

**Wisconsin Department of Natural Resources
Natural Resources Board Agenda Item**

Item No.3.A.

SUBJECT:

Request that the Board adopt Board Order WM-09-12(E), proposed rules affecting Ch.'s NR 10, 12 and 19 pertaining to the wolf hunting and trapping season and regulations, a depredation program, approval of quota and permit levels, approval of 2012 wolf harvest zones, and inclusion of 2012 harvest zones as addendum to Wolf Management Plan.

FOR: July, 2012 Board meeting

PRESENTER'S NAME AND TITLE: Kurt Thiede, Land Division Administrator, and Bill Vander Zouwen, Chief, Wildlife Ecology Section

SUMMARY:

As required by 2011 ACT 169, Wisconsin's first wolf hunting and trapping season will held this fall and winter.

These proposed emergency rules will establish regulated and managed harvest opportunities for gray wolves by hunting and trapping. The proposal also establishes requirements and administrative procedures for the submission and payment of wolf depredation claims.

Additionally, the department is recommending a 2012 - 2013 harvest quota and a permit level for gray wolves. The goal of the harvest quota is to provide opportunity for hunters and trappers, begin to reduce the wolf population, and to maintain a sustainable, viable wolf population. The number of wolf harvesting licenses to be issued is proposed to equal ten times the state quota after tribal declarations have been subtracted.

Recommended 2012 - 2013 harvest quota:

Zone 1 - 65

Zone 2 - 35

Zone 3 - 37

Zone 4 - 10

Zone 5 - 25

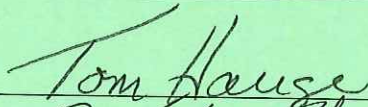
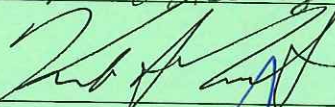
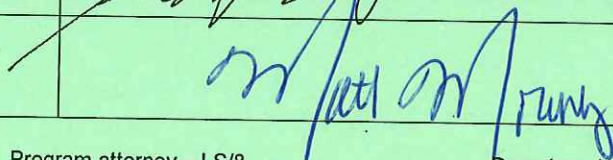
Zone 6 - 29

Statewide total =201

The authorizing legislation has established that a finding of emergency is not necessary for promulgating these rules.

RECOMMENDATION: That the Board adopt Board Order WM-09-12(E), approve quota and permit levels, approval of 2012 wolf harvest zones, and inclusion of 2012 harvest zones as addendum to the Wolf Management Plan.

LIST OF ATTACHED MATERIALS (check all that are applicable):☐ (choose one)☐ Statement of scope☒ Fiscal estimate and economic impact analysis (EIA) form☒ Response summary☒ Attachments to background memo☒ Governor approval of statement of scope☐ Environmental assessment or impact statement☒ Board order/rule

Approved by	Signature	Date
Tom Hauge, Bureau Director		7/2/12
Kurt Thiede, Administrator		7/2/12
Cathy Stepp, Secretary		7/2/12

cc: Board Liaison - AD/8
Scott Loomans - WM/6

Program attorney - LS/8
Bill Vander Zouwen - WM/6

Department rule coordinator - LS/8

Staff review – Natural Resources Board agenda item

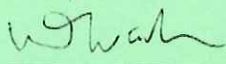
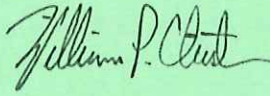
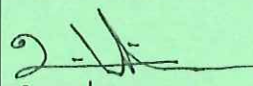
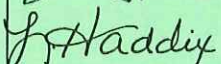
Reminder:

Have the following questions been answered under the summary section of this form?

- Why is the rule needed?
- What are the significant changes?
- What are the key issues/controversies?
- What was the last action of the Board?
- Will the proposed rule have an economic impact on small business, and if so, will it be minimal (level 3), moderate (level 2), or significant (level 1)?

List of attached materials required for rule proposals:

Statement of scope	Hearing authorization	Final adoption
<ul style="list-style-type: none"> • Memo to the Board • Statement of scope • Governor approval letter 	<ul style="list-style-type: none"> • Background memo • Fiscal estimate and EIA form • Environmental assessment (if needed) • Board order/rule 	<ul style="list-style-type: none"> • Background memo • Response summary • Fiscal estimate and EIA form • Environmental assessment (if needed) • Board order/rule

Program and reviewer	Signature	Date	Comments
Enforcement and Science Type Env. analysis liaison's name (if applicable), Environmental Analyst William Walker, Economist		6/27/12	
Management and Budget William Christianson		6/28/12	
Legal Services Tim Andryk Linda Haddix	 	6/28/12 7-2-12	
Other (if applicable) Type name and job title (if applicable) Type name and job title (if applicable) Type name and job title (if applicable)			

DATE: June 26, 2012

TO: Natural Resources Board Members

FROM: Cathy Stepp, Secretary

SUBJECT: Adoption of Board Order WM-09-12(E) relating to wolf hunting and trapping regulations, establishment of a depredation program, and approval of a harvest quota and permit level

These proposed emergency rules will establish regulated and managed harvest opportunities for gray wolves by hunting and trapping. The proposal also establishes requirements and administrative procedures for the submission and payment of wolf depredation claims.

Additionally, the department is recommending a 2012 – 2013 harvest quota of 201 wolves for the Wisconsin wolf population. The proposed harvest quotas across the 6 wolf zones vary from a 20% harvest of the winter count (excluding tribal reservation packs) in primary wolf habitat, to 40% harvest in secondary wolf habitat, and 75% harvest in marginal wolf areas. The overall level of harvest is expected to reduce the wolf population closer to the management plan population goal that is a threshold for management actions; but is not likely to cause a drastic population decline. The proposed wolf harvest system is designed to maintain a sustainable, viable wolf population in Wisconsin.

Background:

Wolves were extirpated from Wisconsin in the mid-1900s. However, Minnesota wolves began to re-colonize Wisconsin in the 1970s. Protections brought by endangered species laws, and possibly changes in attitudes toward wolves, allowed their population to re-build. The wolf population began to increase substantially in the 1990s. In response, the department worked with stakeholders and scientists to write a wolf management plan that was approved by the Natural Resources Board in 1999. The number of wolves passed the endangered species threshold of 80 for 3 years in 1997, passed the threatened species threshold of 250 in 2001, and passed the management plan minimum goal of 350 in 2004 (Fig. 1). The 2012 winter wolf count was a minimum count range of 815-880 in 213 packs. Figure 2 shows the most recently available map of packs, from the 2011 count.

Figure 1. Trend in Wisconsin winter wolf count.

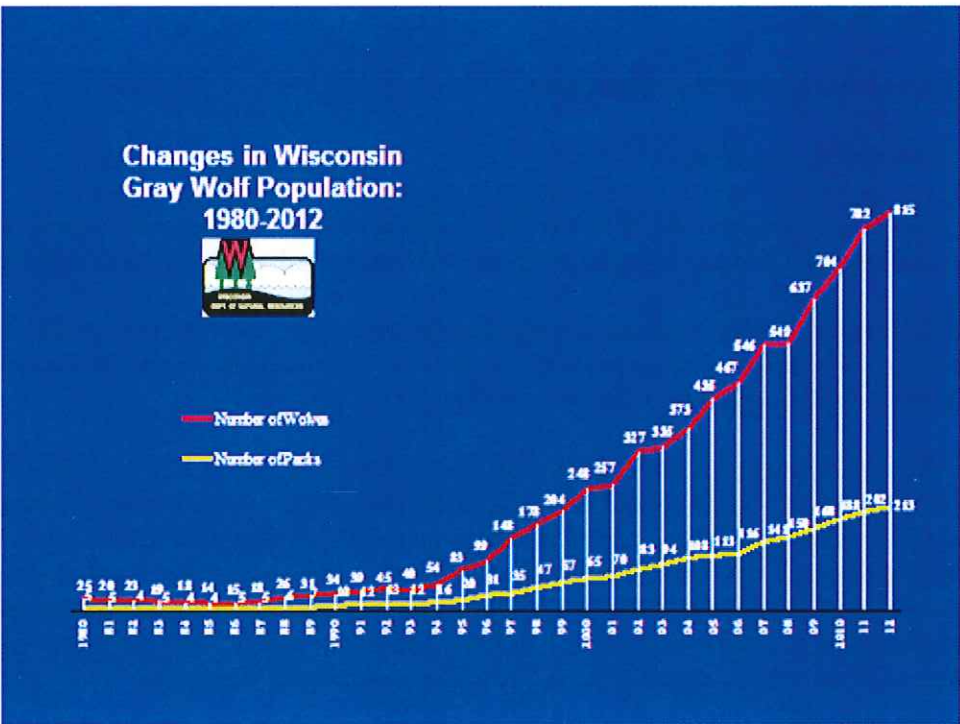
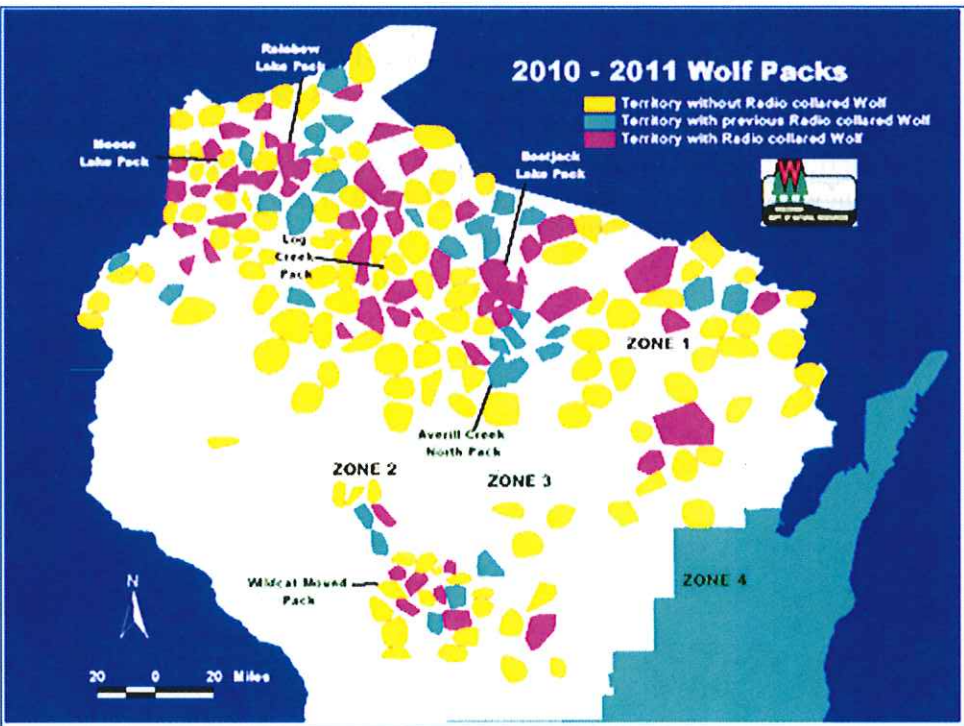


Figure 2. Wolf pack distribution in Wisconsin.

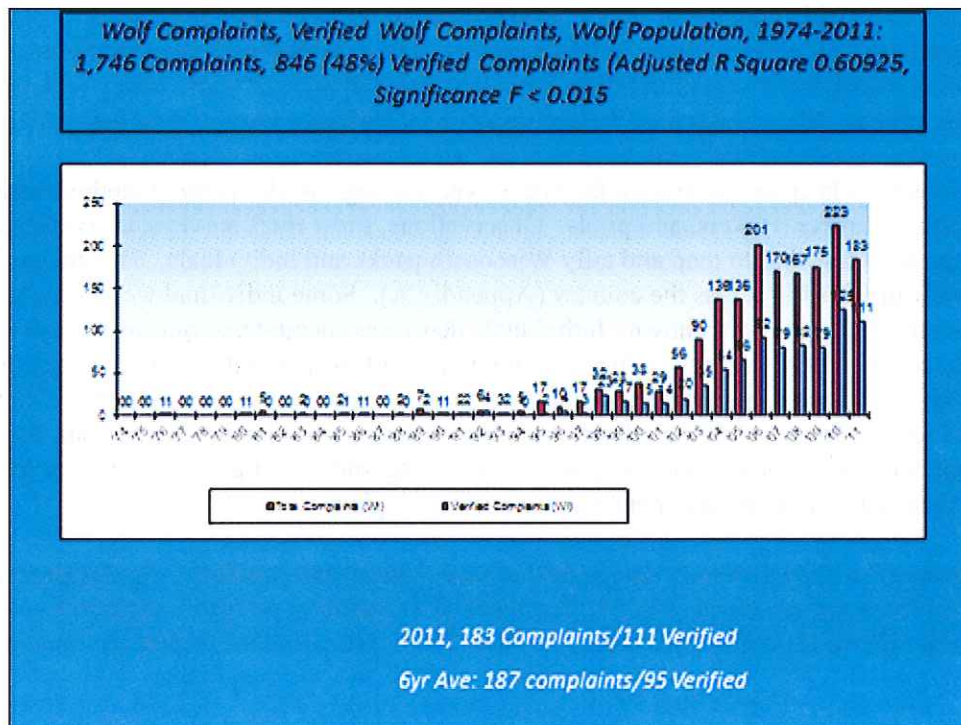


We want to recognize the incredible wildlife recovery story of the wolf and all those who contributed toward its return to a viable population status. Department endangered resources, wildlife management, and law enforcement staff all had a hand in this recovery. The U.S. Fish and Wildlife Service provided oversight of wolf management and monitoring, working with Department staff. Many organizations supported these efforts. Many volunteers helped department staff monitor the wolf population as well.

Wolf populations have been monitored for the last 33 years using a pack mapping method with the help of department staff, volunteer trackers, and pilots. Observations, snow track surveys, and radio-telemetry techniques were used together to map and tally Wisconsin packs and individuals. This method is a standard for wolf monitoring across the country (Appendix A). Some individual wolves are missed in this survey, but this number is not known. Individuals that were encountered during surveys were included in the count. These surveys yield a minimum count of the population, and the management plan minimal goal of 350 is based on minimum counts. Packs with den sites or at least 50% of their home range on tribal reservations are not included in comparisons of population size to the goal, but are included in statewide wolf counts. The purpose of this management plan goal was to serve as a threshold above which wolf population management actions could take place.

With the recovery of a large carnivore came some annual depredation problems. As the population grew, depredations on livestock increased (Fig. 3). The level of depredation problems appeared to increase substantially after the wolf population exceeded 350 in 2004. Depredations of pets and hunting dogs also increased.

Figure 3. Trend in number of farms with wolf depredations in Wisconsin.



Although the management plan allowed for control actions, such as a public hunting and trapping season, when the wolf population surpassed 350, federal lawsuits resulted in re-listing wolves as a protected endangered species each time it was de-listed. The winter wolf count continued to grow from 350 to over 800 in 2012 with 8 years of no authority for hunting or trapping seasons and only temporary authority during some years for other control actions. The Great Lakes wolf population was again de-listed on January 27, 2012.

Once the wolf was de-listed in January, the department provided opportunities to address livestock depredation problems. The US Department of Agriculture Wildlife Services was contracted to investigate depredation situations and remove wolves where prudent. Landowners who have had depredation problems were also issued permits, allowing them to trap or shoot wolves on their property. In addition, landowners seeing wolves in the act of pursuing their livestock or pets were allowed to shoot those wolves without a permit. As of June 25, 39 wolves were killed as part of these control actions.

The Wisconsin state legislature passed bills authorizing a wolf hunting and trapping season, describing many of the components of the licensing structure, season dates, and methods to be allowed for hunting and trapping. The governor signed Senate Bill 411 into law as Act 169 on April 2, 2012. The legislation directed the department to establish through emergency rule a wolf hunting and trapping season to be implemented in the fall of 2012.

Statutory provisions of the wolf hunting and trapping season include:

License: Wolf trapping and hunting license combined

Fees: Application fee \$10, License fee \$100 resident and \$500 non-resident
Use of fees: License and application fees fund wolf depredation payments first and then other costs
License transfer: allowed by application to DNR no later than 15 days before the season
Preference system: one half random drawing; one half by drawing based on preference
Season dates: October 15 to end of February
Legal Weapons: Firearms, bows, crossbows
Shot size: larger than BB allowed
Dogs: May use up to 6 dogs in a pack to track or trail wolves beginning the day after regular gun deer season
Night Hunting: legal option beginning day after the regular gun deer season
Use of Lights: flashlights only at point of kill
Cable restraints: May be used as a trapping method
Baiting: allowed for trapping; allowed but restricted for hunting
Calling: allowed including electronic calls
Registration of harvest: required
Harvest zones, quotas and permit levels: May be determined by the department
Zone season closures: Protocol provided for closing seasons based on wolf management needs through information provided in a news release, on the website, and on the telephone registration system.

The legislature left to the department the most important components of wolf harvest management: designation of the harvest zones, establishing wolf harvest quotas, and setting the number of licenses to issue. Additional rules are suggested by the department for the purposes of safety, conformity with other furbearer hunting and trapping rules, minimizing non-target species captures, conformity with depredation compensation rules for other species, and enforceability.

Hunting and trapping license applications will be sold through the automated licensing system from August 1 to 31. Tribal declarations, of up to 50% of the approved harvest quotas within ceded territory, are expected in August. Licenses will be issued in September based on the remaining quota for state-licensed hunters and trappers.

The department's objectives for the first hunting and trapping season are to: implement the wolf hunting and trapping statute as directed by the legislature; provide opportunities for hunting and trapping; begin to reduce the wolf population; and learn and adapt based on the first year's experience with this season.

