to the 2007 hunting season and to assess the effects of herd control seasons. The pre-hunt population *estimate* in 2007 was 1.8 million deer, nearly identical to 2007. The predicted buck harvest in non-CWD Deer Management Units (DMU) this year was 124,155. The actual buck harvest was 116,776, a difference of about 6%. Only once since 1991 has the predicted buck harvest differed from the actual by more than 20%.

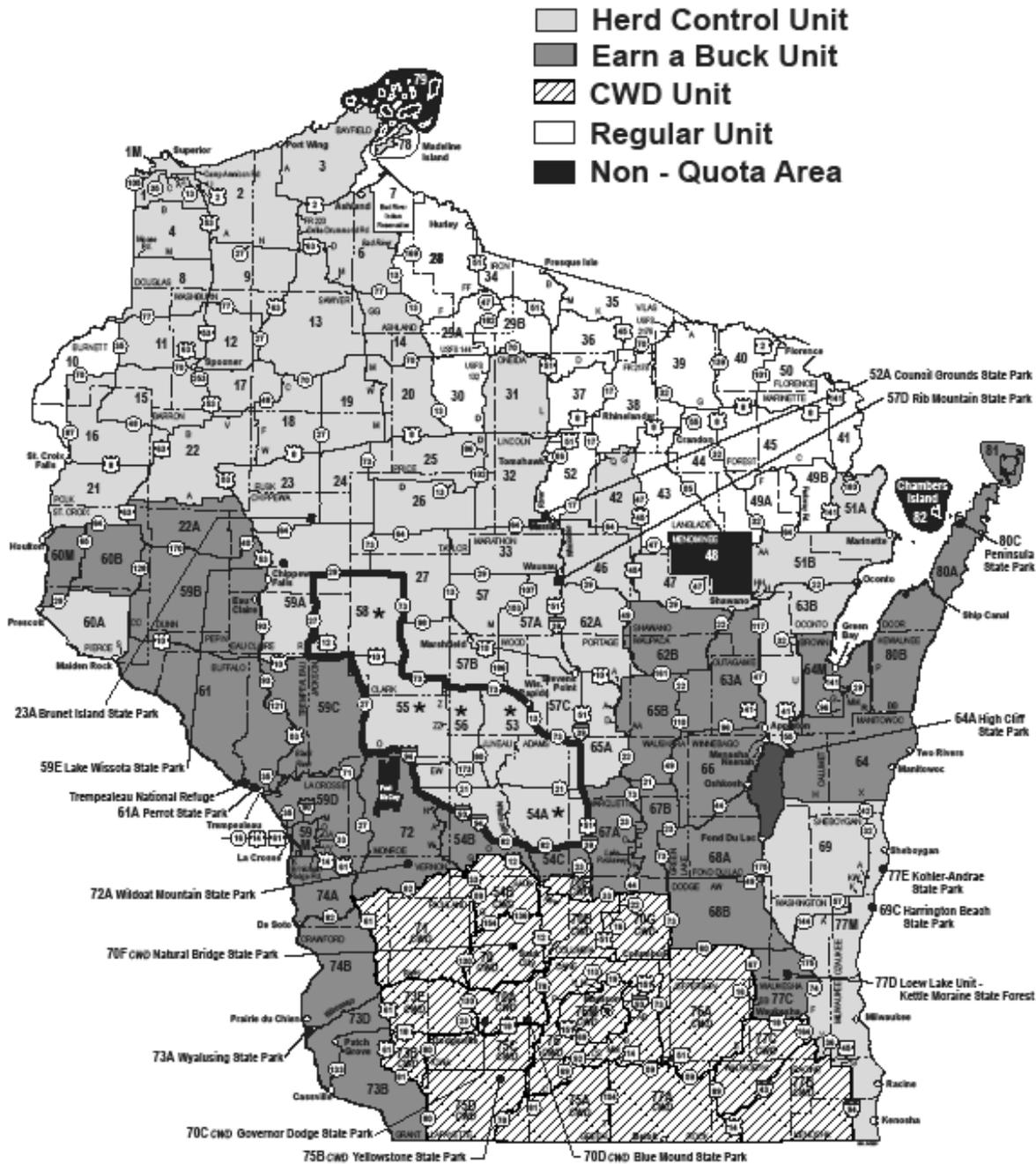
The estimated deer population after the 2007 hunt is 1.2 million deer, slightly lower than last year. There has not been much change in the statewide deer population, but EAB and herd control seasons in much of the state resulted in herd reduction in many DMUs. The result is that populations are moving toward goal in many units. Herd Control and EAB season structures are recommended for many units again in 2008 to build upon the



progress made in 2007.

