

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD  
REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING AND CREATING RULES

The Wisconsin Natural Resources Board proposes an order to repeal s. NR 10.13(1)(b)15.a.(note); to renumber NR 10.06(6)(m) to (t); to amend ss. NR 10.01(3)(b)m), (c)3., (e)2.f. and 3.b. and (g), 10.09(1)(a)1., 10.10(1)(b), 10.102(1)(d), 10.13(1)(b)15.(intro.) and a., 10.25(4)(c), 45.09(2); to repeal and recreate NR 10.09(1)(a)2., 10.28(1), 10.29, 10.30; and to create NR 10.01(3)(em)2.b., 10.06(6)(m) and (q), 10.104(15), 16.18(5)(c), 19.51 and 19.60(2)(d)6. relating to hunting and trapping regulations.

WM-14-07

Analysis Prepared by the Department of Natural Resources

**Statutes Interpreted and Explanation of Agency Authority:** The department has interpreted the following statutes as providing the authority to promulgate rules regarding hunting and trapping, use of state owned lands and license issuance: ss. 23.09(2)(b), 29.014, 29.089, 29.091, 29.041, 29.164(4)(b), 29.184(6), and 29.197(2), 29.597, Stats.

**Statutory Authority and Explanation of Agency Authority:** Statutes that authorize the promulgation of these rules include, ss. 23.09(2)(b), 29.014, 29.089, 29.091, 29.164(4)(b), 29.184(6), 29.197(2), and 29.597 Stats. These statutes specifically provide the department with the authority to manage refuge areas for wildlife, promulgate rules regarding management of wildlife through the establishment of hunting seasons, management zones and regulations regarding the techniques by which game animals and game birds may be harvested. These statutes also provide authority to regulate the issuance of permits and licenses, as well as establishing conditions regarding the use of state land such as state parks, public recreation areas and hunting grounds. All rules promulgated under this authority are subject to review under ch. 227, Stats.

**Related Statute or Rule:** There are no state rules or statutes currently under promulgation that relate to the provisions that are proposed in this administrative order.

**Plain Language Analysis:** The department has recommended modifications to chapters NR 10, 11, 16, 19 and 45, Wis. Adm. Code, relating to hunting, trapping, closed areas, fur farms, feeding wild animals, and the use of public lands. These rule changes are proposed for inclusion in the 2007 Spring Hearing Questionnaire. Specifically, these proposals:

- Reduce the number of Turkey Management Zones from the current 46 to seven.
- Rename Bear Hunting Zone A1 as Zone D.
- Eliminate the open season for jackrabbits.
- Establish a non-resident trapping season for raccoons that begins two weeks after the start of the season for residents.
- Legalize the use of shotgun slugs for hunting species other than game birds.
- Allow the use of buckshot for hunting bobcat at all times during that season.
- Require the display of blaze orange on ground blinds used on department lands during seasons when hunters are required to wear blaze orange.
- Prohibit deer feeding near dwellings and businesses when feed is being used by bear or elk.
- Expand the time when cable restraints may be used for coyote and fox, allow their use for a portion of the bobcat season.
- Modify standards for the construction of cable restraints.
- Establish a fee of \$12.00 for the course of instruction under the trapper education program and \$28 for correspondence courses that require out-of-state mailing.
- Apply existing trap size, type and placement regulations to licensed wild fur farms.
- Create an archery season for deer and special tags in Unit 79, Apostle Islands National Lakeshore.

- Create a nine-day, shotgun-only deer hunting season at Lake Wissota State Park and create Deer Management Unit 59E.
- Eliminate the 19-day muzzleloader-only deer hunting season at Brunet Island State Park and create a nine-day, shotgun-only season in its place.
- Establish a 2:00 p.m. closing time for pheasant hunting at Mud Lake Wildlife Area in Columbia County and Pine Island Wildlife Area in Sauk and Columbia Counties.
- Create a pilot program to allow fall turkey hunting with the aid of dogs in certain counties.