Rule Summary:

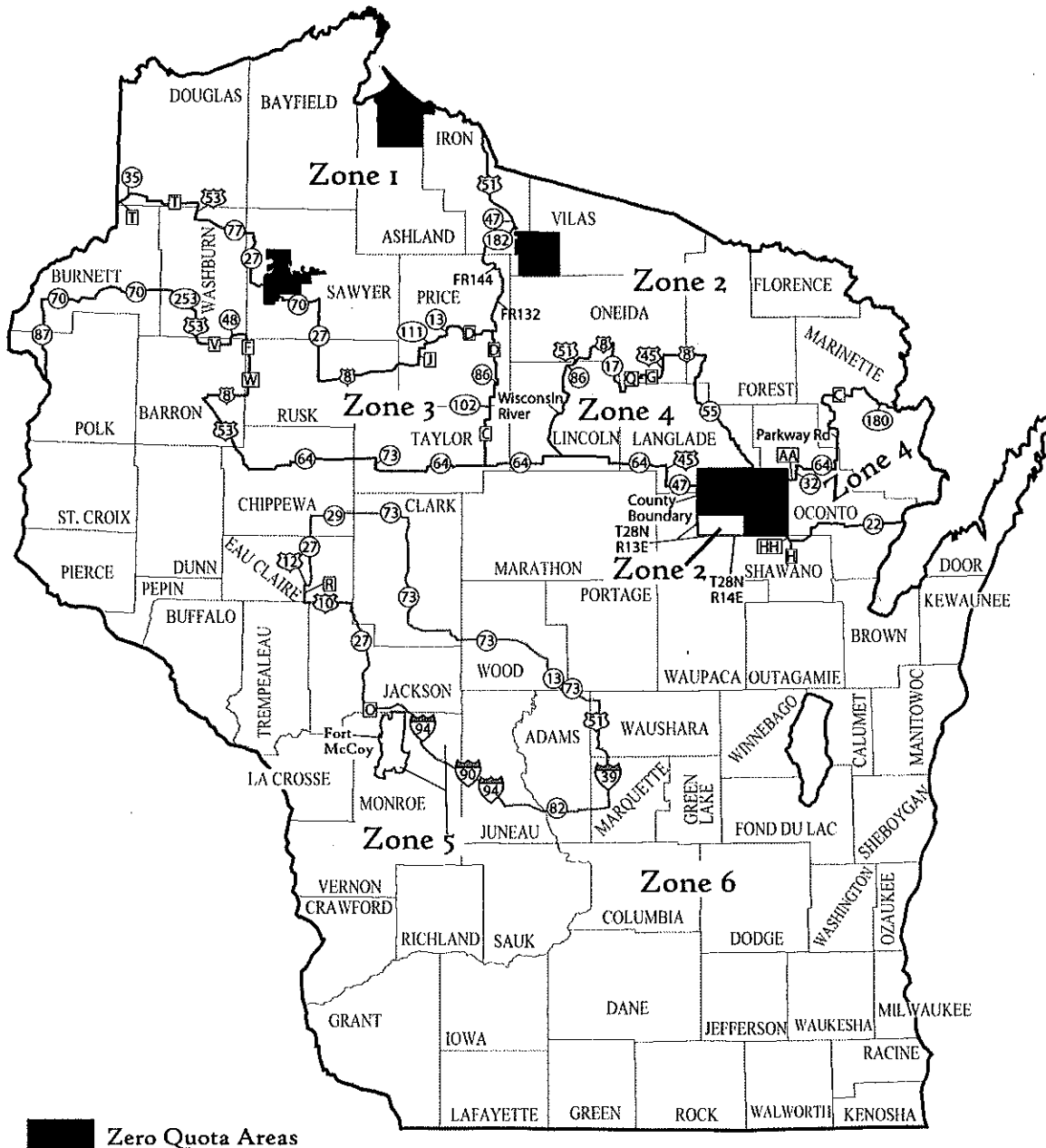
The department is recommending the following modifications to chapters NR 10, 12 and 19, Wis. Admin. Code, relating to the wolf hunting and trapping seasons, regulations, and a depredation program. Additional description of individual provisions of the rule is found in the discussion below and in the summary of factual data and analytical methodologies in board order WM-09-12(E). Specifically, the rule would:

- Define reservation wolf pack for the purposes of establishing wolf harvest quotas.
- Define "point of kill", a term used to describe when a flashlight can legally be used at night while hunting species for which there are no hunting hour restrictions.
- Clarify, in the definition of "small game", that wolves are not small game.
- Define and establish Wolf Harvesting Zones.

- Locate the statutorily established wolf hunting and trapping season dates in the table where other season dates are established.
- Strike wolves from the list of protected species for which hunting and trapping seasons are not established and relocate a provision allowing landowners, lessees and occupants of lands to kill nuisance wolves in certain situations.
- Establish normal daytime hours for hunting wolves but eliminate hunting hour restrictions for the portion of the wolf season beginning on the day following the traditional 9-day November firearm deer season each year.
- Prohibit the use of radio telemetry receivers to aid in locating wolves for any purpose unless specifically authorized by the department.
- Establish that baiting is allowed as a method of hunting wolves and the conditions under which bait may be placed for hunting wolves.
- Establish special regulations for hunting wolves at night including a prohibition of using dogs at night. This section also establishes regulations related to dog tags, identification, and the number of dogs that may be used.
- Update code language for consistency with 2011 ACT 168 and 2011 ACT 169 regarding the allowed types of firearms, ammunition, and crossbow use for hunting wolves.
- Prohibit the use of steel-jawed foothold traps with a jaw spread of greater than seven inches as a non-water set when the wolf trapping season is open to November 30 to reduce the incidental capture of certain non-target species.
- Establish a period during the wolf hunting and trapping season when cable restraints may be used in order to reduce the incidental capture of non-target species and create standards for the use of cable restraints placed to capture wolves.
- Allow the possession and retention of coyotes, fox and bobcat captured incidentally to wolf trapping in cable restraints that are not otherwise legal to place for coyotes or bobcat, if the respective season is open and the person has an valid unfilled permit and tag, in the case of an incidental bobcat.
- Establish that a wolf harvesting license is required to hunt or trap wolves and create guidelines and criteria that must be considered by the department when establishing harvest quotas and issuing permits.
- Explain how applications for wolf harvesting licenses are made and successful applicants are selected. This provision also establishes the manner for tagging, reporting and registering harvested wolves with the department. Finally, this provision creates language that is consistent with 2011 ACT 169 regarding a process for closing the wolf hunting and trapping seasons for wolf population management purposes.
- Establish that the U.S. Fish and Wildlife Service may allow wolf hunting at the Necedah National Wildlife Refuge. This does not require the service to allow wolf hunting. Trapping furbearers such as wolves is already possible under current rules, at the service's discretion.
- Re-establish, following delisting of the species, that department authorization is required to remove wolves causing damage or which constitute a nuisance and establish conditions and requirements for removal.
- Clarify that dogs may not be used to pursue wolves under a wolf damage shooting permit unless specifically authorized by the department, similar to permits issued for bear damage.
- Establish a wolf depredation program that is in effect only at times when wolves are not listed as a threatened or endangered species.

Approach to Harvest Zones – The rule proposes harvest zones that: a) provide core range critical to wolf population viability, where harvest rates will be lower than prescribed elsewhere; b) provide secondary range where greater conflict potential exists and where wolves will be managed at a lower density; and c) manage the rest of the state at very low wolf densities through liberal harvest prescriptions (Fig. 4). Zone boundaries generally follow deer management unit boundaries comprised of major roads and rivers. The core range includes the heavily forested portions of northern Wisconsin and the central forest, including Fort McCoy. The core range includes most tribal reservations. The secondary range includes portions of the north where there is a transition into greater agricultural land use. The use of 4 zones in the north allows the department to set quotas and therefore hunting and trapping pressure in response to regional wolf population trends, wolf population management needs, and levels of depredation issues or potential for conflict.

Figure 4. Proposed wolf harvest zones.



Zero Quota Areas

Wolf harvest is not allowed within the boundaries of the Bad River, Lac Courte Oreilles, Lac du Flambeau, Menominee, and Red Cliff reservations except with DNR depredation permits.

The original draft harvest zones (map located on DNR's website, search for "wolf") were modified based upon public feedback to accomplish several objectives. The small 1A zones in the far northwest would be added to the larger northwest zone, with the intent of addressing the high number of depredations in 1A with local depredation control actions. Several deer management units (41, 44, 45, 49A, 50) including the Menominee and Stockbridge-Munsee reservations were moved from the secondary range to core range due to the low potential for conflicts, high amount of forested land, and tribal values (e.g. National and County forests). Deer management unit 23 was added to the secondary range due to the amount of forested landscape suitable for wolf habitat. Deer management unit 51B was added to the secondary range due to the amount of forested landscape there. All of these changes result in more land moving from higher to lower harvest rate prescriptions.

In order to respect tribal values associated with wolves and to avoid potential jurisdictional confusion and challenges regarding management and enforcement, the department proposes that tribal reservations with federally recognized exterior reservation boundaries within which there are some non-tribal fee simple owned lands and that currently support or have the potential to support wolf packs within those boundaries have zero quotas for state wolf harvest. These reservations include the Bad River, Red Cliff, Lac Courtes Oreilles, Lac du Flambeau, and Menominee.

Approach to Harvest Quotas – The department's objective for this first year is to begin to reduce the wolf population. Quotas are set with that intent in mind. Quota ranges brought to the public for discussion purposes and feedback totaled 142 to 233. These quotas were calculated by multiplying a range of harvest rates (percentages) by the mid-point of the range of 2012 minimum wolf counts for the draft harvest zones. For the core range, the quota range amounted to 10-20% of the mid-point. For the secondary range, the quota range amounted to 30-40%. The quota range was 50-75% of the mid-point of counts for the remainder of the state. Packs that have den sites or at least 50% of their home range on reservations (41 wolves) were not counted for the purposes of quota calculations. With the proposed harvest zone modifications, the harvest rate prescriptions were again calculated. The department is proposing quotas at the high end of these percentage ranges for the modified harvest zones (20% core; 40% secondary; 75% remainder of state), but midway in the total quota range taken to the public for input. The total proposed harvest quota for the 2012-13 season is 201 wolves, broken down by zone as follows: Zone 1 – 65; Zone 2 – 35; Zone 3 – 37; Zone 4 – 10; Zone 5 – 25; and Zone 6 – 29.

The department believes this is a safe harvest that would begin to reduce the wolf population. This assessment is based on the scientific literature that suggests that wolf populations typically are not reduced by human take up to 23-29% and preliminary population modeling by the University of Wisconsin-Madison Department of Forestry and Wildlife Ecology (Appendix B).

The department is uncomfortable prescribing higher harvests in this first year in light of uncertainties such as the: level of depredation control kills over the coming year; level of illegal kills with down-listing of wolves; level of mistaken kills as the coyote season may be opened in the north during the gun deer season; level of wounding losses during the hunting season; impacts of the season on reproduction of remaining wolves; and level of compensating effects of immigration and dispersal.

The quotas regulate the harvest for both state hunters and trappers, as well as the take by the Chippewa tribes. The Chippewa tribes are entitled to 50% of the quota within the ceded territory. The Chippewa tribes have not yet decided how much, if any, quota they will declare. If they make a declaration, the department will honor it and reduce the state hunter and trapper quota by an equal amount. In future years, quota adjustments can be made for actual, probable tribal harvest, based on evidence from prior years.

This rule lists factors that will be considered in setting harvest quotas rather than a formula for doing so. These factors include: wolf population level and trends; past harvest distribution; conflicts with human interests; ecological impacts and values; cultural values; tribal values; wolf removals through depredation control actions; disease impacts on wolves; and the population goal in the most recently approved wolf management plan. The quota is proposed to be a hunting and trapping season harvest quota. As such, it would consider other forms of mortality, human-caused or otherwise, but the season would not be closed as a result of tallies of such forms of mortality unless they are greater than anticipated at the time quotas were set.

Approach to Number of Licenses – The department proposes that licenses be issued in the number that is 10 times the harvest quota. If the state quota after tribal declarations would be 100, then the number of licenses issued would be 1000. For this first year, the department does not know the success rate of hunters or how likely an early closure may be. The department proposal is a compromise that considers the potential for: providing optimum opportunities for participation; optimum opportunities for reaching the quotas; minimum probability of closing the season before hunters and trappers get an opportunity to pursue wolves with their preferred methods; and minimum probability of exceeding the harvest before the season could be closed (e.g. opening weekend of gun season). The rule proposes that these factors be considered each year in addition to the quotas and past hunter and trapper success rates.

This proposal compares to a multiplication factor of 15 in the first year for Minnesota, where they are also having a more conservative quota that is not intended to reduce the wolf population, and to around a 1% success rate in Montana and Idaho where most hunters buy a low cost license in case they see a wolf while deer or elk hunting. Potential for higher success rates in Wisconsin could result from the accessibility of wolves in Wisconsin compared to the other states, the incentive for success that a high license cost and possible once in a lifetime opportunity may be, and the possible impacts of methods such as trapping, dogs, and night hunting. Actual success rates in the 2012-13 will inform the license number decision for future seasons.

Hunter and Trapper Flexibility: This rule proposes that the department may require that hunters and trappers apply for one or more zones and that successful applicants may be restricted to one or more zones. However, it also gives the department authority to allow successful applicants to hunt or trap in any open zone. The latter is proposed for the first season in 2012-13. If the population is reduced and quotas become small, zone restriction for licensees may become necessary.

Reporting/registration requirements: This rule would require hunters and trappers to call in to report their harvest within 24 hours of kill. This would be the same as for bobcat and would provide the department with information that would allow for timely closure of zones if the quota is approached. Hunters and trappers would also be required to present the pelt and carcass to department staff within 5 days of the month of kill in order to receive a department seal on the pelt. Hunters and trappers would be required to

provide information and carcass samples (e.g. tooth, reproductive tract) to the department for the purpose of population monitoring and modeling. This would be the same as for bobcat, fisher and otter.

Closure factors and process: The statute allows the department to close the season in zones if needed for wolf management purposes. A closure protocol must include public notice in 3 forms: a news release, website information, and telephone registration system information. The time from kill to closure could be up to 72 hours including 24 hours to report, time for releasing the 3 forms of public notice, and 24 hours for hunters and trappers to learn about the closure. Considering this timeline, it may be prudent to initiate the zone closure process before the quota is reached. The rule provides a list of factors that may lead the department to initiate the closure process including: the relationship of the harvest tally to the quota; how quickly the quota is being approached; and other causes of wolf mortality which are known to be greater than anticipated when the quota was set. Examples of the latter might include illegal kills, a disease outbreak, or depredation control actions.

Trapping Restrictions: The statute requires that trapping be allowed during the entire season from October 15 to the end of February. The rule proposes that cable restraints be allowed beginning December 1, the same as for bobcat, coyote and fox. The rule also proposes that maximum jaw spread of dryland foot-hold traps be 7 inches through November 30. Both of these regulations will result in less captures of non-target species such as bears.

Night Hunting Restrictions: The statute requires that night hunting be allowed beginning the day following the regular gun deer season. The rule proposes that allowable night hunting methods only include hunting with calls and hunting over bait. This is for safety reasons. The statute only allows the use of flashlights at the point of kill.

Baiting Restrictions: The statute requires that baiting be allowed for hunting, but that animal products other than scents are not allowed. Without additional rules, this could result in 3 sets of baiting regulations for bears, wolves and deer, all over-lapping and potentially conflicting with each other. For example, without additional rules, a wolf hunter could potentially place 100 gallons of corn as a wolf hunting bait in a county where deer baiting is prohibited. The rule proposes that baiting amounts and methods for wolf hunting follow allowable methods for deer or bear in the county (e.g. 10 gallons under cover for bear or 2 gallons uncovered where legal for deer) and that wolf baiting be allowed from October 1 to the end of the wolf season. Substances known to be toxic to canids (e.g. dogs) could not be used as wolf baits.

Hunting Hours: The rule proposes that hunting hours would be the same as for small and big game except that night hunting be allowed beginning the day after the regular gun season, as required by statute.

Depredation Compensation and Abatement: The rule proposes compatibility where possible with other animal damage rules and clarifies compensation timing and proration requirements. Components of the rule include:

- Requirement of wolf hunter access where compensation is received as with other species in the animal damage program.
- Requirement that department staff or its designees be allowed access to investigate depredations as for other species in the animal damage program.

- Requirement of reasonable abatement practices as with other species in the animal damage program.
- Allowing others to assist a landowner with wolf control activities if the assistant has any hunting license, since it is not practical to expect these assistants to be drawn in the wolf license drawing.
- Allowing up to 5 calves to be claimed for compensation for every calf confirmed to be depredated by a wolf, considering that calves may be preyed on without leaving evidence that remains until the loss is detected.
- Process for setting payment maximums
- Payment of compensation following December 31 when all claim amounts and wolf hunting and trapping revenues are known for proration decisions, if necessary.

Public Awareness and Comment:

In the short time between Natural Resources Board approval of the rule scope statement on May 23 and this rule's green sheet deadline on June 27, the department offered many opportunities for staff, scientists, stakeholder groups, and the public to comment on draft rule concepts. These opportunities for awareness building and comments included but were not limited to:

- 5 meetings of an internal department season framework ad hoc group comprised of wildlife management and law enforcement rule specialists, furbearer staff specialist, wolf specialist, furbearer research and modeling specialist, chief attorney, 2 field wildlife supervisors, and the wildlife ecology section chief;
- Additional internal meetings of teams working on funding, licensing system, law enforcement, depredation compensation issues, rule language development, tribal issues and stipulations, and others.
- 4 public meetings in Spooner, Black River Falls, Fond du Lac and Rhinelander
- Wolf Science Team meeting in Rhinelander
- Wolf Stakeholder Committee meeting in Rhinelander
- Conservation Congress Wolf Committee meeting in Milladore
- Cattleman's Association meeting
- Farm Bureau meeting
- Meeting with representatives of Wisconsin Bear Hunters Association
- Meeting with Wisconsin Wildlife Federation board in Stevens Point
- Meeting with Fort McCoy staff
- Consultation with US Forest Service biologist
- Department website established for documents detailing proposals and for public survey
- A recording of one of the public meetings was made available to the public through Wisconsin Eye.
- Staff review of wolf harvest plans and results from the states of Idaho, Montana, Minnesota and several provinces and contacts with staff at some of these locations
- Review of scientific literature on wolf harvest management in various states and provinces
- Work with UW-Madison on modeling of wolf harvest management impacts

Many comments were received on the survey and through letters and e-mails from people both in and outside of Wisconsin. Many people did not think that wolves should be hunted or trapped. Others desired more restrictions on the season length and methods, with most frequently mentioned methods being trapping, use of dogs, and night hunting. Many of these people were opposed to wolf hunting and trapping season components already decided in the statute. Others thought the population goal was too

low, considering how many wolves are now in Wisconsin. Many commented that they wanted more liberal harvest quotas and license numbers to allow more hunting and trapping opportunity and to more rapidly reduce the wolf population. Concerns of scientists tended to focus on the level of harvest quotas and licenses for a first season with the degree of uncertainty and consequent level of impacts. Generally, survey respondents were split as far as support or opposition for proposed rule concepts and harvest zones; the proposed range of quotas; and the proposed formula for determining the number of permits or licenses (Table 1).

Table 1: Results of surveys completed by the public at meetings and on the department website

Question	Spooner Meeting	Black River Falls Meeting	Conservation Congress Wolf Committee and Guests	Fond du Lac Meeting	Rhinelanders Meeting	Website Survey	Total
Support rule concepts?	Yes – 15 No – 6	16 5	8 2	6 3	23 15	386 542	454 573
Support harvest zones map?	Yes - 17 No - 8	19 4	6 4	7 3	30 7	443 462	522 488
Preferred quota relative to range of 142-233?	Higher - 8 High - 5 Mid - 5 Low - 2 Lower - 7	11 6 1 2 3	3 5 2 0 0	4 2 0 1 4	12 5 1 15 7	192 164 62 63 300	230 187 71 83 321
Preferred number of permits relative to proposed 5 x quota?	Higher -10 Support - 8 Lower - 3	14 5 3	2 7 0	3 2 4	10 14 13	231 178 345	270 214 368

Tribal Consultation

Department administration and staff have regularly consulted with Wisconsin tribes since work on the rule commenced. These consultations included trips to Voigt Task Force meetings at Mille Lacs, Minnesota and Lac Courtes Oreilles, Wisconsin; a meeting with Chippewa tribal leaders at Red Cliff regarding wolf stipulation concepts; 4 meetings of staff with one or more Great Lakes Indian Fish and Wildlife Commission representatives on rule and quota development; numerous communications among Chippewa tribal and department attorneys; an all tribes meeting in Red Cliff; a meeting with Stockbridge-Munsee; a meeting with Menominee; and a Wolf Science Team meeting that included representatives of Stockbridge-Munsee, Potawatomi, and Bad River tribes.