Figure 1.

## Preliminary 2008 Deer Season Structure



**Conservation Congress Review.** The Conservation Congress Big Game Study Committee reviewed and supported the Department's deer season proposal (11-7 vote) on March 29.

### The October Antlerless Deer Gun Hunt

From **1996 to 2005**, there were three options for gun deer hunting opportunity:

- 1) Deer population near goal: Regular 9-day gun hunt. This is the least effective population management strategy. The "Hunter's Choice" program was in place. This allowed hunters to participate in a drawing to have their regular buck carcass tag be an either sex deer tag. There was also a 10-day muzzle loader hunt following the 9-day regular gun hunt. Additional bonus antlerless only tags (up to the allowable quota) were sold for \$12 each.
- 2) Deer population 20% (or more) above goal (Herd Control): The 4-day October antlerless deer gun season (teacher's convention weekend) was held, plus the regular 9-day gun hunt. An extra free antlerless deer tag for each archery and gun license and two extra free tags for a conservation patron license were valid in these units and given to hunters with license purchase. There was also a 10-day muzzle loader hunt following the 9-day regular gun hunt and a 4-day antlerless only season in December. For additional deer, hunters could purchase Bonus antlerless deer carcass tags for \$12 each.
- 3) If after two years of using the approach in Option 2), the population was still not within 20% of goal, Earn-A-Buck (EAB) regulations could be applied. In EAB units, the October gun hunt was held, plus the regular 9-day gun hunt. Free antlerless deer tags were provided under this structure also. There was also a 10-day muzzle loader hunt following the 9-day regular gun hunt and a 4-day antlerless only season in December. For additional deer, hunters could purchase Bonus antlerless deer carcass tags for \$12 each.

In response to years of controversy surrounding the October gun hunt and EAB seasons, the Department established a stakeholder advisory panel (made up of approximately 20 individuals representing hunting, agriculture, conservation, and other user groups) to reach a compromise that could be tested to see if a season structure designed by stakeholders could be successful. The department implemented a 2-year trial moratorium on the October gun hunt (with a sunset provision that re-established the October gun hunt as a tool in 2008). This change was supported by every major stakeholder group (except the snowmobilers) and was approved after extensive legislative review.

The stakeholders developed specific performance measures which were established in Administrative Code to assess the effectiveness of the changes. The agreement was that the performance measures were not met, the 4-day October antlerless gun deer hunt would be reinstated. The stakeholders selected the primary performance measure: if the average antlerless:antlered harvest ratio in *Herd Control* units did not meet or exceed 2.0 in individual deer management regions (Figure 2), the October gun hunt would again be in place.

The 2:1 benchmark minimum was not met in four of five Deer Management Regions (Table 2). The October gun hunt called for in Administrative Code can be implemented in Herd Control and EAB units in 2008 in all Deer management regions except the Central Forest. As per the agreement, the October gun hunt will be moved earlier in the month and will occur October 16-19 this year. In the Central Forest Deer Management Region, there will not be an October gun hunt this year the antlerless:antlered harvest ratio was 1.95:1 (Table 1). The Department believes that it is in the spirit of the agreement to round up to 2:1. However, if the ratio is not maintained (and the trend is showing a decline), the October gun hunt will return in *Herd Control and EAB* units in the Central Forest Deer Management Region in the future.

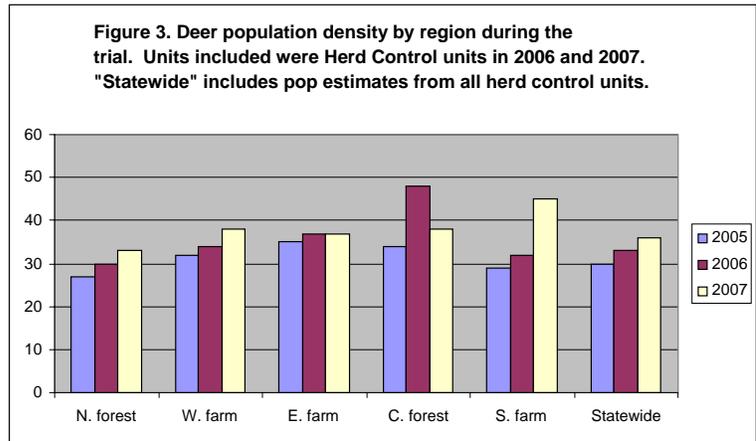


Table 2. Antlerless:antlered deer harvest ratios by Deer Management Region 2005-07.