**Summary of, and Comparison with, Existing or Proposed Federal Regulations:** Federal regulations allow states to manage the wildlife resources located within their boundaries provided they do not conflict with regulations established in the Federal Register. None of these rule changes violate or conflict with the provisions established in the Federal Code of Regulations.

**Comparison with rules in Adjacent States:** These rule changes do not represent policy or significant rule changes that may differ from surrounding states. All surrounding states have regulations and rules in place for the management and recreational use of wild game, migratory and furbearer species that are established based on needs which are often unique to that state's resources or public desires. Regarding wild turkey hunting zones, Minnesota currently has 65 zones and Michigan has 26 but Iowa and Illinois have four and two respectively.

Minnesota and Michigan both require bear hunters to hunt within a zone and those states have 11 and 10 zones respectively.

Jackrabbits are hunted in Minnesota and Iowa but not Michigan or Illinois. None of the surrounding states devote significant resources to managing that species. Minnesota estimates that hunters harvest several thousand jackrabbits each year.

Surrounding states offer non-resident trapping seasons for raccoons with the exception of Minnesota where non-residents are not allowed to trap.

Surrounding states generally do not regulate the use of shotgun slugs or buckshot for taking game like coyotes, fox, unprotected species or bobcat except that Illinois only allows the possession of slugs during the deer season if that person also possesses a valid, unused deer permit. Surrounding states do not require the use of blaze orange on ground blinds.

Illinois does not allow the use of cable restraints on dry land but Minnesota, Iowa and Michigan do allow them in certain situations. Regulations in those states are similar to Wisconsin's but they do not specify the number of strands that a cable must be comprised of.

Trapper education courses are required in Minnesota and there is no fee. Trapper education is voluntary in Iowa, Michigan, and Illinois.

Surrounding states all have fall turkey hunting seasons and the use of dogs is allowed in Iowa and Michigan.

All of the surrounding states offer deer hunting seasons and have special seasons in certain areas like parks where there are individual management goals. Similar to Wisconsin, special hunts and seasons exist for archery and a variety of firearms including shotguns and muzzleloaders.

**Summary of Factual Data and Analytical Methodologies:** The rule changes included in this order do not deviate from current department policy on the management of wildlife, hunting and trapping. The deer seasons proposed for Brunet Island and Lake Wissota State Parks are consistent with the seasons established at other parks where hunting is feasible and practical. It also allows for increased use and recreational opportunities for hunters in these parks, especially at Lake Wissota where there is currently no season. At Brunet Island, the season will be five days

shorter but the types of weapons are expanded to include shotguns and handguns as well as muzzleloaders. The increased efficiency of shotguns may result in greater hunter effectiveness.

Currently, there are 46 turkey hunting management zones and this rule change would reduce that number to seven. The new units would be comprised of entire units that previously existed so that the existing turkey harvest database could still be used to make informed management decisions. This change will also provide hunters more choice of locations to hunt within a zone and simplified regulations and application, permit drawing and tag issuance processes.

Changing the designation of current bear management zone A1 by renaming it zone D will minimize the potential for confusion by the public and better distinguish this zone as a separate entity. Currently, people who possess a Class A harvest permit for zone A may hunt in zone A1 as well. This change would allow only people who possess a Class A harvest permit for zone D to hunt in zone D. The new harvest strategy will better regulate the number of hunters utilizing these zones and improve the ability to manage the bear populations in each zone.

There have been few recorded observations of Jackrabbits and they are listed as a Species of Concern. Since there is also very little management effort directed towards Jackrabbits it would be responsible not to encourage hunting. Closing the season for Jackrabbits should not affect hunting programs because it is not believed that there is currently any hunting effort directed towards that species.

Trapping by non-residents was authorized by 2005 ACT 284 and holders of the proper license were automatically authorized to participate in most open seasons except the raccoon season. Since there is a separate season for hunting raccoons by residents and non-residents a separate season must also be established for trapping by residents and non-residents. This will allow use of all of the privileges that were intended for the non-resident trapping license.