Most of the tribes are interested in protecting wolves from harvest or managing for at least as high a number of wolves as occurs now. The wolf is very important to them from a cultural and religious standpoint. The tribes are especially concerned about the harvest of wolves from packs that spend any

time on their reservations. The department was not able to reach agreement with the tribes on harvest zones, harvest quotas or license numbers as of the date of writing of this memo. The tribes requested zero harvest within their reservation boundaries and within a six-mile distance from the reservations. While the department could not provide the 6-mile buffer, in most cases we have met the tribes' desires for additional protection of tribal packs by creating zero harvest or non-quota zones within established reservation boundaries.

Rule Development:

These rules were developed with assistance from the bureaus of law enforcement, legal services, customer service & licensing, and endangered resources.

Environmental Analysis:

The department has determined that these emergency rule revisions are a Type IV action which is exempt under Chapter NR 150, Wis. Adm. Code, and no environmental analysis is required.

Anticipated Private Sector Costs:

These rules, and the legislation which grants the department rule making authority, do not have a significant fiscal effect on the private sector. Additionally, no costs are associated with compliance to these rules.

Effects on Small Business:

These rules are applicable to individual sportspersons and impose no compliance or reporting requirements for small businesses, except if they choose to participate in the damage abatement and claims program established in this rule. The program established in this rule is substantially similar to an existing program that was, and will continue to be, administered by the department at times when wolves are listed as an endangered species. Under both programs, the department reimburses owners for the fair market value of domestic animals killed, or veterinary services, in wolf depredation incidents. A difference in the new program for times when wolves are not listed is that, under 2011 ACT 169, funding for damage claims originates from the sales of wolf harvesting licenses and permit applications. Therefore, these rules will require program participants who have hunt-able land to allow some public access to hunters, consistent with similar damage claims programs for species like deer, which are also funded by hunting licenses. The ACT allows prorating claims based on available funding. The department is not able to estimate the level of interest there will be in permit applications and cannot anticipate whether-or-not prorating claims will be necessary.

The ACT and this rulemaking will allow Wisconsin to manage wolves to population levels that will be lower than the current population. A result will be less wolf depredation on domestic animals. A reduction in depredation will result in less time investigating damage, filing claims, and working with agency staff who administer the program. Individual producers who are concerned about livestock depredation are likely to view a hunting season as very important to them economically. In 2010, the department investigated and made damage payments for depredations of 84 cattle or missing cattle and six sheep.

Because this rule does not create new regulatory requirements of small businesses, the proposed rules will not have a significant economic impact on a substantial number of small businesses under 227.24(3m).

Appendix A: Counting methods for Wisconsin wolf population.

The department uses a minimum count to estimate the state wolf population in mid to late winter. This is similar to systems of minimum counts used in other areas of North America and Europe, in which some version of minimum counts were used in 26 or 28 studies evaluated by Kunkel et al. (2005). In Wisconsin a combination of aerial tracking of radio-collared wolves, ground snow-tracking surveys, and collections of public reports of wolves are used to make an estimate of the minimum number of wolves in the state. In cases of radio-collared wolves, the highest number of wolves seen together (radio-collared wolf and members of its pack) are assumed to be a minimum count of that pack. Sometimes with ground snow track surveys, when conditions are less than ideal, especially if there has been considerable vehicle traffic, or deep snow with wolves stepping in part of each other's tracks, or pack members being scattered over a large area, absolute counts are not possible and pack size is reported in a range. For example a pack might be reported as 5-8 wolves, meaning there was strong evidence of at least 5 wolves in this pack, but the total in the pack may possibly be as high as 8 wolves. Thus, the statewide wolf count represents a minimum count and range of how many additional wolves may have occurred in surveyed wolf packs.

The minimum wolf count used in Wisconsin is mostly a territorial mapping system; through radio-tracking, snow tracking, and historical patterns, boundaries of wolf territories area determined (Wydeven et al. 2009). Most wolves counted within boundaries of specific designated packs are assumed to be members of that pack. Thus, the survey system focuses mainly on residential wolves that occupy these territories on a year-round basis. Attempts are made to also report any lone, non-territorial wolves detected during winter surveys. Generally, lone wolves found separate from other wolves, and not apparently connected to any existing pack, are assumed to be loners. But, sometimes, pack members do make extra territorial moves and return to home packs at some later date. Thus, some wolves assumed to be loners may have also have been counted with a pack. Fuller et al (2003) reports 7 -20% (table 6.1, p. 165-166) as non-resident or loner wolves, and some studies use values of 10-15% loners as additions to any pack wolves surveyed, but Burch et al (2005, p. 1233) argue against just adding figures from the literature to wolf population estimates. In Wisconsin we counted 2-15% of the minimum count as loners each year, but have not applied any additional factor for the unknown number of additional loners that our surveys did not detect (Wydeven et al. 2009).

Literature Cited:

Burch, J. W., L. G. Adams, E. H. Follmann, and E. A. Rexstad. 2005. Evaluation of wolf density estimations from radio telemetry data. *Wildlife Society Bulletin* 33:1225-1236.

Fuller, T.K., L.D. Mech, and J. F. Cochrane. 2003. Wolf population dynamics. pp. 161-191 in L.D. Mech and L. Boitani, eds. *Wolves, Behavior, Ecology, and Conservation*, University of Chicago press, Chicago, IL, USA.

Kunkel, K., C. Mack, and W. Melquist. 2005. *An Assessment of Current Methods for Surveying and Monitoring Wolves*. Report prepared for Nez Perce Tribe, Lapwai, Idaho. 59 pp. +9pp Appendix

Wydeven, A.P., J.E. Wiedenhoeft, R. N. Schultz, R.P. Thiel, R. L. Jurewicz, B.E. Kohn, and T.R. Van Deelen. History, population growth, and management of wolves in Wisconsin. pp. 87-105 in A.P.

Wydeven, T.R. Van Deelen, and E.J. Heske. 2009. *Recovery of Gray Wolves in the Great Lakes Region of the United States: An Endangered Species Success Story*. Springer, New York, NY, USA.

Appendix B: Scientific basis for Wisconsin wolf harvest proposals including effects on wolves and wolf packs and considerations of other mortality factors.

Introduction:

The Wisconsin DNR is proposing a wolf harvest of 201 wolves for the first hunting and trapping season to run from October 15, 2012 through February 28, 2013 (Table 1). This number represents 24% of the mid-point of the range of the state minimum wolf count in late winter 2012 of 848 wolves (minimum count of 815 to 880 wolves).

Wolves are currently harvested in jurisdictions across their North American range. Harvest rates vary by state and province (Table 2). In the first year of harvest, states have ranged from 13-22% take. The first harvest of wolves in Montana in 2009 consisted of 72 wolves from a population of 525 wolves (14%). Idaho harvested 188 wolves out of a population of 856 wolves (22%). Minnesota proposes to harvest 400 wolves from a population of approximately 3,000 wolves (13%). The proposed wolf harvest for Wisconsin is slightly higher than the range of initial harvest proposed or completed in other states. These states do differ from Wisconsin in that they had more regular lethal control depredation management, through being listed as threatened (Minnesota) or being listed as experimental populations (Idaho and Montana).

Alaska typically harvests at 12-19 % of its wolf population annually, but remove another 2% annually with special control programs to increase wild ungulate populations (Table 2). But in Alaska public harvest and government control programs account for most human caused mortality. The Canadian provinces with wolf populations typically harvest 3-16% of their wolf population annually (Table 2).

Wisconsin's wolf population will respond to all forms of human-caused mortality. Wolf populations were exposed to various forms of human-caused mortality throughout their recovery including depredation control, vehicle collision and illegal take. The delisting of the wolf population resulted in policy changes which not only establish a hunting season but also liberalize depredation control efforts. It is important to view these sources of mortality in aggregate to properly assess the impact they will have on the population.

Estimates of Human-Caused Mortality:

Analysis of Wisconsin radio-collared wolf (2003-2011) mortalities yields a cause of mortality composition which includes 34 % illegal kill, 12% control actions, 9% vehicle collisions, 27% natural mortality, and 18% other mortalities and unknown causes (Stenglein et al. submitted). Smith et al. (2010) reports mortalities for radio-collared wolves in the Northern Rocky Mountains during the period 1982-2004 as 24% illegal kills, 30% control actions, 12% natural mortalities, 21% vehicle collisions and other mortalities, and 12% unknown causes. In Wisconsin, authority to use lethal control on problem wolves varied during periods of Federal down-listing, delisting, or by special permits, but there also were extensive periods when the only authority for use of lethal controls was in human safety situations. Lethal control authority for wolves depredating on livestock was available for the Northern Rocky Mountain region throughout this period, explaining part of the difference in percentage of wolves removed by control actions between the two regions. There is some indication that illegal kill rates were higher in Wisconsin.

Studies in Wisconsin show approximately 25% of adult and yearling wolves die most years (Wydeven et al. 2009). In analysis conducted by Jen Stenglein (UW-Madison PhD candidate), approximately 9% of wolves are killed illegally each year according to radio-collar records. The cryptic nature of poaching makes direct estimates difficult. Jen analyzed DNR data to estimate the number of lost radio-collared wolves which could be attributed to illegal kill. This analysis indicates true illegal kill rates may be as high as 19% (Jen Stenglein pers. comm.). Thus a functional “harvest” of 9 to 19% of the wolf population is already occurring.

Wolf control activity is likely to increase in Wisconsin as more flexible controls are available through federal delisting of the Western Great Lakes gray wolf population on January 27, 2012. During the period from 2003 through 2006, while wolves were listed as federally threatened or WDNR was under special permit from the U.S. Fish and Wildlife Service, an average of 6% of the state wolf population was removed from depredation sites per year (Ruid et al. 2009). More recently, with delisting in place for much of the year in 2007 and 2008, USDA-WS removed 6.8 % (37 wolves) and 7.1 (39 wolves) respectively. Additionally in 2007 landowners shot 3 wolves (0.5%) and in 2008 shot 4 wolves (0.7%). Thus total depredation controls were about 7 and 8 % of the winter wolf population in 2007 and 2008. For the 3-year period from 2009 through 2011, wolves were delisted for only 2 months, and no special depredation permits were provided during the rest of the period, resulting in 10 (1.6% of winter population) removed for livestock depredation in 2009. Sixteen (2.3% of winter population) wolves were removed for human safety concerns in 2010, and 4 (0.5% of winter population) wolves were removed for human safety concerns in 2011.

Delisting has allowed for more liberal issuance of landowner permits and greater application of USDA control efforts. As of June 25, 2012, 30 wolves were removed at depredation sites by USDA-Wildlife Services, and 9 were removed by landowners under permits (7) or in the act of attacks on livestock (2). Thus, 39 wolves were removed for control purposes or 4.8% of the winter population. With livestock depredations likely to extend into October (Ruid et al. 2009), these numbers will continue to rise. We estimate they will reach approximately 10% of the winter wolf count.

Aggregation of individual mortality estimates allows us to estimate total human-caused mortality. As presented above, we estimate 3-4% mortality from vehicle collision, 9-19% from illegal take and 10% from depredation control. The addition of 24% harvest yields an estimated human-caused mortality rate of 46-57%, if there is no compensation among these factors.

Prior Research on Sustainable Mortality Rates:

Several researchers have explored possible rates of allowable harvest for wolf populations. Fuller et al (2003) summarize research through about 2000. While some have stated that wolves can tolerate mortality rates as high as 50% annually, Fuller et al determined that wolves could only tolerate 29 to 35% human mortality rates before population declines. Adams et al. (2008) updated research reviewed by Fuller et al. (2003), and determined that up to 29% human-caused mortality would not cause wolf populations to decline.

In a re-examination of Fuller et al. (2003) by Creel and Rotella (2010), they determined stable off-take by humans of most wolf populations averaged about 24.5%. Creel and Rotella (2010) argued the for the Northern Rocky Mountain wolves maximum stable off take by humans was only 22.4%. While most biologists agree that most harvest and human-caused mortalities are additive to other forms of wolf

mortality, Creel and Rotella (2010) argue that harvests can be super-additive in that harvests of key individuals for wolf packs may disrupt wolf packs and reduce survival of remaining pack members, or could cause packs to dissolve. Brainerd et al. (2006) provided some support for the concept that loss of adults, especially breeders may reduce survival of pups and cause packs to dissolve. Adams et al. (2008) postulate that “wolf populations compensate for human exploitation <29% primarily via adjustments in dispersal components (i.e., local dispersal, emigration, and immigration), whereas responses in productivity or natural mortality have little or no role in offsetting harvests.”

Gude et al. (2012) disagreed with portions of analysis by Creel and Rotella (2010) on maximum potential take on Rocky Mountain wolves. Gude et al. (2012) point out that Creel and Rotella incorporated data on wolf population estimates during years when adequate surveys had not been conducted, and when these surveys were removed from analysis, allowable harvest were higher for Northern Rockies wolves. Gude et al. (2012) argued that wolf recruitment needed to also be considered in assessments of allowable take. Gude et al. (2012) did not disagree with the assessment for other wolf populations.

Thus, it appears that potentially as many as 24 to 29 % of a wolf population can be removed via human-caused mortality before populations begin to decline. But some additional cautions need to be applied to this research when comparing it to places such as Wisconsin. Many of these studies that demonstrated allowable take at 29% or higher, have durations of less than 10 years and sometimes only 2 or 3 years. These studies are usually conducted in areas surrounded by high quality wolf habitat with high wolf populations. Large population refugia can serve as a source of dispersing animals, which may compensate for mortality in harvested areas.

None of the Canadian provinces or Alaska approach the levels of allowable harvests depicted in these studies (see table 2), and wildlife biologists in these Canadian provinces generally indicate wolf populations are relatively stable. In northern Canada and much of Alaska, public harvest represents nearly all the human-caused mortality, but wolves south of Canada will likely also suffer high losses from illegal kills, vehicle collisions, and depredation control activities (Smith et al. 2010, Stenglein et al. submitted).

Impact of Human Caused Mortality in Wisconsin:

The combination of 24% public harvest, 9-19 % illegal kill, 10% depredation controls, and 3-4% vehicle collisions yields an estimated total human-caused mortality of 46 to 57% of the Wisconsin winter population, well above the 24-29% level at which population declines can occur. We conclude the proposed 24% harvest will result in a moderate population reduction. Although wildlife scientists acknowledge that, under some circumstances human-caused mortality, may be compensatory to natural caused mortality, at high wolf population densities, most human caused mortality is likely to be additive to other mortalities (Murray et al. 2010), and possibly even super-additive (Creel and Rotella 2010). Thus additions of public harvest and depredation control should be viewed as additive mortality to the state wolf population.

Since the year 2000, the Wisconsin wolf population increased at an annual rate of 11 to 12% annually (Wydeven et al. 2009, Wydeven et al. 2011). The establishment of an active depredation control program and the establishment of a public harvest will likely reverse this trend, and cause a reduction in the wolf population. The harvest is not likely to reduce the wolf population close to the minimum population goal (level where management actions may be applied) of the 1999 plan (Wisconsin DNR 1999) of 350 wolves outside tribal reservations in the first year.

Simulation of the harvest levels proposed for each zone through an individual-based wolf harvest model developed by Jennifer Stenglein and Tim Van Deelen (University of Wisconsin-Madison) estimated a one-year statewide wolf population decline of 10% (personal communication). Their model includes both the current levels of human-caused mortality and projected depredation control removals of 10% of the population in addition to the proposed harvest quotas. However, the model generates somewhat different wolf numbers in each zone than were counted this past winter. They also note that there are unknown effects that were not modeled. Their modeling shows the importance of ongoing immigration of wolves from Minnesota and Michigan and the importance of maintaining an area of lower harvest rates in Wisconsin's core wolf range for a long-term, sustainable wolf population.

Other Mortalities

Wisconsin wolves have been exposed to a number of diseases. However, the wolf population has continued to grow since the late 1990's. It cannot be known whether a disease outbreak may occur in the future that could seriously depress the wolf population. Wolf health monitoring will determine if additional stress resulting from wolf hunting, trapping and dog training changes the impacts of these diseases. Future harvest quotas may be adjusted if significant effects occur. What has been learned about wolf diseases and exposure to disease agents follows.

Wisconsin wolves have been affected by canine parvovirus since the early 1980s, and it was apparently a factor that caused the wolf population to drop from 25 wolves in 1980 to 14 in 1985 (Wydeven et al. 2009). This was not as drastic as the decline on Isle Royale where the wolf population dropped from 50 in 1980 to 14 in 1982 due to parvovirus (Peterson 1995). The Wisconsin DNR tested for titers to canine parvovirus through 2004, and generally found that the vast majority of wolves in the state have been exposed to the virus. Testing for the agent was discontinued because the prevalence of the disease exposures in the adult population appeared constant and the exposure seemed to have little effect on the population growth.

Mech and Goyal (2011) examined seroprevalence of canine parvovirus for a wolf population in northeast Minnesota from 1973 through 2007. They determine that the main period when the disease affected pup survival and population change was 1987 through 1993. While seroprevalence remained at about 70% through recent years, little effect was documented on wolf population growth. The pattern was probably similar in Wisconsin with greatest impact on the wolf population in the 1980s, and little impact in the 1990s when the wolf population averaged a 22% annual increase despite finding that most wolves tested had antibodies to canine parvovirus.

Canine parvovirus will likely continue to be a mortality factor for some wolves; however, the effect on the population could vary greatly dependent on the population dynamics and the emergence of variants of the canine parvovirus itself.

Another virus that serology has identified that Wisconsin wolves have been exposed to is Canine Distemper Virus (CDV). CDV is a contagious, systemic, viral disease that has been documented in Canidae, Mustelidae, and Procyonidae. In Wisconsin, CDV has been documented as the cause of death in necropsies of gray foxes, raccoons, skunks and ermine. CDV has been implicated in high pup mortality in 1999 and 2005 in Yellowstone National Park (Almberg, et al 2009). Nelson, et. al (2011) concluded that the lack of exposure to CDV in pups and yearlings, compared to canine parvovirus, in the Canadian

Rocky wolf population was likely due to the higher virulence of CDV and the resultant higher mortality in pups. Similar to canine parvovirus, CDV will likely continue to be a mortality factor in the Wisconsin population; however, the effect on the population could vary greatly dependent on the ability of the remaining wolf population to absorb the impacts of the pup mortalities that could be associated with CDV.