	2005	2006	2007	2006-07 average	Percent 06-07 is off from 2.0
Northern Forest	1.9	1.7	1.6	1.65	-17.5%
Central Forest	N/A	2.1	1.8	1.95	-2.5%
Eastern Farmland	1.8	1.7	1.5	1.60	-20.0%
Western Farmland	1.8	1.8	1.7	1.75	-12.5%
Southern Farmland	1.6	1.6	1.6	1.60	-20.0%
Average	1.8	1.8	1.6	1.71	-14.5%

Deer populations in herd control units in all five regions increased over the two year trial period (without the October gun hunt) (Figure 3). Had the 2:1 benchmark been met, over 50,000 additional antlerless deer would have been harvested statewide– a significant improvement in herd control. The Department believes that without an October gun hunt, the antlerless:antlered ratio will continue to decline. That would result in further deer population increases. In the absence of an October gun hunt in 2008, there would be as many as 35-40 more DMUs where an earn-a-buck season would have been necessary and recommended for 2008.

The October gun hunt has a long history of consistent harvest ratios above those realized in the trial. When available throughout the state, the October gun hunt is the second most popular hunting season in Wisconsin with up to 250,000 participants. In addition to the youth hunt weekend, an October gun hunt will provide another opportunity in early fall for adults to mentor a new hunter in a low pressure, educational situation. An October gun hunt also provides an opportunity to earn a buck sticker in EAB units.



### Earn-A-Buck

EAB is recommended for 29 Deer Management Units for 2008. EAB moves populations down in a steady and generally predictable rate (see Figure 4). If EAB is not consistently applied, populations in many units would continue to fluctuate without declining, resulting in a pattern of EAB in one year and not the next and a population that remains well over goal. The Department’s objective is to eliminate that cycle and hence the need for EAB.

Hunters who registered antlerless deer in any EAB in 2007 were are given a ‘Buck Authorization’ sticker with their customer number on it. Hunters can earn buck stickers by legally registering an antlerless deer killed in an EAB unit at any time during the year. Buck stickers earned in a EAB unit last year will be valid for two deer seasons: 2008 and 2009. Buck stickers earned in EAB units last year will be valid again this year in EAB units. Over 130,000 hunters (including CWD units) are pre-qualified for a buck next fall.

## Population Goals

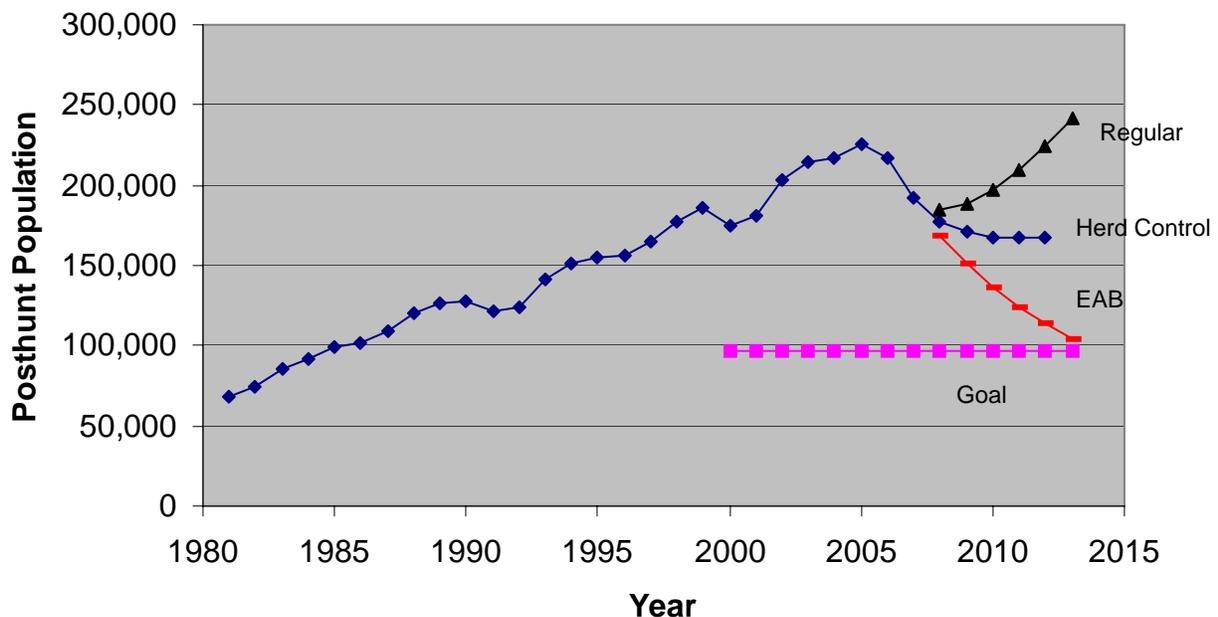
Over winter goals are reflective of the social and biological carrying capacity in individual units. Goals are set through a public participation process and are required by administrative code to reflect:

1. Biological carrying capacity.
2. Hunter success in harvesting and seeing deer and public deer viewing opportunities.
3. Ecological and economic impacts of deer browsing.
4. Disease transmission.
5. Concern for deer–vehicle collisions.
6. Chippewa treaty harvest.
7. Hunter access to land in a deer management unit.
8. Ability to keep the deer herd in a deer management unit at goal.
9. Tolerable levels of deer damage

Statewide, the deer population is still well above goal. When the deer population gets closer to goal, our objective is to return to the traditional 9-day gun deer season structure, if possible, in all units. The deer population in the western farmland deer management region is representative of the situation statewide. Figure 4 shows the simulated effects of various season structures on deer populations in that region. EAB regulations have been implemented in most units there for the past two years and the result is that the population is going down. However, in order to continue toward goal, another EAB season is necessary in many of these units. As seen in Figure 4, if a Herd Control season is implemented, the population may be held stable but our models suggest that it will not continue to go down. The take home message is that it took several years (nearly two decades) for the population of deer to build to this level and it will take several years to bring it back down.

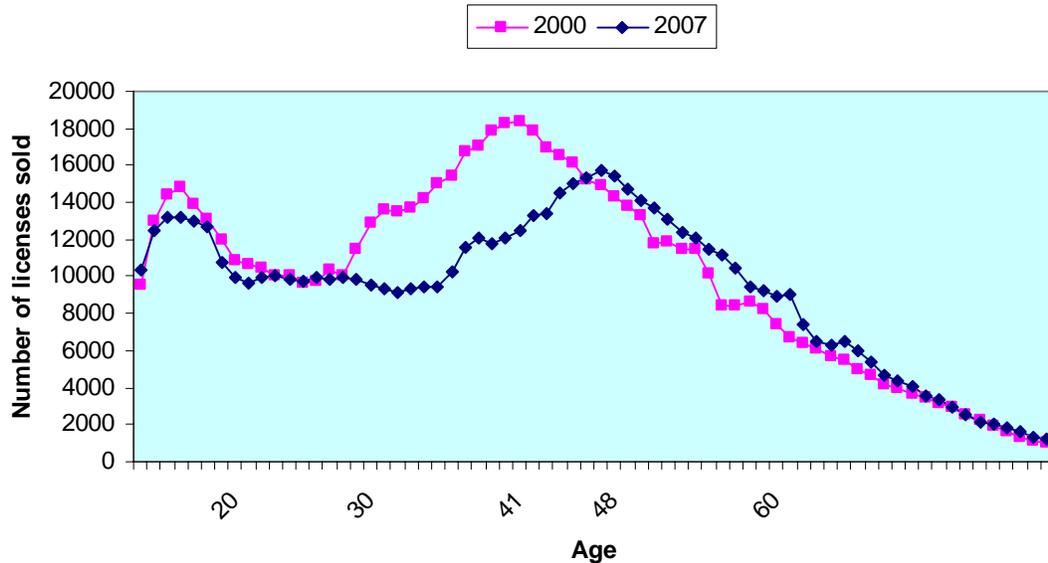
Predicting with certainty the time at which either the statewide population or the population in any given unit will be at goal is very difficult. We can model the anticipated effects of various season structures to the deer population over time (Figure 4). However, given all the variables that cannot be controlled (hunting, weather, winter, hunter actions, population growth, etc.) future deer population estimates may diverge from these predictions. The primary caveat is that this is purely a biological projection that assumes averages and assumes that biological recommendations for season structure would be implemented. There is no accounting for the sociological considerations and biological variables that impact deer season results and structures.