Currently, it is illegal to possess shotgun slugs while hunting other than during the gun deer and bear hunting seasons. Buckshot is legal to use in many situations but not for deer hunting and buckshot may not be possessed from June 1 through the second day after the close of the last gun deer season of the year. There are legitimate uses of shotgun slugs for hunting species other than deer and bear. Buckshot is used occasionally by bobcat hunters. Both of these rules were probably designed to prevent the poaching of deer and for public safety reasons but it is not believed that it is necessary to be as restrictive today. This rule would give hunters more flexibility in the type of firearms and ammunition that they choose to use.

Manufactured ground blinds, which are similar to tents and completely enclose the hunter, are being used widely today. During seasons when blaze orange must be worn by hunters, many people believe that these blinds defeat the purpose of preventing hunting accidents by making sure hunters are visible to others. This rule would require that these blinds display 144 square inches of blaze orange that is visible from all directions when they are used on department lands.

Baiting bears is currently legal for hunting and dog training purposes but feeding bears for other reasons is prohibited, as is the feeding of elk. Deer feeding is legal in many areas and those stations may attract bear and elk as well. In some situations people have continued to operate feeding stations in spite of being aware that bears or elk were using them. This rule clarifies that any feeding station which is maintained after the owner should reasonably have known it was being used by bear or elk shall discontinue feeding for at least 30 days.

Cable restraints have been used on dry land for fox and coyotes for three years. Trappers have appreciated the expanded opportunity and there have been few problems. Cable restraints currently may only be used in January through mid-February but, considering the success of this tool, the department proposes allowing their use in December and for bobcat. Additionally, this proposal would relax cable standards because testing has shown that other multi-strand wires meet effectiveness and humaneness standards.

Since 1992 the fee for the course of instruction under the Cooperative Trapper Education Program has been \$8.00 for the regular class and \$12.00 for the correspondence class, and was agreed upon in a memorandum of understanding between the department and the Wisconsin Trappers Association. Most fees charged by the department are established either by statute or in administrative code. The proposed fee of \$12.00 for the regular classroom and resident correspondence course and \$28.00 for the out-of-state correspondence course, and an amount not to exceed \$50 for an advanced trapper education course, would better reflect the actual costs of administering the program today and would be established as an administrative rule.

Since the wild fur farm license and associated rules were moved from Chapter 29 to Chapter 169 Stats., under the 2001 ACT 56, trapping activities on lands licensed as a wild fur farm are no longer subject to restrictions on the type or size of traps, snares, or cable restraints that may be used for taking beaver, coyote, mink, muskrat, otter, opossum, raccoon, skunk, and weasel. Fur farms are not fenced and other wildlife and animals may enter these properties. Under this proposal the trap size and type restrictions that apply to other trappers, many of which are designed to improve humaneness and prevent the incidental take of protected species and species that are not in season, would apply to trappers on licensed wild fur farms.

The Apostle Islands National Lakeshore (unit 79) is a federally owned property and has seasons that are different than surrounding areas which is often the case on other federal properties and at state parks. The service wishes to continue managing the property for species and habitat conditions that are similar to those that existed at the time of European settlement and to provide primitive hunting experiences. The department has cooperated by creating an October muzzleloader-only deer hunting season. This proposal would add an archery season beginning on September 15 and closing on September 30, reopening after the muzzleloader season and running from November 1 to the Sunday nearest January 6. In order to encourage the harvest of antlerless deer, hunters would be given an additional buck tag for each antlerless deer that they harvest and would not have to use their regular season buck deer carcass tag. Antlerless tags would be issued free at the rate of two per day. If they choose, hunters would also be able to harvest one buck without "earning" it but would have to use their regular season buck deer carcass tag during the muzzleloader season or archery buck deer carcass tag during the archery season.