Sarcoptic mange was first identified in Great Lakes wolves in 1991 along the Wisconsin/Minnesota border, and may have been a factor in a minor decline in the state wolf population in 1993 (Wydeven et al. 2009). Between 1991 through 1996, 27% of wolves handled showed sign of mange, but in recent years generally < 10% of handled wolves have mange, and in 2010 only 1 (3%) of 35 wolves had some mange. Between October 1979 and December 2010, 26% of 164 radio-collared wolves dying from known causes had died from disease, mostly mange, but in 2010 only one of 16 radio-collared wolves died of mange (Wydeven et al. 2011).

Sarcoptic mange mites were detected in 16 of 168 dead wolves examined in the Montana wildlife lab from animals dying between 2003 and 2007 (Jimenez et al. 2010). Mange was first detected in Montana in one pack in 2003, and spread to 11 of 47 packs in 2005, but found in only 3 of 71 packs in 2007 (Jimenez et al. 2010). Sarcoptic mange mites were also detected on five wolves in Wyoming, but had yet to be found in Idaho. Outside of some localized impact, mange had limited effect on wolves in the Northern Rocky Mountains, and did not appear to slow the growth of the regional wolf population.

Sarcoptic mange will likely continue to be an important mortality factor for wolves in Wisconsin and adjacent states. Although the disease has been in the wolf population for the last 21 years, only one minor decline was detected, and the wolf population has increased over 20 fold during that time period. The effects of mange may change if winters become more mild, and infected animals are not readily culled out of the population, and continue to infect other wolves. Long term climate change may also alter or modify the effect mange has on wolves.

The impact of a public hunting and trapping season on mange is difficult to predict. On the one hand animals affected by mange often lose their fear of people, travel in the open and in conspicuous places, and would be more susceptible to harvest. On the other hand hunters or trappers may select against mangy wolves because the pelts would have little value. Also harvesters may be tempted to discard infected wolves in the field, and continue hunting or trapping, resulting in higher than intended quotas. Overall impacts of mange on public harvest are difficult to detect and will need to be monitored carefully, but there currently is no indication that mange has the potential of causing any major declines in the wolf population.

Rabies has potential of affecting wolves, but has yet to be detected in wild wolves in the Western Great Lakes region of the U.S. It has been detected in eastern wolves (*Canis lycaon*) in Ontario, with 15 cases detected between 1960 through 1994 (Theberge et al. 1994). Generally rabies is rare in wolves south of the Arctic region, but in Northern Environments can be a major limiting factor on wolf populations (Ballard and Krausman 1997).

Wolves are susceptible to a wide variety of disease and parasites (Kreeger 2003), but there are no additional known diseases in Wisconsin that are likely to have any major population effects on wolves. Public harvests are not likely to have major impacts on wolf disease, and may have some culling effects by more readily removing diseased animals from the population. Baiting practices for wolves and bears

will need to be monitored carefully to make sure the baits do not risk spread of diseases. Future climate changes may also alter environments that may cause new diseases to occur in wolves, or possibly change the virulence of existing diseases. Also, the introduction of foreign diseases (such as West Nile Virus in our avian populations) can significantly impact populations. Clearly, disease monitoring will continue to be an important part of wolf monitoring programs.

Behavioral and Pack Dynamic Concerns

Brainerd et al. (2006) conducted a meta-analysis of impact of breeder losses on wolves, especially pup survival and pack maintenance. Pup survival was highest in larger packs (especially with ≥ 6 wolves) and with the presence of other adults, if breeding adults were eliminated from a pack. More than half of the packs bred the next year (56%) if only one breeder was removed, but only 9% of packs bred the next year if both breeders were eliminated. When both breeders were eliminated, 85% of packs dissolved, but if only one breeder was removed, only 26% of packs dissolved. Where packs had dissolved, in 53% of these cases new wolf packs established territories, and 21% of the time the area was taken over by an adjacent pack. Impact of breeder removal was much more intense for recovering wolf population of < 75 wolves, than for larger populations or saturated populations.

It is apparent that loss of breeders can have detrimental effects on pup survival, and the persistence of stable wolf packs. These factors can be especially acute in small wolf populations. Thus, wolf harvest systems should avoid fragmenting subpopulations into small units, and avoid high harvests that would cause excessive removal of breeding adults. Juvenile wolves and dispersers are likely to be most susceptible to human harvests (Adams et al. 2008, Murray et al. 2010), and if harvest levels are kept relatively light, these are the wolves that will most readily be removed.

Excessive harvest mortality may disrupt the natural kin-based social structure of wolf packs, and promotes the adoption of unrelated animals into wolf packs (Rutledge et al. 2010). Such kin selection has apparent fitness benefits to wolves and helps maintain a naturally regulated wolf population, that reduces hybridization of wolves with other canids. In Algonquin Park the enlargement of protected areas reduced anthropogenic mortality, which in turn reduced incidents of coyotes hybridizing with eastern wolves (Rutledge et al. 2010). Great Lakes wolves are not known to readily hybridize with coyotes, but some have hybridized with dogs (Fain et al. 2010). Smith et al. (2010) also pointed out the value of secure core habitat to a wolf population.

The Wisconsin harvest system will establish tribal reservations as closed to wolf harvests by nontribal members, and apply a relatively light harvest system to important areas of wolf core areas (see table 1) which should limit disruption of pack structure in these areas. While these core areas will allow some level of harvest, the level will be at a low enough rate to allow many functioning wolf packs to persist and allow packs to function in a normal fashion.

Summary

A harvest quota of 201 wolves is being proposed for the Wisconsin wolf population. The proposed harvest quotas across the 6 wolf zones varies from a modest 20% harvest of the winter count (excluding tribal reservation packs) in primary wolf habitat, to a moderate 40% harvest in secondary wolf habitat, to an intense 75% harvest in marginal wolf areas. The overall level of harvest is expected to begin reducing the wolf population to a level closer to the management plan population goal that is a threshold for management actions; but is not likely to cause a drastic population reduction. The proposed wolf harvest system is designed to maintain a sustainable, viable wolf population in Wisconsin.

Literature Cited

- Adams, L.G., R. O. Stephenson, B. W. Dale, R. T. Ahgook, and D. J. Demma. 2008. Population dynamics and harvest characteristics of wolves in the Central Brooks Range, Alaska. *Wildlife Monographs* 170: 1-25.
- Almberg, E.S., L.D. Mech, D.W. Smith, J.W. Shledon, and R.L. Crabtree. 2009. A seriological Survey of infectious disease in Yellowstone National Park's canid community. *PLoS ONE* 4(9):e7042.
- Ballard, W. B. and P. R. Krausman. 1997. Occurrence of rabies in wolves of Alaska. *Journal of Wildlife Diseases* 33: 242-245.
- Brainerd, S.M., H. Andren, E.E. Bangs, E.H. Bradley, J.A. Fontaine, W. Hall, Y. Iliopoulos, M.D. Jimenez, E.A. Joswiak, O. Liberg, C.M. Mack, T.J. Meier, C.C. Niemeyer, H.C. Pedersen, H. Sand, R.N. Schultz, D.W. Smith, P. Wabakken, and A.P. Wydeven. 2006. The effect of breeder loss on wolves. *Journal of Wildlife Management* 72: 89-98.
- Creel, S. and J.J. Rotella. 2010. Meta-analysis of relationships between human offtake, total mortality and population dynamics of gray wolves (*Canis lupus*). *PLoS One* 5 (9): e12918.
- Fain, S.R., D.J. Straughan, and B.F Taylor. 2010. Genetic outcomes of eastern timber wolf recovery in the Western Great Lakes States. *Conservation Genetics* 11: 1747-1765.
- Fuller, T.K., L.D. Mech, and J. Fitts Cochran. 2003. Wolf population dynamics. pp. 161-191 in L. D. Mech and L. Boitani, eds. *Wolves: Behavior, Ecology, and Conservation*. University of Chicago Press, Chicago, IL, USA.
- Gude, J. A., M.S. Mitchell, R. E. Russell, C.A. Sime, E.E. Bangs, L.D. Mech, and R.R. Ream. 2012. Wolf populations dynamics in the U.S. Northern Rocky Mountains are affected by recruitment and human caused mortality. *Journal of Wildlife Management* 76:108-118.
- Jimenez, M.D., E.E. Bangs, C. Sime, and V.J. Asher. 2010. Sarcoptic mange found in wolves in the Rocky Mountains in Western United States. *Journal of Wildlife Diseases* 46: 1120-1125.
- Kreeger, T. J. 2003. The internal wolf: physiology, pathology, and pharmacology. Pp. 192-217 in L. D. Mech and L. Boitani, eds. *Wolves: Behavior, Ecology, and Conservation*. University of Chicago, Chicago, IL, USA.
- Mech, L.D. and S.M. Goyal. 2011. Parsing demographic effects of canine parvovirus on a Minnesota wolf population. *Journal of Veterinary Medicine and Animal Health* 3(2): 27-30.
- Murray, D.L., D.W. Smith, E.E. Bangs, C. Mack, J.K. Oakleaf, J. Fontaine, D. Boyd, M. Jimenez, C. Niemeyer, T.J. Meier, D. Stahler, J. Holyan, and V.J. Asher. 2010. Death from anthropogenic causes is partially compensatory in recovering wolf populations. *Biological Conservation* 143: 2514-2524.

- Nelson, B., M. Hebblewhite, V. Ezenwa, T. Shury, E.H. Merrill, P.C. Paquet, F. Schmiegelow, D. Seip, G. Skinner, and N. Webb. 2012. Prevalence of antibodies to canine parvovirus and distemper virus in wolves in the Canadian Rocky Mountains. *Journal of Wildlife Diseases* 48(1):68-76.
- Peterson, R.O. 1995. *The Wolves of Isle Royale: A Broken Balance*. Willow Creek Press, Minocqua, WI, USA.
- Ruid, D.B., W.J. Paul, B.J. Roell, A.P. Wydeven, R.C. Willging, R.L. Jurewicz, and D.H. Lonsway. 2009. Wolf-human conflict and management in Minnesota, Wisconsin, and Michigan. pp. 279-295 in A.P. Wydeven, T. R. Van Deelen, and E.J. Heske, eds. *Recovery of Gray Wolves in the Great Lakes Region of the United States: An Endangered Species Success Story*. Springer, New York, NY, USA.
- Rutledge, L.Y., B.R. Patterson, K. J. Mills, K.M. Loveless, D. L. Murray, and B.N. White. 2010. Protection from harvesting restores the natural social structure of eastern wolf packs. *Biological Conservation*. 143: 332-339.
- Stenglein, J.L., A.P. Wydeven, D.J. Mladenoff, J.E. Wiedenhoef, N.K. Businga, J.A. Langenberg, N.J. Thomas, and T. R. Van Deelen. Submitted. Causes of mortality for Wisconsin's wolves: Elucidating patterns and quantifying bias. *Journal of Wildlife Management*.
- Smith, D.W., E.E. Bangs, J.K. Oakleaf, C. Mack, J. Fontaine, D. Boyd, M. Jimenez, D.H. Pletscher, C.C. Niemeyer, T.J. Meier, D. R. Stahler, J. Holyan, V. J. Asher, and D. L. Murray. 2010. Survival of colonizing wolves in the Northern Rocky Mountains of the United States, 1982-2004. *Journal of Wildlife Management* 74: 620-634.
- Theberge, J.B., G.J. Forbes, I.K. Barker, and T. Bollinger. 1994. Rabies in wolves in the Great Lakes region. *Journal of Wildlife Diseases* 30: 563-566.
- Wisconsin DNR. 1999. Wisconsin Wolf Management Plan. Wisconsin Department of Natural Resources. Publ-ER-099 99, Madison, WI 74 pp.
<http://dnr.wi.gov/topic/WildlifeHabitat/wolf/documents/wolfmanagementplan.pdf>
- Wydeven, A.P., J.E. Wiedenhoef, R.N. Schultz, R. P. Thiel, R. L. Jurewicz, Bruce E. Kohn, and T.R. Van Deelen. 2009. History, population growth, and management of wolves in Wisconsin. pp. 87-105 in A.P. Wydeven, T. R. Van Deelen, and E.J. Heske, eds. *Recovery of Gray Wolves in the Great Lakes Region of the United States: An Endangered Species Success Story*. Springer, New York, NY, USA.
- Wydeven, A.P., J.E. Wiedenhoef, R.N. Schultz, J.E. Bruner, R.P. Thiel, S.R. Boles, Michele A. Windsor. 2011. Status of the timber wolf in Wisconsin: Performance Report July 2010 through 30 June 2011(also Progress Reports for 15 April 2010-14 April 2011, and 2010 summaries). Wisconsin Endangered Resources Report #140, Wisconsin Department of Natural Resources, Madison, WI, USA. 66pp.

Table 1. Wolf Harvest Units and Proposed Wolf Quotas for Wisconsin for 2012.

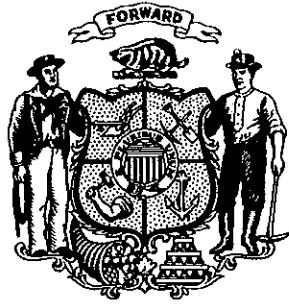
Wolf Harvest Unit	Winter Wolf Population in 2012	Proposed Wolf Harvest Quota in 2012
Zone 1	337-357	65
Zone 2	191-203	35
Zone 3	88-98	37
Zone 4	25-27	10
Northern units total	641-685	147 (22%*)
Zone 5	135-156	25
Zone 6	35-40	29
Southern units total	170-196	54 (30%*)
Total	815-880	201 (24%*)

* Percentages are of the mid-point of the range of the minimum count

Table 2. North American Wolf Harvests in recent years (periods of data collection time varies).

State or Province	Estimated Population	Hunt Season	Trap Season	Harvest	Percent Pop.
Alaska	7,000 -11,000	yes	yes	H&T ~1300 Controls 200	1500 14-21%
Idaho	856 ('09-10) 746 ('11-12)	\$11.50 res, \$31.75 nonr. 13 zones Aug30-Mar31	\$11.50 res. \$31.75 nonr. Limit 3 tags Nov. 15-Mar. 31	H'09 188 H'11 254 T'11 124	188, 22.0% 378, 50.6%
Montana	525 ('09-10) 653 ('11-12)	\$19 +\$8 res. \$350+\$10 nonr. 14 zones Bow Sep3-Oct 16 Gun Oct22-Dec31	no	H'09 72 H'11 166	72, 13.7% 166, 25.4%
Minnesota	3,000 (2008)	Prop. \$30 res. \$250 nonres.	yes	Prop. 400	400 13%
Wisconsin	815-880 (2012)	\$99.25 res. \$499.25 nonres.	yes	Prop. 129	129 16%
Alberta	4,200 ('00)	yes	yes	ave. H 100 ave. T 351	451 11%
British Columbia	8,000 ('00)	\$32 res.	yes	ave. H 606 ave. T 105	711 9%
Labrador (Newf.)	2,000	none	yes	ave. 57	57 3%
Manitoba	4,000-6,000 ('00)	yes	yes	ave. H 50 ave. T 204	254 4-6%
Ontario	7,700	Sep.15-Mar.31 2 seals	Sep. 15-Mar. 31 Reg. trap. 2800	ave. H 123 ave. T 337	460 6%
NWT	5,000	yes	yes	ave. H 25 ave. T 768	793 16%
Quebec	7,000	Oct. 18-Mar.31 29 zones, no bag	Oct. 18- Mar.1 96 units, no bag	ave H 3% ave. T 617	~636 9%
Saskatchewan	4,300	no	yes	ave. T 223	223 5%
Yukon	5,000	yes	yes	ave. T 100 ave. H 30	130 3%

State of Wisconsin



2011 Senate Bill 411

Date of enactment: April 2, 2012
Date of publication*: April 16, 2012

2011 WISCONSIN ACT 169

AN ACT *to repeal* 71.10 (5) (am); *to amend* 29.024 (2) (d), 29.171 (4) (b) (intro.), 29.314 (4) (b) 2., 29.314 (5) (b) 2., 29.563 (14) (a) 3., 29.563 (14) (c) 3., 29.977 (1) (d) and 29.983 (1) (b) 4.; and *to create* 20.370 (5) (fv), 29.179 (1) (a) 10m., 29.180 (1) (a) 10m., 29.185, 29.553 (1) (hr), 29.563 (4) (a) 3., 29.563 (4) (b) 3., 29.563 (12) (c) 3g., 29.563 (12) (c) 3r. and 29.888 of the statutes; **relating to:** hunting and trapping of wolves, providing an exemption from emergency rule procedures, extending the time limit for emergency rule procedures, and making an appropriation.

The people of the state of Wisconsin, represented in senate and assembly, do enact as follows:

SECTION 1. 20.370 (5) (fv) of the statutes is created to read:

20.370 (5) (fv) *Wolf depredation program.* All moneys received from the issuance of wolf harvesting licenses under s. 29.185 and all processing fees received as authorized under s. 29.553 (1) (hr) to be used for the wolf depredation program under s. 29.888.

SECTION 2. 29.024 (2) (d) of the statutes is amended to read:

29.024 (2) (d) Except as provided under s. 29.179, 29.180, 29.182 (4), 29.185 (4), or 29.519 (2) (d) or by rule, no person may transfer his or her approval or permit the use of any approval by any other person.

SECTION 3. 29.171 (4) (b) (intro.) of the statutes is amended to read:

29.171 (4) (b) (intro.) Except as provided in par. (bc), crossbows used in hunting as authorized by a Class A, Class B or Class C permit issued under s. 29.193 (2) or under this subsection or as authorized under sub. (2m) or s. 29.161 (2), 29.164 (2) (b), 29.182 (3) (a), 29.184 (3)

(c), 29.185 (6), 29.204 (2), 29.207 (2), 29.213 (2), or 29.216 (2) shall meet all of the following specifications:

SECTION 4. 29.179 (1) (a) 10m. of the statutes is created to read:

29.179 (1) (a) 10m. Wolf harvesting license.

SECTION 5. 29.180 (1) (a) 10m. of the statutes is created to read:

29.180 (1) (a) 10m. Wolf harvesting license.

SECTION 6. 29.185 of the statutes is created to read:

29.185 Wolf harvesting licenses. (1b) DEFINITIONS.

In this section:

(a) "Federal endangered list" means the U.S. list of endangered and threatened species, as it applies to this state.

(b) "State endangered list" means the list of endangered and threatened Wisconsin species that is established under s. 29.604 (3) (a).