Figure 4. Simulated effects of various season structures on western farmland deer population.



The Department's management objective is to manage the population at the goals that have been established, not to set harvest records. This is important because the number of deer that hunters will be able to harvest is likely to decline in the future as hunter numbers decline (Figure 5). Clearly there will be a large decline in the number of deer hunters in the next 10 – 20 years as the baby boomer generation ages and moves out of the ranks of hunters. The ability to manage deer populations through hunting are at risk because the current deer herd is too large to be managed by fewer hunters.. It is imperative that we move deer populations significantly downward toward goal now, because the harvest capacity in the future will be insufficient to hold the deer population stable at the level it now exists.

Figure 5. Gun Hunters by Age 2000 and 2007



**Deer herd status meetings:**

Meetings were held statewide in March to discuss herd status with the public. These meetings are held each year as part of the department's annual deer quota setting process. The meetings provide the local wildlife managers with an opportunity to discuss the past and future deer seasons with local hunters. As part of this discussion, they talk about whether special herd control measures will be required to keep the deer populations near goals. A summary of public comments collected during these meetings will be provided as a handout at the March Board meeting.

**Timeline:**

The timeline for determining deer season structure and quotas is tight. Following the close of hunting at the end of December, registration stubs are entered into the database and summarized by sex, unit, and county. Aging data and harvest structure are used to develop population estimates and season structure and quota recommendations by mid-March for action at the April Board meeting. Following changes (if there are any) by the Board, the department will return to field staff and population experts to determine quotas and permit levels. This information needs to be available by the end of May.

BEFORE THE STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

In the matter of a Secretary's Order pertaining to modification of 2008 deer hunting regulations in select deer management units that are not CWD units.

**FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER**

**FINDINGS OF FACT**

1. It is unlikely the deer population in deer management units 1, 1M, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 23A, 24, 25, 26, 27, 31, 32, 33, 42, 46, 47, 51A, 51B, 53, 54A, 55, 56, 57, 57A, 57B, 57C, 57D, 58, 59A, 59E, 60A, 62A, 63B, 65A, 69, 69C, 77E, 77M, and 78 will be reduced to within 20% of the overwinter population goals established in s. NR 10.104, Wis. Adm. Code, under the current deer hunting rules. In making this determination, the department compared the harvest required to reduce the deer population to goal to the harvest likely to occur under the existing season structure based on deer harvest data from past seasons, including the sex and age of the registered kill.
2. After two consecutive years of seasons described in s. NR 10.01(3)(ed)1.a., Wis. Adm. Code, the department has determined that a third season as described in s. NR 10.01(3)(ed)1.a. Wis. Adm. Code, is still unlikely to reduce the deer population to within 20% of the overwinter population goals established in s. NR 10.104, Wis. Adm. Code in deer management units 59D, 60B, 72, 72A, 73A, 73B, 73D and 74B. In making this determination the department compared the harvest required to reduce the deer population to goal to the harvest likely to occur based on deer harvest data, including the sex and age of the registered kill, from past seasons under the regular season structure and under special hunts.
3. After a season as described in s. NR 10.01(3)(ed)1.b. Wis. Adm. Code, the department has determined that a season as described in subd. 1.a., Wis. Adm. Code, is still unlikely to reduce the deer population to within 20% of the overwinter population goal, established in s. NR 10.104, Wis. Adm. Code, in deer management units 22A, 54B, 54C, 59B, 59C, 59M, 60M, 61, 61A, 62B, 63A, 64, 64A, 64M, 65B, 66, 67A, 67B, 68A, 68B, 74A, 77C, 77D, 80A, 80B, 80C and 81. In making this determination the department compared the harvest required to reduce the deer population to goal to the harvest likely to occur based on deer harvest data, including the sex and age of the registered kill, from past seasons under the regular season structure and under special hunts.
4. The average antlerless:antlered harvest ratio from deer herd control units the 2 previous years did not equal or exceed two antlerless deer to each antlered deer, as identified in NR 10.01(3)(ed)1.b., in the Western Farmland, Southern Farmland, Eastern Farmland, and Northern Forest Deer Management Regions.