There is currently no season for hunting deer at Lake Wissota state park. Brunet Island state park has a 19-day muzzleloader-only season primarily for antlerless deer. Both parks have substantial deer populations that threaten plant communities and the damage is especially severe at Lake Wissota. This proposal would create a nine-day shotgun only season at Lake Wissota that would coincide with the traditional firearm deer season. The proposal would also replace 19-day muzzleloader-only season at Brunet Island with a nine-day shotgun season (muzzleloaders and handguns are legal to use during shotgun seasons). While this would result in fewer days of hunting, allowing shotguns should result in a more effective hunt and seasons at the two parks will be consistent. Both parks would be identified as individual deer management units so that hunter numbers can be controlled, providing a high quality hunt.

Pheasant hunting hours at Mud Lake and Pine Island wildlife areas in Columbia and Sauk Counties currently close 20 minutes after sunset. At twenty other state properties where the department stocks pheasants, hunting hours for pheasants closes at 2:00 p.m. in order to facilitate stocking of birds without hunting pressure. This proposal would add Mud Lake and Pine Island to that list so that stocked birds can be better distributed and orient themselves to their surroundings.

Hunting turkeys with dogs is not currently allowed. Several Southwestern counties have supported allowing their use during the fall season because it could provide a unique recreational opportunity that, as has been seen in other states, has few or no associated problems. This compromise would initiate a pilot program to allow fall turkey hunting with dogs in counties that have supported the proposal in the past. The season would automatically sunset after two years and would have to be re-authorized after its degree of success and public acceptance has been assessed.

**Analysis and Supporting Documents Used to Determine Effect on Small Business or in Preparation of Economic Impact Report:** These rules, and the legislation which grants the department rule making authority, do not have a significant fiscal effect on the private sector or small businesses.

**Effects on Small Businesses:** These rules are applicable to individual sportspersons and impose no compliance or reporting requirements for small business, nor are any design or operational standards contained in the rule.

**Agency Contact Person:** Scott Loomans, 101 S. Webster St., PO BOX 7921, Madison, WI 53707-7921. (608) 267-2452

**Deadline for Written Comments:** The deadline for written comments was April 16, 2007.

**Section 1. NR 10.01(3)(bm) is amended to read:**

Kind of animal and locality	Open season (all dates inclusive)	Limit
NR 10.01(3)(bm) Raccoon (non-resident hunting <u>and trapping</u> )		
In all counties of the state	Beginning on the Saturday nearest November 1 and continuing through January 31.	None

**Section 2. NR 10.01(3)(c)3. is amended:**

Kind of animal and locality	Open season (all dates inclusive)	Limit
NR 10.01(3)(c)3. Jackrabbit		
In all counties of the state	<del>Beginning on the Saturday nearest October 17 at 12:00 noon and continuing through November 15</del> <u>None</u>	<del>Daily bag 3; possession 6-0</del>

**Section 3. NR 10.01(3)(e)2. f. is amended to read:**

Kind of animal and locality	Open season (all dates inclusive)	Limit
<b>NR 10.01(3)(e)2. f.</b> Brunet Island (unit 23A) and <u>Lake Wissota (unit 59E) state park</u>	<del>Muzzleloading firearm</del> <u>Shotgun</u> season beginning on the Saturday immediately preceding the Thanksgiving holiday and continuing for <del>49</del> <u>2</u> consecutive days.	One antlerless deer or one deer of either sex as authorized by deer permits issued under s. NR 10.104.

**Section 4. NR 10.01(3)(e)3.b. is amended to read:**

Kind of animal and locality	Open season (all dates inclusive)	Limit
<b>NR 10.01(3)(e)3.b.</b> Deer management unit 79 - Apostle	Muzzleloading firearm season October 1-31.	<del>One deer either sex.</del> <u>One buck per carcass tag as described</u>

Islands

under s. NR 10.104(15)(c).  
Additional deer may be taken  
pursuant to s. NR  
10.104(15)(d).

**Section 5. NR 10.01(3)(em)2.b. is created to read:**

Kind of animal and locality	Open season (all dates inclusive)	Limit
<b>NR 10.01(3)(em)2.b.</b> Deer management unit 79 - Apostle Islands	Archery season beginning on the Saturday nearest September 15 and continuing through September 30; and November 1 through the Sunday nearest January 6.	One deer per carcass tag as described under s. NR 10.104(15)(a) and (b). Additional deer may be taken pursuant to s. NR 10.104(15)(d).