(1m) DEPARTMENT AUTHORITY. If the wolf is not listed on the federal endangered list and is not listed on the state endangered list, the department shall allow the hunting and trapping of wolves and shall regulate such hunting and trapping as provided in this section and shall implement a wolf management plan. In regulating wolf

* Section 991.11, WISCONSIN STATUTES 2009-10: Effective date of acts. "Every act and every portion of an act enacted by the legislature over the governor's partial veto which does not expressly prescribe the time when it takes effect shall take effect on the day after its date of publication as designated" by the secretary of state [the date of publication may not be more than 10 working days after the date of enactment].

hunting and trapping, the department may limit the number of wolf hunters and trappers and the number of wolves that may be taken by issuing wolf harvesting licenses.

(2) **LICENSES REQUIRED.** (a) *Prohibition.* Except as authorized under a wolf harvesting license, no person may hunt or trap a wolf. Both residents and nonresidents are eligible for wolf harvesting licenses.

(b) *Resident archer licenses and trapping licenses.* Notwithstanding ss. 29.171 (2), 29.216 (2), and 29.241 (3), a resident archer hunting license, a nonresident archer hunting license, or a trapping license does not authorize the hunting or trapping of wolves.

(3) **ISSUANCE OF LICENSES.** (a) *Issuance; generally.* Except as provided in par. (bn), if the department establishes an open season as provided under sub. (5), the department, subject to ss. 29.024 and 54.25 (2) (c) 1. d., shall issue a wolf harvesting license to each person who applies for the license, and who pays the required fees for the license.

(bn) *Issuance system.* 1. In issuing wolf harvesting licenses under this subsection, the department shall determine the number of licenses that will be available for a given year. The number of licenses to be issued shall equal an even number.

2. If the number of qualified applications for wolf harvesting licenses exceeds the number of licenses that are available, the department shall issue 50 percent of the licenses by selecting at random the applicants to be issued the licenses.

3. The department shall issue the remaining 50 percent of the wolf harvesting licenses based on a cumulative preference system. The system shall establish preference categories for those applicants who applied for but who were not issued a wolf harvesting license in previous seasons, with higher preference given to those applicants with more preference points. If the number of applicants within a preference category exceeds the number of wolf harvesting licenses available in the category, the department shall select at random within the category the applicants to be issued the licenses. For each season, the department shall allow each applicant to apply for a preference point or for a license. The department shall give a preference point to each applicant who applies for a preference point and to each applicant who applies for license but who is not selected. An applicant who applies for either a preference point or a license at least once during any 3 consecutive years shall not lose his or her acquired preference points under the system.

4. The department shall establish a method for dividing the applications into those that will be included in the at-random system and those that will be included in the cumulative preference system.

5. A person applying for a wolf harvesting license shall pay the processing fee at the time of application.

(c) *Preference system; on receipt of license.* A applicant who is selected to receive a wolf harvesting license under the cumulative preference system established under par. (bn) 3. may elect to receive a preference point instead of a license if he or she serving on active duty in the U.S. armed forces or national guard during all or part of the wolf harvesting season for which the license is issued.

(4) **TRANSFER OF LICENSE.** (a) Upon application by a holder of a wolf harvesting license to the department to transfer the license to another person and upon payment of any fee required under par. (b), the department shall transfer the license if the application is made no later than the 15 days immediately preceding the first day of the wolf harvesting season if the person to whom the license is transferred is at least 18 years of age and is otherwise eligible to use the license. The accompanying carcass tag shall also be transferred.

(b) If the holder of the wolf harvesting license is a resident and the holder applies to transfer the license to a nonresident, the holder shall pay, at the time of application, any difference between the fee for issuing the license to a resident and the fee for issuing the license to a nonresident.

(c) A holder of a license being transferred under this section may not receive any consideration for the transfer of the license.

(5) **SEASONS; ZONES.** (a) The department shall establish a single annual open season for both hunting and trapping wolves that begins on October 15th of each year and ends on the last day of February of the following year.

(b) The department shall divide the entire state into wolf harvesting zones and shall identify the zones in its wolf management plan. Each zone shall be open to both hunting and trapping, except as provided in par. (c). A wolf harvesting license authorizes its holder to hunt or trap or both only in the zone specified on the license.

(c) The department may close a wolf harvesting zone to both hunting and trapping of wolves, if the department determines that the closure is necessary to effectively manage the state's wolf population. Closure of a wolf harvesting zone under this paragraph may not take effect until at least 24 hours after the department has done all of the following:

1. Posted notice of the closure on its Internet Web site.

2. Announced the closure on its telephone registration system.

3. Issued a press release announcing the closure.

(d) If the department closes a wolf harvesting zone to the hunting of coyotes during a season that authorizes hunting of deer with firearms, the department may reopen the zone to the hunting of coyotes if the department determines that the closure is no longer necessary to effectively manage the state's wolf population.

(e) Notwithstanding ss. 29.014 and 227.10 (1), the opening and closing of wolf harvesting zones as authorized under pars. (c) and (d) need not be promulgated as rules under ch. 227.

(6) AUTHORIZED HUNTING AND TRAPPING ACTIVITIES.

(a) *Authorization; hunting.* A wolf harvesting license authorizes the hunting of wolves by using any of the following:

1. A firearm, as authorized under par. (b), a bow and arrow, or a crossbow.
2. Dogs to track or trail wolves, subject to par. (c).
3. Predator calls, including electronic calls.
4. Bait that does not involve animal parts or animal byproducts, other than liquid scents.

(b) *Firearms and ammunition.* A wolf harvesting license authorizes hunting with a rifle, a muzzle-loading firearm, a handgun, a shotgun that fires slugs or shotshells, and any other firearm that is loaded with a single slug or ball. A wolf harvesting license authorizes hunting with shot that is larger than size BB.

(c) *Use of dogs.* 1. A person may hunt wolves using dogs beginning with the first Monday that follows the last day of the regular season that is open to hunting deer with firearms and ending on the last day of February of the following year.

2. No more than 6 dogs in a single pack may be used to trail or track a wolf, regardless of the number of hunters assisting the holder of the wolf harvesting license.

3. While a person is using a dog to hunt wolf, the person shall keep on his or her person any tag required for the dog under s. 95.21 (2) (f), 174.053 (2), or 174.07 (1) (e).

(d) *Hunting at night.* A person may hunt wolves during nighttime beginning with the first Monday that follows the last day of the regular season that is open to hunting deer with firearms and ending on the last day of February of the following year.

(e) *Inapplicability of restrictions.* A person who is hunting as authorized under a wolf harvesting license is not subject to any restrictions relating to hunting seasons, zones, or times that the department imposes on the hunting of coyote.

(f) *Trapping; types of traps.* The types of traps that shall be authorized by the department for trapping wolves shall include cable restraints.

(7) TAGS; REGISTRATION. (a) The department shall issue one wolf carcass tag to each person who is issued a wolf harvesting license under sub. (3). Each holder of a wolf harvesting license who kills a wolf shall immediately validate and attach the carcass tag to the wolf. No person may possess, control, store, or transport a wolf carcass unless it is tagged as required under this paragraph. The carcass tag shall be attached and validated in the manner required by the department. A person who kills a wolf shall register the carcass with the department on a telephone registration system or through an elec-

tronic notification system established by the department, except as provided in par. (am). The carcass tag may not be removed before registration. The removal of a carcass tag from a wolf before registration results in the wolf being untagged.

(am) In lieu of registering carcasses by telephone or through an electronic notification system, the department may require that the person who kills a wolf physically present the entire carcass to the department for registration.

(b) A person who harvests a wolf that has an attached or implanted radio telemetry device shall return the device to the department. The department shall inform the person, upon his or her request, of any information that has been collected through the telemetry device or otherwise by the department that relates that the wolf that was harvested.

SECTION 7. 29.314 (4) (b) 2. of the statutes is amended to read:

29.314 (4) (b) 2. To a person who possesses a flashlight or who uses a flashlight at the point of kill while hunting on foot for wolves or for raccoons, foxes, coyotes, or other unprotected animals during the open season for the animals hunted.

SECTION 8. 29.314 (5) (b) 2. of the statutes is amended to read:

29.314 (5) (b) 2. To a person who possesses a flashlight or who uses a flashlight at the point of kill while hunting on foot for wolves or for raccoons, foxes, coyotes, or other unprotected animals during the open season for the animals hunted.

SECTION 11. 29.553 (1) (hr) of the statutes is created to read:

29.553 (1) (hr) Wolf harvesting license.

SECTION 12. 29.563 (4) (a) 3. of the statutes is created to read:

29.563 (4) (a) 3. Wolf harvesting: \$99.25.

SECTION 13. 29.563 (4) (b) 3. of the statutes is created to read:

29.563 (4) (b) 3. Wolf harvesting: \$499.25.

SECTION 13g. 29.563 (12) (c) 3g. of the statutes is created to read:

29.563 (12) (c) 3g. Wolf harvesting issued to a resident: \$50.

SECTION 13r. 29.563 (12) (c) 3r. of the statutes is created to read:

29.563 (12) (c) 3r. Wolf harvesting issued to a non-resident: \$250.

SECTION 14. 29.563 (14) (a) 3. of the statutes is amended to read:

29.563 (14) (a) 3. The processing fee for applications for elk hunting licenses and wolf harvesting licenses: \$9.75.

SECTION 15. 29.563 (14) (c) 3. of the statutes is amended to read:

29.563 (14) (c) 3. Each application for a hunter's choice permit, bonus deer hunting permit, elk hunting license, wild turkey hunting license, wolf harvesting license, Canada goose hunting permit, sharp-tailed grouse hunting permit, bobcat hunting and trapping permit, otter trapping permit, fisher trapping permit, or sturgeon fishing permit: 25 cents.

SECTION 16. 29.888 of the statutes is created to read:
29.888 Wolf depredation program. (1b) In this section:

(a) "Federal endangered list" has the meaning given in s. 29.185 (1b) (a).

(b) "State endangered list" has the meaning given in s. 29.185 (1b) (b).

(1m) The department shall administer a wolf depredation program under which payments may be made to persons who apply for reimbursement for death or injury caused by wolves to livestock, to hunting dogs other than those being actively used in the hunting of wolves, and to pets and for management and control activities conducted by the department for the purpose of reducing such damage caused by wolves. The department may make payments for death or injury caused by wolves under this program only if the death or injury occurs during a period time when the wolf is not listed on the federal endangered list and is not listed on the state endangered list. The department may expend moneys under this program for its management and control activities only during a period of time when the wolf is not listed on the federal endangered list and is not listed on the state endangered list.

(2) The department shall establish maximum amounts that will be paid under sub. (1m) depending on the type of animal that suffered the death or injury. If the department determines that the amount available from the appropriation under s. 20.370 (5) (fv) is insufficient in a given fiscal year for making all of these payments, the department shall make the payments on a prorated basis.

(3) If, after making the payments under sub. (2), there are moneys remaining in the appropriation under s. 20.370 (5) (fv) for a given fiscal year, the department may use all or part of the remaining moneys in the following

fiscal year for management and control of the wolf population activities conducted by the department.

(4) If there are any moneys remaining at the end of a given fiscal year after making the payments under sub. (2) and paying for activities authorized under sub. (3), these moneys shall lapse into the conservation fund, notwithstanding s. 20.001 (3) (c).

SECTION 17. 29.977 (1) (d) of the statutes is amended to read:

29.977 (1) (d) Any bobcat, fox, wolf, beaver, or otter, \$87.50.

SECTION 18. 29.983 (1) (b) 4. of the statutes is amended to read:

29.983 (1) (b) 4. For any bobcat, fox, wolf, beaver, or otter, \$87.50.

SECTION 18m. 71.10 (5) (am) of the statutes is repealed.

SECTION 21. Nonstatutory provisions.

(1) RULES.

(a) The department of natural resources shall submit in proposed form any rules that are necessary to implement or interpret sections 29.185 and 29.888 of the statutes, as created by this act, to the legislative council staff under section 227.15 (1) of the statutes no later than the first day of the 8th month beginning after the effective date of this paragraph.

(b) Using the procedure under section 227.24 of the statutes, the department of natural resources shall promulgate any rules necessary to implement or interpret sections 29.185 and 29.888 of the statutes, as created by this act, for the period before the effective date of the permanent rules that are submitted under paragraph (a). Notwithstanding section 227.24 (1) (c) and (2) of the statutes, emergency rules promulgated under this paragraph remain in effect until the date on which the permanent rules take effect. Notwithstanding section 227.24 (1) (a), (2) (b), and (3) of the statutes, the department of natural resources is not required to provide evidence that promulgating rules under this paragraph as emergency rules is necessary for the preservation of the public peace, health, safety, or welfare and is not required to provide a finding of emergency for rules promulgated under this paragraph.

Fiscal Estimate — 2009 Session

<input checked="" type="checkbox"/> Original	<input type="checkbox"/> Updated	LRB Number	Amendment Number if Applicable
<input type="checkbox"/> Corrected	<input type="checkbox"/> Supplemental	Bill Number	Administrative Rule Number WM-09-12(E)

Subject

Relating to the wolf hunting and trapping season, regulations, and a depredation program.

Fiscal Effect

State: ☐ No State Fiscal Effect
☐ Indeterminate

Check columns below only if bill makes a direct appropriation
or affects a sum sufficient appropriation.

☐ Increase Existing Appropriation ☐ Increase Existing Revenues
☐ Decrease Existing Appropriation ☐ Decrease Existing Revenues
☐ Create New Appropriation

☒ Increase Costs — May be possible to absorb
within agency's budget.

☒ Yes ☐ No

☐ Decrease Costs

Local: ☒ No Local Government Costs

☐ Indeterminate

1. ☐ Increase Costs
 ☐ Permissive ☐ Mandatory
2. ☐ Decrease Costs
 ☐ Permissive ☐ Mandatory

3. ☐ Increase Revenues
 ☐ Permissive ☐ Mandatory
4. ☐ Decrease Revenues
 ☐ Permissive ☐ Mandatory

5. Types of Local Governmental Units Affected:

☐ Towns ☐ Villages ☐ Cities

☐ Counties ☐ Others

☐ School Districts ☐ WTCS Districts

Fund Sources Affected

☐ GPR ☐ FED ☐ PRO ☐ PRS ☒ SEG ☐ SEG-S

Affected Chapter 20 Appropriations**Assumptions Used in Arriving at Fiscal Estimate**

These rules are necessary to implement a wolf hunting and trapping season and a depredation management program as required by 2011 ACT 169. In most cases, these expenses are required by the authorizing legislation and are not discretionary for the department. Therefore, the department does not expect new costs, beyond those already required under the ACT, as a result of this rulemaking.

This will be the first modern era hunting and trapping season in the Midwest and significant new costs are anticipated as a result of the ACT. For informational purposes, this analysis summarizes those costs and is similar to the analysis of 2011 Senate Bill 411 which became ACT 169.

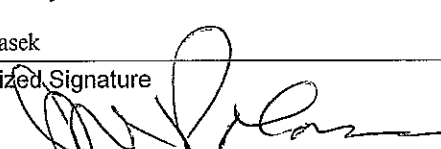
A. Bureau of Law Enforcement

a. Use of dogs for hunting--under the bill, the use of dogs will be allowed for hunting wolves after the close of the regular gun deer season until the season closes the end of February. However, no restriction is created under this bill on the use of dogs to pursue wolves for dog training or dog trials year round, including the October and November portions of the wolf hunting season. The Department anticipates there will be some complaints of hunters using dogs to hunt or train dogs to pursue wolves before the end of the regular gun deer season, which will require investigation to determine if the dog handlers were in fact hunting wolves or were simply hunting other species or only training dogs to pursue wolves. It is not possible to determine accurately the costs associated with the number of complaints that will be received and require investigation by wardens. The cost in staff time and travel could be significant, likely averaging 2-8 hours per complaint, with travel distance/time and other circumstances.

b. Use of bait - bait will be allowed for hunting provided it does not include any animal parts or animal byproducts. Rules will likely need to be established to restrict who may place bait, the amount, and how it is placed to minimize access by other species. The cost of monitoring the use of bait is indeterminate at this time but would likely take 2-4 hours to investigate each complaint.

Long-Range Fiscal Implications

Interest in wolf harvesting opportunities may decline as the wolf population is reduced closer to a population goal, resulting in less funding for depredation. However, depredation program needs may also decline and may result in some funds available for other wolf management activities.

Prepared By:	Telephone No.	Agency
Joe Polasek	266-2794	Department of Natural Resources
Authorized Signature	Telephone No.	Date (mm/dd/ccyy)
	266-2794	06-28-12

Fiscal Estimate — 2009 Session

Page 2 Assumptions Narrative Continued

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number WM-09-12(E)

Assumptions Used in Arriving at Fiscal Estimate – Continued

c. Use of traps with cable restraints--under the bill, the types of traps that may be used for trapping wolves must include cable restraints. A cable restraint is a type of trap using a relaxing loop made with a cable. Current Department rules only authorize the use of cable restraints for bobcat, fox and coyote from Dec. 1 through the end of that species open season or Feb. 15th, whichever is first. Cable restraints used for bobcat, fox and coyote may not exceed certain specifications to help ensure that they do not catch and hold species such as deer or bear. However, cable restraints authorized for wolf trapping under this bill would have to exceed the standards for bobcat, fox and coyote to be capable of holding a wolf. There may be incidental catches of non-target species. When trappers are unable to release deer, bear or other non-target species unharmed, it will require staff time and travel to respond to and assist with the release or disposal of such animals. The costs associated with increased workload caused by increased use and larger cable restraints is indeterminate at this time, but would likely require 2-6 hours of staff time per incidental catch requiring staff assistance. By prohibiting the use of cable restraints until winter, when bears are no longer active, the department anticipates a low number of incidental catches.

d. Wild animal protection surcharge--the bill increases the wild animal protection surcharge added to any penalty imposed by the courts when a person is convicted of illegally harvesting a wolf from the current \$17.50, to \$87.50. When the wolf was listed as an endangered species, the surcharge amount was \$875 for each illegally killed animal (which is in addition to the violation penalty amount). This surcharge amount is deposited into the state's conservation fund. It is not possible to accurately estimate what number of wolves that might be killed illegally and the persons responsible who will be apprehended and convicted.

B. Bureau of Wildlife Management

a. Population monitoring and harvest planning--The Department will need to monitor populations and conduct harvest planning to meet federal requirements and to "effectively manage the state's wolf population", as required by the bill. Many of these tasks are currently conducted by existing wolf advisory and science committees. Population monitoring is a significant expense for the department and will continue to be a necessary activity. When wolf hunting and trapping are allowed, annually establishing harvest quotas will be a new task. Because the Department has an existing process in place for collecting information and making wolf management decisions, no new significant costs are anticipated.

b. Cumulative preference system--Because the number of applicants for wolf harvest licenses is expected to exceed the number of licenses issued, a random drawing and cumulative preference system for wolf harvest licenses is created for issuing 50% of the permits. Hardware and software are already in place to support similar drawings for other species, so no new purchases are required. The costs for collecting customer data are addressed under section D of this fiscal estimate for the Bureau of Customer & Outreach Services.

c. Pelt tagging--In addition to harvest reporting, which is addressed below, in-person pelt tagging, registration of harvested animals, and collection of carcasses for research purposes will be needed in order to meet population monitoring and law enforcement needs and, in the future, to meet requirements resulting from U.S. participation in the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES). CITES participation is a federal requirement for states that allow the harvest and international transportation and trade of certain species. Some new costs will be incurred by law enforcement and wildlife management staff to meet with successful hunters and trappers to register animals and issue CITES tags.