**CONCLUSION OF LAW**

1. According to s. NR 10.01(3)(e)e., 10.01(3)(ed) and 10.01(3)(ez), Wis. Adm. Code, the department may, upon making the above findings, modify the deer seasons, deer registration and permit issuance procedures.

**ORDER**

1. *Free Antlerless Permits.* Notwithstanding all other provisions of Ch. NR 10, Wis. Adm. Code, which remain in effect, special deer hunting permits for antlerless deer issued under s. NR 10.104, Wis. Adm. Code and s. 29.177, Stats., shall be issued free of charge for use in deer management units 1, 1M, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 22A, 23, 23A, 24, 25, 26, 27, 31, 32, 33, 42, 46, 47, 51A, 51B, 53, 54A, 54B, 54C, 55, 56, 57, 57A, 57B, 57C, 57D, 58, 59A, 59B, 59C, 59D, 59E, 59M,

60A, 60B, 60M, 61, 61A, 62A, 62B, 63A, 63B, 64, 64A, 64M, 65A, 65B, 66, 67A, 67B, 68A, 68B, 69, 69C, 72, 72A, 73A, 73B, 73D, 74A, 74B, 77C, 77D, 77E, 77M, 78, 80A, 80B, 80C and 81. Hunters may receive one special permit with their archery license and one special permit with their gun license, or two special permits with their conservation patron license. Additional antlerless deer carcass tags may be obtained at no charge, except for a \$2.00 handling fee authorized under s. 29.556, Stats. and s. NR 19.02, Wis. Adm. Code, for the above units except 23A, 57D, 59E, 61A, 64A, 69C, 72A, 73A, 77E and 80C where additional antlerless deer carcass tags may be purchased only by those who have obtained a state park access permit for these units.

2. *Earn-a-Buck.* Notwithstanding all other provisions of Ch. NR 10, Wis. Adm. Code, which remain in effect, hunters shall harvest or tag an antlerless deer in deer management units 22A, 54B, 54C, 59B, 59C, 59D, 59M, 60B, 60M, 61, 61A, 62B, 63A, 64, 64A, 64M, 65B, 66, 67A, 67B, 68A, 68B, 72, 72A, 73A, 73B, 73D, 74A, 74B, 77C, 77D, 80A, 80B, 80C and 81 with either a bow or a gun during any deer season in these units, or with an agricultural shooting permit, before they may harvest a buck with either weapon. The requirement to harvest or tag a legally harvested antlerless deer before harvesting or tagging a buck includes state parks and federal properties that are within or adjoining these units including the portion of the Elroy-Sparta state trail located within deer management units 54B, Hartman Creek, Kinnickinnic, Mill Bluff, Newport, Rock Island, Willow River, and the Plum Island portion of the Grand Traverse Islands state parks and the Trempealeau Wildlife Refuge. Only one buck may be taken with a bow under a license which authorizes archery deer hunting including a conservation patron license, and only one buck may be taken with a gun under a license which authorizes gun deer hunting including a conservation patron license. Deer harvested as described in this paragraph shall be transported in accordance with s. NR 10.105 (2).
  
3. *October Firearm Deer Season.* Notwithstanding all other provisions of Ch. NR 10, Wis. Adm. Code, which remain in effect, a firearm season for hunting antlerless deer is established as described in Section NR 10.01(3)(e)e. The season begins on October 16 and will continue for four days in deer management units 1, 1M, 2, 3, 4, 6, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 22A, 23, 24, 25, 26, 27, 31, 32, 33, 42, 46, 47, 51A, 51B, 54B, 54C, 57, 57A, 57B, 57C, 59A, 59B, 59C, 59D, 59M, 60A, 60B, 60M, 61, 62A, 62B, 63A, 63B, 64, 64M, 65A, 65B, 66, 67A, 67B, 68A, 68B, 69, 72, 73B, 73D, 74A, 74B, 77C, 77M, 78, 80A, 80B and 81. This season does not include areas established in Ch. NR 11 and 15, Wis. Adm. code, state parks that are within or adjoining these units or the Trempealeau Wildlife Refuge. Sections NR 10.09(2) and 10.06(8)(b) Wis. Adm. Code are not applicable during this population control action. An archery license is not valid for taking an antlered deer in these areas during this period.

Dated at Madison, Wisconsin, \_\_\_\_\_

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL  
RESOURCES

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By Matthew Frank, Secretary