**Section 6. NR 10.01(3)(g) is amended to read:**

Kind of animal and locality	Open season (all dates inclusive)	Limit
NR 10.01(3)(g) Black bear (gun and bow seasons).		
1. Those portions of bear management zones <del>A, and B and D</del> as described in s. NR 10.30 where the use of dogs for bear hunting is authorized as described in s. NR 10.10 (1) (b).	With aid of dogs only, beginning on the first Wednesday following Labor Day and continuing for 28 consecutive days in odd-numbered years and beginning on the second Wednesday following Labor Day for 28 days in even-numbered years.	One adult bear per permit issued under s. NR 10.102.
	All methods not utilizing the aid of dogs, beginning on the first Wednesday following Labor Day and continuing for 28 consecutive days in even-numbered years and beginning on the second Wednesday following Labor Day for 28 days in odd-numbered years.	One adult bear per permit issued under s. NR 10.102.
2. Those portions of bear management zones A, B, <del>and C and D</del> as described in s. NR 10.30 where the use of dogs for bear hunting is prohibited as described in s. NR 10.10 (1) (b).	All methods not utilizing the aid of dogs, beginning on the first Wednesday following Labor Day and continuing for 35 consecutive days.	One adult bear per permit issued under s. NR 10.102.

**Section 7. NR 10.06(6)(m) to (t) are renumbered NR 10.06(6)(n) to (p) and (r) to (v), respectively.**

**Section 7m. NR 10.06(6)(m) and (q) are created to read:**

NR 10.06(6)(m) Mud Lake (Columbia county)  
(q) Pine Island (Columbia and Sauk counties)

**Section 8. NR 10.09(1)(a)1. is amended to read:**

NR 10.09(1)(a) *Shotshells*.1. `Slugs or balls.' Possess or have in control, while hunting any gamebird, any shotshells loaded with single slug or ball except during the open gun season for deer, elk or bear.

**Section 9. NR 10.09(1)(a)2. is repealed and recreated to read:**

NR 10.09(1)(a)2. `Size.' Possess or have in control, while hunting, shells containing shot larger than no. BB during the period commencing on June 1 and continuing through the last day of any deer season or hunt established in s. NR 10.01 (3) (e), (es), (et) or (ez), whichever season is later, except in any of the following circumstances:

a. During the open season established in s. NR 10.01 (1) (b), (c) and (g) when nontoxic shot size BBB and T may be used for hunting migratory game birds listed in s. NR 10.01 (1) (b), (c) and (g).

b. A person holding a valid permit to harvest a bobcat and an unfilled pelt tag issued under s. NR 10.145 may possess and use shotshells containing shot larger than no. BB for the purpose of hunting bobcat during the open season established in s. NR 10.01(3)(d).

**Section 10. NR 10.10(1)(b) is amended to read:**

NR 10.10(1)(b) *Dogs*. With the aid of dogs, except that dogs may be used for hunting bear during the season established in s. NR 10.01 (3) (g) 1. in black bear hunting zones A, ~~A1~~, and B and D as described in s. NR 10.30.

**Section 11. NR 10.102(1)(d) is amended to read:**

NR 10.102(1)(d) *Population goals*. The fall pre-hunt black bear population goal is as follows:

Zone Population Goal

A 4,600

~~A1~~ 3,300

B 2,200

C 1,200

D 3,300

**Section 12. NR 10.104(15) is created to read:**

**NR 10.104(15) APOSTLE ISLANDS.** The following carcass tags are valid for the taking and tagging of deer in deer management unit 79, Apostle Islands:

(a) Archery buck deer carcass tag.