Mileage: 5,000 miles (carcass collection and sample deliveries) @ \$0.60/mile = \$3,000.00
Time: 320 hours (manager, technician, warden and researcher time) @ \$30/hr. = \$9,600.00
Meals & Misc. \$1,000.00
Lab Analysis \$4,000.00

Total \$17,600.00.

d. Public outreach--The Department invests significant effort into communicating with the public about hunting and trapping opportunities and the management of harvested species. These investments are made primarily by customer & outreach, wildlife, law enforcement and the science services bureaus. Since the Department is already organized to handle these duties, additional efforts related to wolves can be supported with currently available resources.

e. License sales--Wisconsin has not held a wolf hunting season in modern times. A wolf harvest quota and resulting number of harvest licenses to be issued is not known at this time. The primary way of generating revenue will be through the sales of \$10 applications (\$9.75 plus a 25 cent vendor fee) for wolf harvest licenses. Although the number of applications that would be sold cannot be accurately estimated, it is likely that there will be interest in this new opportunity. In 2009, the first year of Idaho's wolf season, 26,428 licenses were issued. Also in 2009, Montana's first year of wolf hunting, 15,603 licenses were issued. Both states allowed anyone to purchase a license but closed their seasons early when harvest quotas were met. Because anyone could purchase a license, those numbers might be indicative of potential interest in harvest license applications in Wisconsin. The department also has data from Wisconsin for bear permit applications, which also allows for preference points and a drawing to issue permits. In 2011, 27,793 people applied for a harvest tag and 76,060 people applied for a preference point. If interest is comparable to that which was generated in Idaho, a possible outcome in Wisconsin is that 25,000 applicants buying applications that cost \$9.75 would generate \$250,000 for the depredation program. To the extent that wolf depredation claims would be at or below this \$250,000 level, prorating claims would not be required and any remaining funds could be used to cover the costs of staff for claims investigation, verification, and program administration. If it is closer to the interest level that exists for bear hunting, it could be as high as 100,000 applicants, or about \$1 million.

If the wolf harvest quota is 200 animals, half of which could be claimed after tribal declarations are made, then 100 would be left for state-licensed hunters and trappers in the first season. For the 2012 season, the department is assuming a success rate of 10%. That means that 1,000 hunters would be purchasing licenses valued at \$100 each, equaling a revenue increase of \$10,000 from license sales. This is a short term estimate only and the department will learn more about interest in licenses and success rates after the first season.

g. Wolf trapping certification course--Wolf trapping techniques are unique and have not been a subject of Wisconsin's mandatory trapper education course. Since instruction in wolf trapping methods will be essential for public acceptance of the activity, the Department will place a priority on providing information through its website and other sources. At this time, the department does not plan to establish new trapper education requirements so the costs to department staff should be minimal and can be absorbed in the department's budget.

C. Endangered Resources

The Bureau of Endangered Resources (BER) was responsible in the past for administering the wolf management program. The wolf management program has three main components: a) wolf recovery and surveys; b) wolf investigations; and c) wolf depredation payments.

a. Wolf recovery and surveys are funded from a variety of sources, including state funding, private gifts, Pittman-Robertson federal funding, and memorandums of agreement for aerial surveys with the U.S. Department of Agriculture (USDA) and Wisconsin Indian Tribes. In FY11, recovery and surveys expenditures totaled \$497,600, which includes 1.75 FTE that are federally-funded, non-game mammalian ecologists which the Bureau currently dedicates to wolf recovery activities.

b. Wolf investigations have previously been funded primarily from federal dollars provided by the USDA's Animal and Plant Health and Inspection Service (APHIS). In FY11, the APHIS amounts for these services were approximately \$260,000. As of the end of FY11, direct federal funding for APHIS ended, leaving the Bureau to pay for these continued inspection services. It is important to note that Pittman-Robertson funding cannot be used specifically for lethal control mechanisms, but only for investigations related to wolf depredations.

c. Wolf depredation payments were statutorily attached to the bureau of endangered resources. The main funding source was the ER Segregated account, defined in WI Stat. s.20.370 (1) (fs) but that has changed under the ACT and management responsibility is shifting to the wildlife management bureau. In FY11, the total damage payments from wolves were \$213,000, which included \$78,100 in a federal wolf livestock demonstration grant. In FY12, the total wolf damage payments are estimated to exceed \$320,000.

The bill creates a hunting and trapping season for wolves and establishes a new appropriation for the wolf depredation program to be funded from the licenses and processing fees collected. The bill also states that if the Department determines that the amounts for payments available from s.20.370 (1) (fs) and the amount from the new licenses and fees is insufficient in a given fiscal year, the Department shall make the payments on a prorated basis. The bill further states that if moneys remain after payments for wolf depredation in a given fiscal year, in the following fiscal year remaining moneys can be used for management and control activities.

If future damage claims and resulting payments continue at about \$300,000 annually, fees generated from wolf hunting and trapping licenses will need to generate approximately that amount annually or the payments will be prorated.

There will continue to be a need for \$757,600 that the department currently spends annually on wolf survey and investigation costs (\$497,600 recovery and survey + \$260,000 investigations).

D. Bureau of Customer and Outreach Services

The Bureau would incur one-time costs related to the issuance of wolf trapping and hunting licenses. These one-time costs are as follows:

a. An estimated 235 hours of computer programming time for touchscreen and internet modifications, programming for the development of a license/carcass tag on via touchscreen/internet, and the development of a wolf harvest registration database and batch import process. Costs are estimated at \$22,300 (235 hrs. x \$95/hr.).

b. Changes to the harvest registration phone and online systems will take approximately 50 hours of Department staff time at an estimated cost of \$2,500.00

Total estimated one-time costs for Customer and Outreach Services = \$24,800

Fiscal Estimate Worksheet — 2009 Session

Detailed Estimate of Annual Fiscal Effect

☒ Original ☐ Updated
☐ Corrected ☐ Supplemental

LRB Number	Amendment Number if Applicable
Bill Number	Administrative Rule Number WM-09-12(E)

Subject

Relating to the wolf hunting and trapping season, regulations, and a depredation program.

One-time Costs or Revenue Impacts for State and/or Local Government (do not include in annualized fiscal effect):

Annualized Costs:		Annualized Fiscal Impact on State Funds from:	
		Increased Costs	Decreased Costs
A. State Costs by Category			
State Operations — Salaries and Fringes		\$	\$ -
(FTE Position Changes)		(FTE)	(FTE)
State Operations — Other Costs			-
Local Assistance			-
Aids to Individuals or Organizations			-
Total State Costs by Category		\$	\$ -
B. State Costs by Source of Funds		Increased Costs	Decreased Costs
GPR		\$	\$ -
FED			-
PRO/PRS			-
SEG/SEG-S			-
State Revenues	Complete this only when proposal will increase or decrease state revenues (e.g., tax increase, decrease in license fee, etc.)	Increased Revenue	Decreased Revenue
GPR Taxes		\$	\$ -
GPR Earned			-
FED			-
PRO/PRS			-
SEG/SEG-S			-
Total State Revenues		\$ 0	\$ -

Net Annualized Fiscal Impact

	State	Local
Net Change in Costs	\$	\$
Net Change in Revenues	\$	\$

Prepared By: Joe Polasek	Telephone No. 266-2794	Agency Department of Natural Resources
Authorized Signature 	Telephone No. 266-2794	Date (mm/dd/ccyy) 06-28-12

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD AMENDING RULES

The statement of scope for this rule, SS 023-12, was approved by the Governor on April 12, 2012, published in Register No. 676, on April 30, 2012, and approved by the Natural Resources Board on May 23, 2012. This emergency rule was approved by the Governor on _____.

The Wisconsin Natural Resources Board proposes an order to amend NR 10.001(25c), 10.02(1), 10.06(5) and (8)(intro.), 10.07(2)(b)2., 10.07(2m)(intro.) and (e)(intro.), 10.07(2m)(f)(intro.), 10.09(1), 10.13(1)(b)9., 10.13(1)(b)15., 10.13(1)(b)16., 10.145(intro), 10.145(3) to (8), 12.10(intro.), 12.10(1)(a)4., 12.10(1)(b)2., 12.15(13) and 19.25 and to create NR 10.001(22q), 10.001(23a), 10.001(23am), 10.001(23b), 10.001(26g), 10.001(33), 10.01(3)(j), 10.07(1)(m), 10.07(2m)(em), 10.07(2m)(g)3., NR 10.07(4), 10.13(1)(b)15m., 10.145(1m), 10.16(5), 10.295, 12.15(11)(e), 12.60 to 12.63, 12.64(1)(a) and (b)(intro.)1., 12.64(1)(b)2. and 3., 12.64(1)(b)4. and 5., 12.64(2)(a) to (c), 12.64(2)(d), 12.64(3) and 12.65 relating to the wolf hunting and trapping season and regulations and a depredation program.

WM-09-12(E)

Analysis Prepared by the Department of Natural Resources

Statutory Authority, Statutes Interpreted, and Explanation: The department is directed by s. 29.014, Wis. Stats., to establish regulations for the taking of game that conserve game populations, including wolves, and provide opportunities for continued hunting and trapping. This authorizes the department to establish rules that restrict harvest to safe levels which are established based on population estimates, population goals, and hunter and trapper success rates. This section authorizes other actions such as establishing that wolves are not small game and allows removing them from a protected species list because they will be protected under other rules.

Many provisions of 2011 Wis. ACT 169 will be duplicated in administrative code to clarify what is prohibited and because that is where people are accustomed to finding similar or identical regulatory information for other species. The following provisions are found in s. 29.185(5) and (6), Stats.; season dates, use of dogs, hunting hours, baiting regulations, regulations on traps, firearms, bows and crossbow use. Rule updates on the payments of claims for damage associated with gray wolves will be similar to new language created in s. 20.370(5)(fv), Stats., of the ACT.

A variety of provisions explicitly authorize the department to limit wolf harvest if necessary to effectively manage the state wolf population. The department's authority to limit the number of harvest licenses issued is established in s. 29.185(1), Stats. The establishment of wolf harvesting zones is required by the s. 29.185(5)(b), Stats., of the ACT. Department authority to close the season in a harvest zone is established in s. 29.185(5)(c), Stats. Regulations on the proper use of tags and registration of harvest are authorized under s. 29.185(7), Stats., and generally by s. 29.014, Stats.

Regulations on the types of traps that may be used to harvest wolves are authorized under s. 29.185(6)(f), Stats., and generally by s. 29.014, Stats.

The placement of baits for wildlife that contains poison of any type is prohibited in s. 29.088(1), Stats., and the department is interpreting this statute by clarifying that substances that are poisonous to canines are illegal to use for wolf hunting baits.

Restrictions on the removal of wild animals and the wildlife damage abatement and claims program are established under the authority of ss. 29.014 and 29.885, Stats. These provisions allow the department to require written authorization for a member of the public to capture and relocate or kill wolves in damage and nuisance situations, consistent with current requirements for species such as deer, bear, and elk. Current administrative rule and statutory requirements for preventative abatement action before killing certain wild animals will be extended to wolves. Public hunting and trapping of certain species must be allowed for species currently covered under s. 29.885 (4m), Stats. The department will extend these requirements for wolves being removed under s. 29.888, Stats., of the ACT through this rulemaking. These provisions will not affect current rules that allow a landowner, lessee or occupant of land to kill a wolf that is actually in act of killing, wounding or biting a domestic animal.

All rules promulgated under this authority are subject to review under ch. 227, Stats. Non-statutory provisions of 2011 ACT 169 require the department to submit rules necessary for implementation or interpretation and establish that the department is not required to make a finding of emergency.

Related Statute or Rule: The department is also promulgating a similar permanent rule, Board Order WM-08-12.

Plain Language Rule Analysis: The Bureau of Wildlife Management recommends promulgating rules modifying chapters NR 10, 12 and 19 Wis. Admin. Code related to the wolf hunting and trapping season and regulations and a depredation program.

SECTIONS 1, 3 to 5, and 7 define “reservation wolf” pack for the purposes of establishing wolf harvest quotas.

SECTION 2 defines “point of kill”, a term used to describe when a flashlight can legally be used at night while hunting species for which there are no hunting hour restrictions.

SECTION 6 clarifies, in the definition, that wolves are not small game.

SECTIONS 8 and 29 define and establish Wolf Harvesting Zones.

SECTION 9 locates the statutorily established wolf hunting and trapping season dates in the table where other season dates are established.

SECTIONS 10 and 43 strike wolves from the list of protected species for which hunting and trapping seasons are not established and relocates a provision allowing landowners, lessees and occupants of lands to kill nuisance wolves in certain situations.

SECTIONS 11 and 12 establish normal daytime hours for hunting wolves but eliminates hunting hour restrictions for the portion of the wolf season beginning on the day following the traditional 9-day November firearm deer season each year.

SECTION 13 prohibits the use of radio telemetry receivers to aid in locating wolves for any purpose unless specifically authorized by the department.

SECTIONS 14 to 18 establish that baiting is allowed as a method of hunting wolves and the conditions under which bait may be placed for hunting wolves.

SECTION 19 establishes special regulations for hunting wolves at night including a prohibition of using dogs at night. This SECTION also establishes regulations related to dog tags, identification, and the number of dogs that may be used.

SECTION 20 updates code language for consistency with 2011 ACT 168 and 2011 ACT 169 regarding the allowed types of firearms, ammunition, and crossbow use for hunting wolves.

SECTION 21 prohibits the use of steel jawed foothold traps with a jaw spread of greater than seven inches for non-water sets during the early part of the wolf trapping season to reduce the incidental capture of certain non-target species.

SECTIONS 22 and 23 establish a period during the wolf hunting and trapping season when cable restraints may be used in order to reduce the incidental capture of non-target species and create standards for the use of cable restraints placed to capture wolves.

SECTION 24 allows the possession and retention of coyotes, foxes, and bobcat captured incidentally to wolf trapping in cable restraints that are not otherwise legal to place for coyotes or bobcat, if the respective season is open and the person has an valid unfilled permit and tag, in the case of an incidental bobcat.

SECTION 25 and 26 establish that a wolf harvesting license is required to hunt or trap wolves and create guidelines and criteria that must be considered by the department when establishing harvest quotas and issuing permits.

SECTION 27 explains how applications for wolf harvesting licenses are made and successful applicants are selected. This SECTION also establishes the manner for tagging, reporting and registering harvested wolves with the department. Finally, this section creates language that is consistent with 2011 ACT 169 regarding a process for closing the wolf hunting and trapping seasons.

SECTION 28 establishes that the U.S. Fish and Wildlife Service may allow wolf hunting at the Necedah National Wildlife Refuge. This does not require the service to allow wolf hunting. Trapping furbearers such as wolves is already possible under current rules, at the service's discretion.

SECTIONS 30 to 33 re-establish, following delisting of the species, that department authorization is required to remove wolves causing damage or which constitute a nuisance and establish conditions and requirements for removal.

SECTION 34 clarifies that dogs may not be used to pursue wolves under a wolf damage shooting permit unless specifically authorized by the department, similar to permits issued for bear damage.

SECTIONS 35 to 42 establish a wolf depredation program that is in effect only at times when wolves are not listed as a threatened or endangered species.

Federal Regulatory Analysis: These state rules and statutes do not relieve individuals from the restrictions, requirements and conditions of federal statutes and regulations.

Wolves are currently a state managed species. The US Department of Interior announced in December, 2011 that gray wolf populations in the Great Lakes region have recovered and no longer require the protection of the Endangered Species Act (ESA). The U.S. Fish and Wildlife Service published a final rule in the Federal Register that removed wolves in Michigan, Minnesota and Wisconsin, and in portions of adjoining states, from the list of endangered and threatened wildlife and plants. The rule went into effect on January 27, 2012.

The states of Wisconsin, Minnesota and Michigan are required to monitor wolf populations for at least five years to ensure the species continues to thrive. If it appears, at any time, that the gray wolf cannot sustain itself without the protections of the ESA, the service can initiate the listing process, including emergency listing.

Comparison with rules in Adjacent States: The only adjacent state that has established a wolf hunting and trapping season is Minnesota. Michigan is likely to allow hunting or trapping in the future but has not established a season framework that can be evaluated at this time.

Minnesota will allow hunting and trapping, but not with the assistance of dogs, for the first time in 2012. The application fee will be \$5.00 and the harvest permit will cost \$50.00. Minnesota will issue 6,000 harvest permits with the intention of harvesting a quota of 400 wolves from a population of approximately 3,000 animals. Because 2012 will be Minnesota's first wolf hunting and trapping season, they have no experience with their season framework.

Summary of Factual Data and Analytical Methodologies: This rule proposal will guide management activities by the department, establish regulations that apply to individual hunters and trappers, and establish a wolf depredation program. In all cases, these rule proposals are consistent with existing management guidelines and regulations for other species that are currently hunted or trapped in Wisconsin. The wolf depredation program is similar to and consistent with the existing program for gray wolves when they are listed as threatened or endangered and the wildlife damage, claims and abatement program.

The proposal creates a definition of "reservation wolf packs" for the purposes of establishing wolf harvest quotas. The department proposes not including wolves on tribal lands when establishing quotas.

This rule establishes a definition of the term "point of kill". The definition is important because the term describes when a flashlight can legally be used at night while hunting and when a light may not be used because shining while in possession of a firearm is not legal. This definition is consistent with past department policy.

With the removal of endangered and threatened species protections for wolves, they will automatically be classified as small game unless the exemption in SECTION 2 of this rule is created. Small game is not the appropriate designation for wolves because it will not be legal to hunt them with a license that authorizes hunting of small game, such as an archery, small game, sports, patrons or non-resident fur-bearer license.

This proposal establishes that hybridized variations of true wolves are also considered to be wolves. This broad definition resolves potential questions about the use of harvesting licenses and eligibility for the depredation program when animals that appear not to be true wolves are involved.

This rule proposal establishes wolf harvesting zones. The department will establish harvest quotas for each zone and hunters and trappers are allowed to pursue wolves only in the zone indicated on the license. Under the rule, the department will have the ability to list more than one zone or subzone on a license, providing flexibility for hunters if one zone they intended to hunt is closed early. An alternative might be to allow hunters to obtain a new license with a new zone designation when the season in a hunter's original zone choice is closed early. Managing harvest by the use of zones allows harvest to be focused in certain locations or regions for purposes such as reducing incidents of wolf depredation or keeping populations low in areas determined not suitable for wolves. Zones can also be used to decrease harvest pressure in certain areas where it is needed to maintain or rebuild populations in suitable habitat. The ability to focus harvest pressure allows managers to safely maximize hunting opportunity. However, geographically smaller zones have the disadvantages of regulatory complexity and reducing the area

available to individual hunters and trappers. Larger zones reduce the amount of fine tuning of management that is possible. The wolf harvesting zones in this proposal represent a compromise that takes advantage of the opportunity to utilize zones but minimizes the number of zones.

This rule making will establish that harvest quotas for wolves will be based in part on the wolf population, population trends and established population goals. The number of permits issued to reach a harvest quota will be based in part on the trends of hunter and trapper success rates and is consistent with the department's harvest management strategy for other species. In establishing harvest permit levels, the department will also consider the likelihood of a season being open for its entire allotted number of days. A final consideration will be managing wolf conflict with agriculture and land use in an area, and maintaining a sustainable population in core habitat areas. For wolves, a population goal at which public harvest and proactive control could occur is currently, and will continue to be, established in a species management plan prepared by the department and approved by the Natural Resources Board.

Requiring reporting or registration of individual animals harvested by hunters and trappers is a commonly used method of gathering information for harvest management, population monitoring, and to aid in enforcing regulations. Requirements of this rule will provide the department with more timely harvest information than is possible with registration requirements for some other species because there are two required actions that a successful hunter or trapper needs to make. First, this rule requires a hunter or trapper to report harvest by phone or other method authorized by the department within 24 hours of the harvest, allowing the department to monitor harvest activity as it occurs during the season. If reporting information indicates that the harvest quota for wolves has or will be met, the department will use this information to implement an early season closure to prevent exceeding the harvest quota in a particular zone. Similar reporting requirements are already in place for bobcat and Canada geese, two other species for which the department possesses emergency season closure authority.

There is an additional requirement to present wolf carcasses and pelts to the department for inspection and registration purposes at a later time. At registration, the department will collect samples from carcasses that can be used to determine age and reproductive information and for health monitoring of the animals. Detailed information on the location of harvest will also be collected. The time of registration is when registration tags will be issued indicating that the animal has been registered with the department and is now the property of the hunter or trapper. Many hunters and trappers will be familiar with these requirements because they are similar or identical to other species that are currently hunted or trapped such as bear, bobcat, otter, fisher, and deer.

The department anticipates that compliance with reporting and registration requirements will be good. Wolf hunters and trappers will have significant incentive to report and register in order to obtain the state registration tag that allows possession, transfer and sale of the wolf pelt or carcass. Possessing the attached registration tag is also necessary in order to obtain the services of a taxidermist or tannery.

Another important feature of tagging, transportation, and registration requirements are that they are a primary way of enforcing harvest regulations and preventing illegal harvest. Effective enforcement of harvest restrictions by conservation wardens and tribal wardens is intended to protect the wolf population overall and also preserves opportunities for legal harvest. Federal involvement can occur when illegally killed wolves are transported across state lines or killed on federal lands (National Park Service land, National Wildlife Refuges, National Forests, Federal military bases, or Indian reservations).

A number of wolves have been captured and fitted with radio telemetry gear by the department for research purposes. Under the proposal, the use of radio telemetry gear for locating wolves will be prohibited unless specifically authorized by the department. The prohibition would apply to locating wolves for any purpose. People who hunt with the aid of dogs and train hunting dogs also commonly use

this technology for monitoring their dogs. Individuals using dogs are specifically exempted from the prohibition of possessing radio telemetry gear as long as it is not used to locate wolves that are fitted with transmitters. Harvest of a collared wolf is legal.

This rule proposal establishes regulations on the use of bait for hunting, firearm and crossbow use, and hunting hours. Many of these regulations are similar to provisions established in statute and are reproduced in administrative code to assure enforceability of the statutory provisions and to increase ch. NR 10's usefulness to department staff and the public. Also under this proposal, baiting for wolves would be allowed beginning on the day after bear season closes and continuing through the close of the wolf season in a zone. Regulations for baiting in this proposal are similar in many respects to current bear baiting regulations. For hunting wolves statewide, 10 gallons of bait is allowed and it must be covered to prevent access by deer. Additionally, it will be legal to hunt wolves over baits that were lawfully placed for hunting deer. Similar to the restrictions on hunting deer and bear, animal parts and by-products are not allowed as bait for hunting wolves, as established in the ACT.

Current statute establishes that it is illegal to use baits containing poison of any description where it might cause the destruction of wild animals. This proposal creates a similar provision where baiting regulations are established in administrative code and which is specific to canine animals. Doing so locates more of the baiting regulations in one place, for convenience and rule use ability. It also recognizes that there are food substances which are known to be toxic to canines and may not be used in a way that will poison canine animals.

Meat or other animal parts and by-products can be used as bait for trapping, as they are not prohibited by the ACT, and no rule change regarding the use of baits for trapping is required or proposed in this order. Allowing the use of meat or other animal parts and by-products as bait for trapping may be important to prevent the incidental capture of non-target species such as deer when using cable restraints. The disposal of the carcasses of domestic animals is regulated by the Department of Agriculture, Trade and Consumer Protection and they are not legal for use as bait for trapping wolves.

Hunting at night is authorized under ACT 169 and this rulemaking, however, the rule addresses safety concerns about hunting in the dark with large caliber rifles and shotguns shooting slugs or buckshot by reducing the likelihood that someone will shoot a firearm without being certain of what lies beyond their target. By requiring that a person hunt from a stationary position and prohibiting hunting with hounds at night, shooting opportunities are more likely to occur in directions where the hunter has been able to anticipate and avoid possible unsafe shooting scenarios. It is anticipated that this extra precaution will help assure public safety.

This proposal will restrict the size of steel jawed traps not placed as water sets when used during the early part of the wolf season, through November 30, from a maximum jaw spread of 8 inches to a maximum of 7 inches. This is intended to prevent the incidental catch and retention of bears at times when they are normally still active. This rule would establish regulations on the allowable times for use and the dimensions and mechanical requirements of cable restraints to capture wolves. A cable restraint is a device used for restraining furbearers without injuring them which consists of a non-spring activated galvanized aircraft cable which includes a relaxing mechanical lock, stops, and swivel set in a non-entanglement manner. Cable restraints meeting certain specifications are currently legal for use at certain times for fox, coyote and bobcat. Under this proposal, cable restraint use for wolves is restricted to times when black bears are normally not active to prevent incidental capture and retention of bears.

Hunting and trapping are currently prohibited by DNR in the Necedah National Wildlife Refuge but there are a number of exceptions. As the landowner, the Fish & Wildlife Service already has the ability to allow or prohibit hunting and trapping and service staff people can enforce federal regulations. The

significance of current rule is that it also allows enforcement of special closed area regulations by the department. This proposal includes wolves in a way that is consistent with language for species that are currently hunted and trapped at Necedah. The proposal does not require the service to allow wolf hunting or trapping but is necessary if the service decides to allow wolf hunting.

Wolf depredation management is an important aspect of wolf management in Wisconsin. The department is charged with protecting and maintaining a viable population of wolves, but also must protect the interests of people who suffer losses due to wolf depredation. Wolves occasionally kill livestock, poultry, and pets. Although wolf depredation does not impact a significant portion of livestock growers, poultry producers, and pet owners, it brings hardship to individuals who experience incidents of depredation. In 2010 the department paid approximately \$204,000 in claims to owners of animals under the existing program for depredation caused by wolves. The existing program will remain in place under this proposal but will only apply at times when wolves are listed as endangered or threatened. Most aspects of the current program are recreated by this proposal in a new section that will be in effect at times when wolves are not listed as protected or threatened.

Several new features are also created that will apply only when wolves are not listed as endangered or threatened. This rule creates a requirement that landowners must allow access to the public for hunting and trapping wolves to be eligible for depredation compensation. Landowners could restrict the use of hunting with dogs if trespass on neighboring lands is perceived to be an issue. In order to minimize the use of lethal control, the proposal creates a requirement that individuals seeking wolf depredation compensation must cooperate with the implementation of any recommended abatement. These rules clarify that anyone seeking wolf depredation compensation must allow access to the department or its agent to inspect property and any abatement techniques being used. The proposal establishes that the panel of three representatives from Dept. of Agriculture, Trade and Consumer Protection, UW-Extension, and Wisconsin Farm Bureau Federal can defer the establishment of maximum payments amounts to another expert in the event the type of animal whose value is being evaluated is outside of their area of expertise. The proposal establishes that the department will not pay any wolf depredation claims until after December 31 of each year so that the level of program funding is known when payments are made. The department will also pro-rate claims if funds are not sufficient to pay all claims. These rules establish that someone with a valid hunting license of any kind can assist a person who has a wolf removal permit. For most species the appropriate license for that species is required to assist someone with a removal permit, however, because wolf harvesting licenses will be limited by a drawing, expanding the types of licenses needed to assist permittees under the damage program is needed. Individuals assisting a permittee using trapping methods would need to possess a valid WI trapping license. Finally, this proposal revises the current missing calf rules to create a "one-for-five" rule under which producers would be eligible to receive compensation for up to 5 additional calves for every verified or probable wolf depredation. This provision is based on the department's actual payment history for missing calves and continues to acknowledge that there is not always verifiable evidence of depredation on calves.

Anticipated Private Sector Costs and effects on Small Business: 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. Additionally, no significant costs are associated with compliance to these rules. The department does not have experience yet to gauge the level of public participation and interest in this new activity. People who hunt or trap wolves may reside anywhere in the state but are likely to hunt and trap in the northern third of the state where most wolves are found. This will result in increased purchases of lodging services. Some hunters/trappers will need to be assisted by paid guides in order to have a high likelihood of success. The gear used for wolf hunting will be similar to that used for deer and that, combined with the low number of hunters, means there will be limited new retail expenditures even though this is a new opportunity. Successful hunters and trappers will contribute economically through the sales of

wolf pelts or, more often, the purchase of taxidermy services. These will be minor contributions overall but for an individual taxidermist, guide, or motel owner who receives extra work, the impact is worth noting.

The ACT and this rulemaking will allow Wisconsin to manage wolves to population levels that will be lower than the current population. As a result, there will likely be less wolf depredation on domestic animals. Under previous requirements of law and under the ACT, the department reimburses owners for the fair market value of domestic animals killed, or veterinary services, in wolf depredation incidents. A reduction in depredation will result in less time investigating damage, filling claims, and working with agency staff who administer the program. Individual producers who are concerned about livestock depredation are likely to view a hunting season as very important to them economically. In 2010, the department investigated and made damage payments for depredations of 84 cattle or missing cattle and six sheep.

The department does not anticipate that there will be significant conflict in the field between people pursuing different outdoor recreational opportunities. It is possible that some wildlife watchers who seek wolves for viewing opportunities may be concerned about user conflict, however, and will be less active. They may initially spend less money travelling and pursuing these activities.

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SECTION 1. NR 10.001(7s) is created to read:

NR 10.001(7s) "Den site" means a specific location where wolf pups are born and raised in the spring season of the year.

SECTION 2. NR 10.001(22q) is created to read:

NR 10.001(22q) "Point of kill" means the location at which a flashlight is used to illuminate and kill a wild animal whose position or location is already known by the hunter, such as a tree in which a hound has treed an animal, for the purpose of accurately identifying the animal, safely aiming the weapon and killing the animal. It does not include shining a light on fields, forests or other areas in general for the purpose of searching for or attempting to locate wild animals for which the hunter does not already know the specific location.

SECTION 3. NR 10.001(23a) is created to read:

NR 10.001(23aa) "Rendezvous site" means a specific location where wolf pups are kept in the summer and early fall seasons of the year.

SECTION 4. NR 10.001(23am) is created to read:

NR 10.001(23a) "Reservation" means the federally established reservation of a tribe.

SECTION 5. NR 10.001(23b) is created to read:

NR 10.001(23b) "Reservation wolf" means a wolf or wolves that has at least 50% of its territorial range located within the boundary of a reservation or for whom 50 percent of their rendezvous sites, or a den site, are located within the boundary of a reservation.

SECTION 6. NR 10.001(25c) is amended to read:

NR 10.001(25c) "Small game" means all varieties of wild mammals and birds for which there is an open season, but does not include deer, moose, elk, bear, wolf, wild turkey or endangered, threatened or protected species of game. For the purpose of s. 167.31 (4) (e), Stats., small game does include wild turkeys.

SECTION 7. NR 10.001(26g) is created to read:

NR 10.001(26g) "Tribe" means a federally recognized American Indian tribe or band in this state.

SECTION 8. NR 10.001(33) is created to read:

NR 10.001(33) "Wolf Harvesting Zone" means those established in s. NR 10.295

SECTION 9. NR 10.01(3)(j) is created to read:

Kind of animal and locality	Open season (all dates inclusive)	Limit
NR 10.01(3)(j) Wolf hunting and trapping in all wolf harvesting zones unless closed under s. NR 10.145(7)	October 15 – last day of February unless department determines that an earlier closure is necessary to effectively manage the state's wolf population pursuant to s. 29.185(5)(c).	One per license and pelt tag issued under s. NR 10.145.

SECTION 10. NR 10.02(1) is amended to read:

NR 10.02(1)(a) ~~Except as provided in par. (b), cougar, Cougar, Canada lynx, badger, moose, gray wolf, wolverine and flying squirrel.~~

~~(b) On private land, the landowner, lessee or occupant of the land, or any other person with permission of the landowner, lessee or occupant may shoot and kill any gray wolf or cougar in the act of killing, wounding or biting a domestic animal. Shootings shall be reported within 24 hours to a department conservation warden. The carcass of the wolf or cougar shall be turned over to the department.~~

SECTION 11. NR 10.06(5) is amended to read:

NR 10.06(5) HUNTING HOURS. Hunting hours for bear, bow deer, deer with firearms, elk and ~~small game~~ small game and wolves are 30 minutes before sunrise through 20 minutes after sunset. Hunting hours for migratory game birds are 30 minutes before sunrise to sunset. All waterfowl hunting starts at 9:00 a.m. on the first day of the duck hunting season established in s. NR 10.01 (1) (b). The department shall establish the specific opening and closing times annually in the hunting regulations pamphlets. Opening and closing times for zone A southern and northern areas shall be based on astronomical data collected by the

U.S. naval observatory, Washington D.C., 20392-5420 for Sheboygan, Wisconsin and Powers, Michigan, respectively. The hunting hours for the other zones shall be obtained by adding minutes to the Zone A a.m. and p.m. columns as follows:

Zone Adjustment

- B ----- Add 4 minutes
- C ----- Add 8 minutes
- D ----- Add 12 minutes
- E ----- Add 16 minutes
- F ----- Add 20 minutes

SECTION 12. NR 10.06(8)(intro.) is amended to read:

NR 10.06(8) EXCEPTIONS. There are no hunting hour restrictions for pursuing coyote, fox, raccoon and all wild animals for which no closed season is established, or for wolves beginning with the first Monday that follows the last day of the regular season established under s. NR 10.01(3)(e) that is open to hunting deer with firearms and ending on the last day of February of the following year, except as follows:

Note: If hunting at night for wolves, additional requirements are established in s. NR 10.07(4).

Section 13. NR 10.07(1)(m) is created to read:

NR 10.07(1)(m) *Telemetry devices.* Use radio-telemetry or similar equipment to locate, pursue or hunt any wolf that has radio transmitters attached to them unless authorized by the department. No person may hunt or pursue wolves while in possession of a radio-telemetry receiver except with the aid of dogs that are equipped with radio transmitters and the device is only used for the purpose of locating transmitters attached to the dogs.

SECTION 14. NR 10.07(2)(b)2. is amended to read:

NR 10.07(2)(b)2. For the purpose of hunting deer or wolves in compliance with sub. (2m).

SECTION 15. NR 10.07(2m)(intro.) and (e)(intro.) are amended to read:

NR 10.07(2m) BEAR, WOLF AND DEER BAITING REGULATIONS.
(e) Deer and wolf hunting. Bait or feed may be placed and used for hunting deer or wolves outside of the counties described in par. (b), except no person may place, use or hunt over bait or feed:

SECTION 16. NR 10.07(2m)(em) is created to read:

NR 10.07(2m)(em) Wolf baiting regulations.

1. Bait or feed may be placed and used for the purpose of hunting wolves, except no person may place, use or hunt over bait or feed:

a. Beginning on March 1 and continuing through the last day of the bear hunting season in s. NR 10.01(g).

b. In excess of 10 gallons of bait or feed at any feeding site.

c. Unless the bait is totally enclosed in a hollow log, a hole in the ground or stump which is capped with logs, rocks or other naturally occurring and unprocessed substances which prevents deer from accessing the material. Liquid scent does not need to be enclosed.

d. Unless, when the bait or feeding site is checked or re-baited, all bait that has been uncovered is again enclosed and made inaccessible to deer in accordance with subd. par. c.

e. Unless the person placing the bait possesses a valid wolf harvesting license or written authorization from the holder of a valid wolf harvesting license to place and maintain a bait site for the licensee. Written authorization shall include: name, address and phone number of the wolf harvesting license holder; the name, address and phone number of the person placing or maintaining the bait site; and the county, town and property owner's name for the location where the licensee has authorized the person assisting them to place the bait.

f. Containing substances that are poisonous to canine animals.

2. Wolves may be hunted and wolf dogs may be trained over bait or feed lawfully placed for the purpose of hunting bear or training dogs to pursue bear in compliance with par. (d) and s. 29.184, Stats., and for deer in compliance with par. (e), provided the bait site does not contain any material listed in subd. 1. f.

Note: The American Veterinary Medical Association's official website contains contact information for poison control centers that maintain lists of toxic substances.

SECTION 17. NR 10.07(2m)(f) (intro) is amended to read:

NR 10.07(2m)(f) *Additional prohibitions.* For bear hunting and bear dog training, wolf hunting, and for deer hunting outside of the counties described in par. (b), no person may place, use or hunt over bait or feed that:

SECTION 18. NR 10.07(2m)(g)3. is created to read:

NR 10.07(2m)(g)3. Wolves without possessing a valid unused wolf harvesting license and pelt tag.

SECTION 19. NR 10.07(4) is created to read:

NR 10.07(4) WOLF HUNTING. (a) Hunting at night. During the period when hunting wolves at night is allowed under s. NR 10.06(8), no person may hunt wolves from 20 minutes after sunset to 30 minutes before sunrise unless all the following apply;

1. Hunting with the aid of predator calling techniques or when hunting over a bait site authorized under sub. (2m).

2. From a stationary position.

3. Without the use or aid of dogs.

(b) Dog use. 1. No person may use dogs for tracking or trailing wolves except for the period beginning on the first Monday that follows the last day of the regular gun deer season established in s. NR 10.01 (3) (e) 1. a. and b., and ending on the last day of February of the following year, or the date the department closes the season pursuant to s. 29.285(5)(c), whichever is earliest.