(b) Archery antlerless deer carcass tag.  
(c) Gun buck deer carcass tag.  
(d) Special deer management unit 79 deer permit. These special permits shall be issued free of charge at a rate of up to 2 permits per day per hunter. Each tag may be used to tag any of the following:

1. An antlerless deer.
2. A buck deer if the hunter possesses an antlerless deer registration verification earned in deer management unit 79 in the previous year or in the current year.
3. A buck deer if the hunter possesses an antlerless deer that has been legally harvested in deer management unit 79 and is tagged prior to the harvest of the buck deer and the antlerless deer accompanies the buck deer until each is registered.

Note: All of the land in this unit is owned and managed by the National Park Service's Apostle Island National Lakeshore. The National Park Service may require an access permit for the purposes of deer hunting which may limit the dates an individual may hunt and the island or islands on which hunting may occur.

**Section 13. NR 10.13(1)(b)15.(intro.) and a. are amended to read:**

NR 10.13(1)(b)15. `Cable restraints specifications.' Set, place or operate any cable restraint except for bobcat from December 1 to December 31 and fox and coyotes from January December 1 to February 15, dates inclusive, provided the cable restraint conforms to the following specifications in addition to those under subd. 13. :

a. Cable length of 7 feet or less ~~of 7 bundles comprised of 7 wires per bundle or 19 bundles comprised of 7 wires per bundle~~, with a diameter of 3/32 inch or larger, consisting of multiple strands of wire.

**Section 14. NR 10.13(1)(b)15.a. note is repealed.**

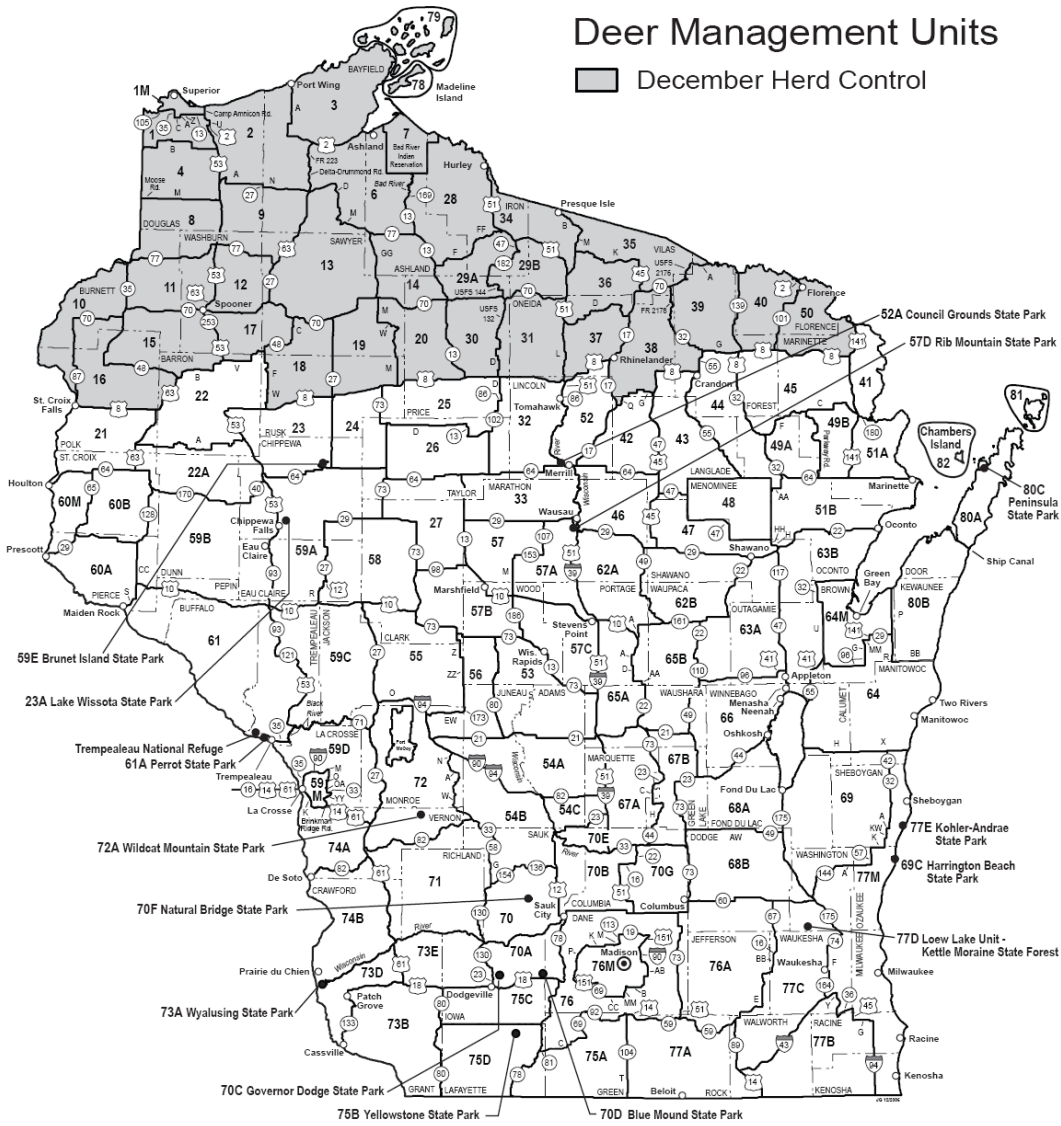
**Section 15. NR 10.25(4)(c) is amended to read:**

NR 10.25(4)(c) With the aid of dogs except during the open season for hunting turkeys described in s. NR 10.01(2)(f)2. in Crawford, Jackson, Juneau, La Crosse, Monroe, Richland, Sauk, Vernon and Wood counties in 2007 and 2008.

**Section 16. NR 10.28(1) is repealed and recreated to read:**

**NR 10.28(1) STATEWIDE DEER MANAGEMENT UNITS.**





Section 17. NR 10.29 is repealed and recreated to read:

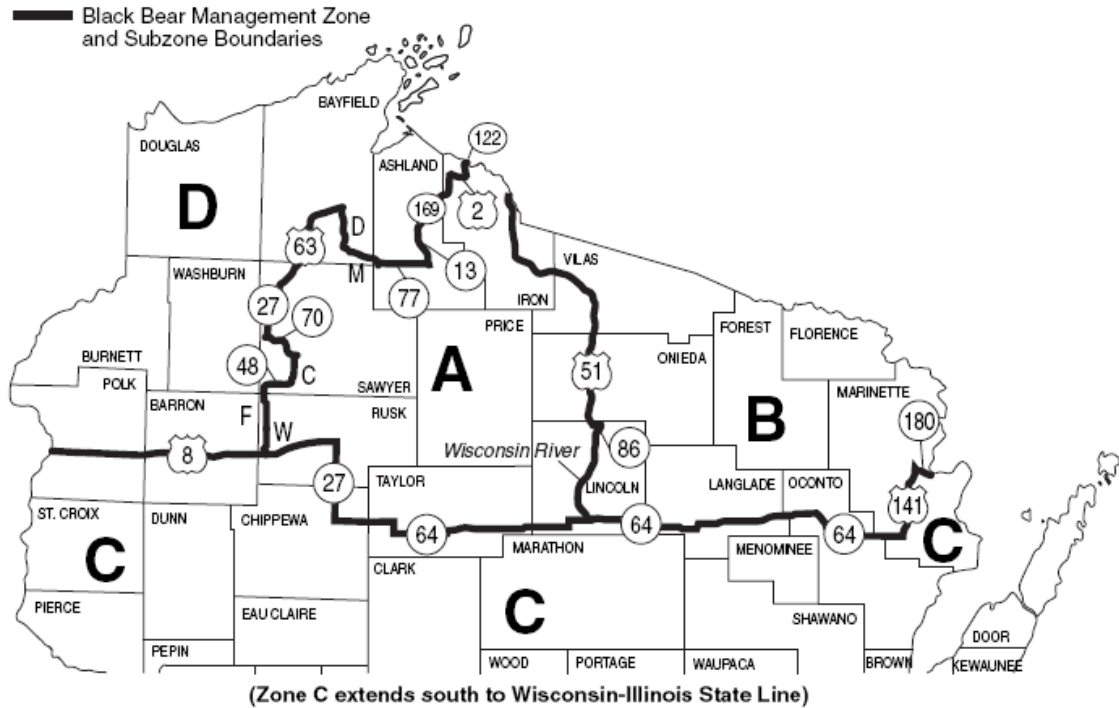
**NR 10.29 Wild turkey hunting zones.**

# Wild Turkey Management Zones



**Section 18. NR 10.30 is repealed and recreated to read:**

**NR 10.30 Black bear hunting zones.** Black bear hunting zones are established as designated on the following map:



**Section 19. NR 16.18(5)(c) is created to read:**

NR 16.18(5)(c) A person trapping on a licensed wild fur farm under the authority of a wild fur farm license issued under s. 169.18, Stats., shall comply with the trap, cable restraint and snare size and placement rules specified under s. NR 10.13(1)(b), unless otherwise authorized in writing by the department.

**Section 20. NR 19.51 is created to read:**

**NR 19.51 Wisconsin cooperative trapper education program fee.** The fee for the course of instruction under the Wisconsin cooperative trapper education program shall be \$12.00 per student. The fee for correspondence trapper education certification program shall be \$12.00 per student for correspondence programs that require in-state mailing of course materials and shall be \$28.00 per student for correspondence programs that require out-of-state mailing of course materials. In addition to the fees established in this section, for correspondence courses, each student shall pay a \$17.00 deposit that shall be refunded when the course materials are returned. The fee for advanced trapper education courses shall be that amount needed to pay for the cost of the course, but not to exceed \$50.00 per student. Only instructors who are certified by the department to teach trapper education courses under s. 29.597, Stats., may charge a fee for a trapper education course established under s. 29.597, Stats.

**Section 21. NR 19.60(2)(d)6. is created to read:**

NR 19.60(2)(d)6. At a feeding site that the person knows or should have known is also being used by bear or elk. If the owner of the residence or business is notified by the department or otherwise becomes aware that bear or elk have been using a deer feeding site, the owner may not place or allow others to place any feed material that is

accessible to deer, bear or elk within 50 yards of the owner-occupied residence or business for a period not less than 30 days.

**Section 22. NR 45.09(2) is repealed and recreated to read:**

NR 45.09(2) Except for blinds used exclusively for waterfowl hunting as provided in s. 29.327 (2) , Stats., and s. NR 10.12(12), and except for blinds constructed entirely of dead vegetation found on the property, no person may do any of the following:

(a) Construct, occupy or use any elevated or ground blind or other elevated device except that portable tree stands and blinds may be used provided they are removed from the property each day at the close of hunting hours. Unoccupied tree stands shall have the owner's department customer identification number or the owner's name and address, written in the English language attached to the tree stand in a manner so it is clearly visible to a person standing on the ground, and kept legible at all times.

(b) Cause damage to trees by the placement or erection of portable tree stands or by any other manner while climbing or hunting from a tree.

(c) Hunt from any ground blind during any open season or special hunt for hunting deer with firearms unless the outside of the blind displays a minimum of 144 square inches of material that is a solid highly visible color commonly referred to as blaze orange, florescent orange, or florescent blaze orange, and is visible 360 degrees around the blind. Blinds that are left unoccupied shall have the owner's customer identification number or name and address written in the English language attached to the outside of the blind in a conspicuous location near the entrance to the blind and be kept legible at all times.

**Section 23. Effective dates.** These rules shall take effect on February 1, 2008, except sections 1, 15, and 21 which shall take effect on September 1, 2007, sections 10, 11 and 18 which shall take effect on November 1, 2007, and section 17 which shall take effect on June 1, 2008.

**Section 24. Board adoption.** This rule was approved and adopted by the State of Wisconsin Natural Resources Board on May 23, 2007.

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

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES

By \_\_\_\_\_  
Scott Hassett, Secretary

(SEAL)