2. Number of dogs. No more than 6 dogs in a single pack may be used to trail or track a wolf, regardless of the number of hunters assisting the holder of the wolf harvesting license and regardless of dog ownership

3. Dog Tags. While a person is using a dog to hunt wolf, the person shall keep on his or her person any tag required for the dog under ss. 95.21 (2) (f), 174.053 (2), or 174.07 (1)(e).

4. Dog Identification. The dogs shall be tattooed or wear a collar with the owner's name and address attached.

SECTION 20. NR 10.09(1) is amended to read:

NR 10.09 (1) PROHIBITED METHODS. No person shall:

(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.

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), or (et), 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 or wolf 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 or wolf during the open season established in s. NR 10.01 (3) (d) and (j).

(b) *Incendiary shells.* Possess or have in control, while hunting, any shell, cartridge or ammunition known as tracer shells, or incendiary shells or cartridges. Distress flares are exempt from this section.

(c) Guns and devices.

1. 'Type.' Hunt with any means other than the use of a gun designed to be fired from the shoulder utilizing the energy of gun powder or compressed air, bow and arrow or by falconry except:

a. Muzzleloaders may be used for hunting, except that any muzzleloader used in the muzzleloading season described in s. NR 10.01 (3) (es) shall have a solid breech plug attached with threads, be capable of being loaded only from the muzzle, use black powder or other black powder substitute, and may include a mounted telescopic sight.

b. Hare, rabbit, squirrel, raccoon, fox, coyote, bobcat and unprotected wild animals may be hunted with handguns or pellet guns of .17 caliber or larger. Handguns shall have a minimum barrel length of 4 inches measured from the muzzle to the firing pin with the action closed.

c. Deer, wolf or bear may be hunted with handguns loaded with centerfire cartridges of .22 caliber or larger and that have a minimum barrel length of 5 ½ inches measured from the muzzle to the firing pin with the action closed.

Note: Hunters using handguns must comply with all state and federal laws respecting handguns, including s. 941.23, Stats., respecting concealment, and s. 29.597 s. 167.31, Stats., respecting transportation.

d. Deer, wolf or bear may be hunted with cylinder loading black powder muzzle-loading handguns which are not less than .44 caliber, do not use cartridges, and have a minimum barrel length of 7 inches measured from muzzle to breech face that fire a single projectile weighing not less than 138 grains.

e. Crossbows may be used by disabled individuals issued a permit under ss. 29.171 (4) and 29.193 (2), Stats., which authorize the use of a crossbow and by resident senior citizens to hunt small game, bear, and deer, elk and wild turkey with an appropriate license, permit and tag if required.

Note: In addition, pursuant to ss. ~~29.164 and 29.171, 29.014(1m) and 29.185(6)(a)1, Stats., crossbows may be used by resident senior citizens for hunting turkey under a license issued under s. 29.164, Stats., bear under a license issued under s. 29.184, Stats., elk under a license issued under s. 29.182, Stats., and for small game and deer under the authority of an archery license issued under s. 29.171, Stats. for deer, elk, turkey, bear, wolves and small game under a license that also authorizes hunting these species with a firearm during a season open for hunting that species with a firearm.~~

f. Notwithstanding sub. 1, a persons possessing a class D disabled hunting permit issued pursuant to s. 29.193(2)(d)3., Stats., may use an adaptive device that allows them to use an authorized type of firearm, bow and arrow, crossbow or air gun while hunting without the need for the firearm, bow and arrow, crossbow or air gun to be held by hand or fired from the shoulder, provide the person is still in physical possession and control of the weapon.

2. 'Deer, wolf or bear hunting.' Hunt any deer, wolf or bear with any air rifle, rim-fire rifle, any center-fire rifle less than .22 caliber, any .410 bore or less shotgun, a rifle or handgun loaded with .410 shotgun shell ammunition or with ammunition loaded with nonexpanding type bullets or ammunition loaded with shot other than a single slug or projectile.

3. 'Possession.' Possess any rim-fire rifle larger than .22 caliber or any center-fire rifle .22 caliber or larger in areas ~~wherein~~ where there is an open season or hunt specified in s. NR 10.01 (3) for hunting deer with shotgun only unless the rifle is unloaded and enclosed within a carrying case.

(d) Automatic firearms. Hunt with a fully automatic firearm.

(e) Handguns. Persons possessing a class A or C, or D disabled permit may use handguns chambered for .410 or larger shot shells for hunting all species except deer, elk, bear, wolf, turkey and migratory game birds.

SECTION 21. NR 10.13(1)(b)9. is amended to read:

NR 10.13(1)(b)9. 'Steel jawed traps.' No person may set, place or operate any steel jaw trap with a spread width of more than 8 inches except that the maximum spread width is 7 inches during the period beginning on October 15 and continuing through November 30 for sets that are not water sets.

SECTION 22. NR 10.13(1)(b)15. is amended to read:

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

SECTION 23. NR 10.13(1)(b)15m. is created to read:

NR 10.13(1)(b)15m. 'Cable restraints specifications for wolves' Set, place or operate any cable restraint for wolves except from December 1 to the last day of February, dates inclusive, while in possession of a valid unfilled wolf harvesting license and pelt tag, and provided the cable restraint conforms to the following specifications in addition to those under subd. 13.

a. Cable length of 10 feet or less, with a diameter of 3/32 inch or larger, consisting of multiple strands of wire.

b. Cable stops shall be affixed to the cable to ensure that the portion of the cable which makes up the noose loop may not be longer than 48 inches when fully open, or less than 8 inches when fully closed.

c. The bottom of the set restraint cable loop may not be less than 6 inches nor greater than 14 inches above the surface. The measurement to the surface is the distance to the first surface beneath the bottom of the set cable restraint where the surface is ground, ice, crusted or packed snow or any other hard material.

d. A cable restraint shall include a reverse-bend washer lock with a minimum outside diameter of 1 1/4 inches; and a 1500 pound roller swivel that acts as the maximum opening cable stop.

e. A cable restraint shall be staked in a manner that does not allow the restraint device to reach any part of a fence, rooted woody vegetation greater than 1/2" in diameter or any other immovable object or stake that could cause entanglement.

SECTION 24. NR 10.13(1)(b)16. is amended to read:

NR 10.13(1)(b)16. 'Incidental take of raccoons, coyote, fox, bobcat and mink.' No person may retain any raccoon, coyote, fox, or bobcat taken incidentally with a cable restraint during the period when the use of cable restraints is authorized under subd. 15. ~~or~~ unless it is during the open season for hunting

or trapping raccoons, coyote, fox, or bobcat listed in s. NR 10.01 (3) (b), (d), (f), or (h), and the person has the appropriate valid unfilled license, permits and tags, if required. No person may retain any mink taken incidentally with a colony trap unless it is during the open season for mink listed in s. NR 10.01 (4) (e).

SECTION 25. NR 10.145(intro) is amended to read:

NR 10.145 Bobcat, wolf, fisher and otter. No person may hunt or trap, or attempt to hunt or trap, any bobcat, wolf, fisher or otter unless ~~he or she possesses in possession of a current and valid license or permit from the department and any associated pelt tags for the area or unit in which he or she~~ the person is hunting or trapping.

SECTION 26. NR 10.145(1m) is created to read:

NR 10.145(1m) WOLF HARVEST QUOTAS. The wolf harvest quota shall be determined annually by the department. The department shall base its determination upon:

- (a) Population estimates and trends, not including reservation wolves.
- (b) Population goals established in a species management plan approved by the Natural Resources Board.
- (c) The projected impacts of wolf harvest quotas on the wolf population.
- (d) Managing the species' to reduce conflict with agriculture and land use in an area.
- (e) The ecological impacts of wolf predation.
- (f) The ecological importance of wolves.
- (g) The take of wolves for depredation management purposes.
- (h) Previous levels of harvest.
- (i) The impact of disease, illegal harvest, and other causes of mortality on the wolf population.
- (j) Recreational demands for wolf hunting and trapping opportunity.
- (k) Wolf harvest management in adjacent states if those states are sources of dispersing wolves.
- (l) Consideration of conservation genetics.
- (m) Off-reservation treaty rights established under *Lac Courte Oreilles Indians v. State of Wis.*, 775 F. Supp. 321, 323 (W.D. Wis. 1991) and on-reservation jurisdiction of Native American tribes.
- (n) Harvest quotas established under this section are for the purposes of hunting and trapping and are in addition to wolves killed in depredation control activities.

(1u) WOLF HARVESTING LICENSES. The number of wolf harvesting licenses to be issued shall be determined annually by the department. The department shall base its determination on:

- (a) The quota established in sub. (1m).
- (b) The projected success rates of hunters and trappers.
- (c) Maximizing opportunities for participation in hunting and trapping.
- (d) Minimizing the need to exercise the early season closure authority established in sub. (7).
- (e) Minimizing under and over harvest relative to the quota established in sub. (1m).

SECTION 27. NR 10.145(3) to (8) are amended to read:

NR 10.145(3) APPLICATION AND ISSUANCE PROCEDURES.

- (a) *Forms.* Applications for permits shall be made on forms provided by the department.
- (b) *Deadlines.* All permit applications shall be postmarked no later than the deadline dates indicated on the form or received by a department service center location on those dates to be considered for selection.

Note: The department conducts extensive publicity on the application deadlines beginning several months prior to any deadline.

Application deadline dates are published in news releases, the department web site at www.dnr.wi.gov, license outlet handouts, and pertinent regulation pamphlets. Department service center hours may vary by location.

(c) *Application limit.* No person may apply for more than 1 permit for each species.

(d) *Random selection.* If the number of applications for permits or licenses exceeds the number of permits or licenses available, successful applicants shall be randomly selected.

(f) *Validity.* All permits are valid only in the area or areas and for the time period specified on the permit during the open season established for bobcat and wolves. Wolf harvesting licenses and tags are not valid and may not be used within the boundaries of the Bad River, Lac Courte Oreilles, Lac du Flambeau, Menominee, and Red Cliff reservations.

(4) TAGGING REQUIREMENTS.

(a) *Field tagging.* When a bobcat, wolf, fisher or otter is killed and before it is carried by hand or transported in any manner, the person who trapped or killed the bobcat, fisher or otter shall immediately validate their pelt tag by slitting, tearing or punching the pelt tag in the manner indicated by the department and attach and seal the pelt tag to the animal in the manner indicated by the department. Failure to validate and attach and seal the pelt tag invalidates the permit or tag. No person may tag a bobcat, wolf, fisher or otter that was trapped or killed by another.

(b) *Transportation and possession.* No person may transport or possess an unskinned bobcat, wolf, fisher, otter carcass, or a raw pelt of these species unless it has been tagged in accordance with par. (a).

(c) *Tag retention.* The pelt and registration tag shall remain attached to the pelt until removed by a fur dresser or taxidermist at time of preparation.

(5) RECORDING OF HARVEST.

(a) 1. 'Bobcat, wolf, fisher and otter.' Unless authorized by the department, each person who has killed a bobcat, wolf, fisher or otter during the respective open season shall exhibit the pelt, separated from the rest of the carcass, to an authorized department representative no later than 5 days after the month of harvest.

(b) The department may require each person exhibiting a bobcat, wolf, fisher or otter pelt to exhibit and provide the skinned carcass to the department.

(c) *Department tagging.* The department shall inspect the pelt, and attach and lock a registration tag to the head portion of the pelt of all lawfully taken and possessed bobcat, wolf, fisher and otter.

(d) *Mounting.* Persons who intend to have a bobcat, wolf, fisher or otter mounted by a taxidermist may exhibit the bobcat, wolf, fisher or otter to the department for registration in whole carcass condition without separating the pelt and shall surrender the skinned carcass to the department within 30 days of registration.

(6) POSSESSION AND TRANSFER RESTRICTIONS. No person may:

(a) Possess raw bobcat, wolf, fisher or otter pelts after the 5th day following closure of the open season for each species and the respective opening date of the next trapping or hunting season without a registration tag attached and locked to the head of the animal.

(b) Transfer, give, trade, sell or purchase a raw pelt or unskinned carcass of any bobcat, wolf, fisher or otter pelt without a registration tag being attached and locked to the head portion of the pelt by the department in accordance with sub. (5) (c).

(7) SEASON CLOSURE. The secretary of the department may close a portion or all of any bobcat, wolf, otter or fisher season established in s. NR 10.01, upon a finding by the department that the harvest for that season will exceed the level authorized by the department under sub. (1). Closure Bobcat, otter, and fisher season closure shall become effective upon issuance of an order and publication in the official state newspaper. Wolf hunting and trapping season closure shall become effective 24 hours after

posting a notice on the department's website, announcement on its telephone registration or harvest reporting system, and issuance of a press release.

(a) Factors the department shall consider in closing the wolf hunting and trapping season are:

1. The reported harvest relative to the harvest quota.
2. The rapidity at which the quota is being approached.
3. The anticipated harvest in coming days.
4. Other known sources of mortality that may be greater than anticipated when quotas were set.

(b) Ability to hunt wolves in additional zones upon season closure. A wolf harvesting license authorizes the holder to hunt or trap in the wolf harvesting zone or zones listed on the license. If the department utilizes its season closure authority in a harvesting zone, the department may authorize the holder to use their license in additional open zones.

(8) REPORTS.

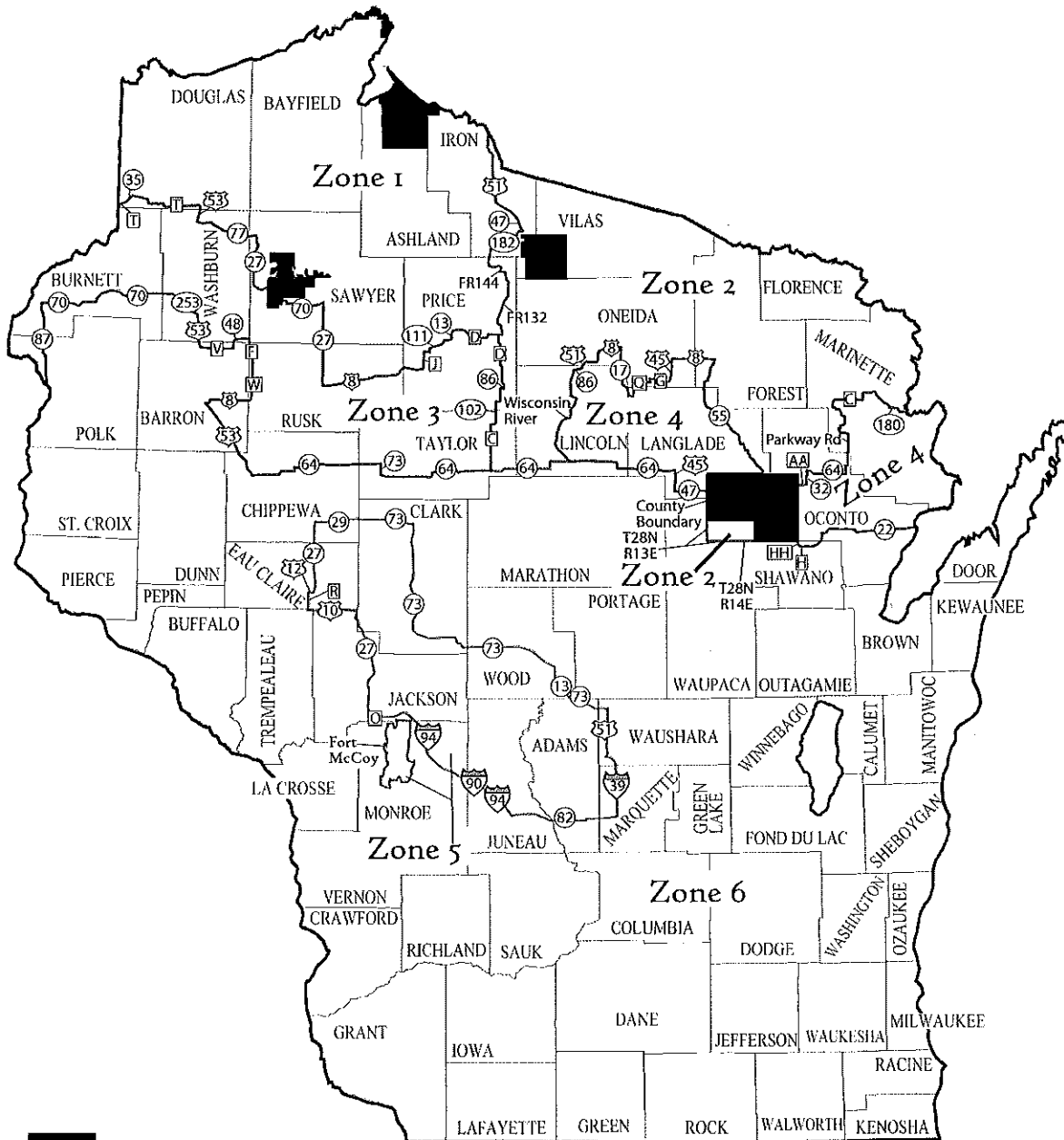
(a) Harvest reports. The department may require each successful bobcat permit or wolf harvest license applicant to submit a harvest report in a manner prescribed by the department within 24 hours of harvesting a bobcat or wolf. If the department requires a person who has been issued a bobcat harvest permit or wolf harvest license to report the harvest under this section, the person shall make the report in the manner required by the department within 24 hours of the time the person kills the bobcat or wolf.

SECTION 28. NR 10.16(5) is created to read:

NR 10.16(5) WOLF HUNTING SEASON. An open season for hunting wolves is established on the Necedah national wildlife refuge, and shall be concurrent with the open season for hunting wolves in s. NR 10.01(3)(j). Such open season shall be effective only in those areas on the Necedah national wildlife refuge designated by posted notices of the U.S. Fish and Wildlife Service. Hunting on the Necedah national wildlife refuge may be restricted to only those persons authorized by the U.S. Fish and Wildlife Service.

SECTION 29. NR 10.295 is created to read:

NR 10.295 Wolf Harvesting Zones.



Zero Quota Areas

Wolf harvest is not allowed within the boundaries of the Bad River, Lac Courte Oreilles, Lac du Flambeau, Menominee, and Red Cliff reservations except with DNR depredation permits.

SECTION 30. NR 12.10(intro.) is amended to read:

NR 12.10(intro.) **Authorization to remove wild animals causing damage or nuisance.** Landowners, lessees or occupants may remove from lands under their control wild animals and their associated structures causing damage or constituting a nuisance in accordance with this section and s. NR 12.15.

SECTION 31. NR 12.10(1)(a)4. is amended to read:

NR 12.10(1)(a)4. Live-capture and relocate white-tailed deer, elk, black bear, wolf or any wild animal classified as endangered or threatened under s. NR 27.03.

SECTION 32. NR 12.10(1)(b)2. is amended to read:

NR 12.10(1)(b)2. Live-trap and relocate any wild animal, except white-tailed deer, elk, black bear, gray wolf or any wild animal classified as endangered or threatened under s. NR 27.03, or any animal classified as a harmful wild animal under s. NR 16.11, to open unenclosed lands not controlled by the department with the permission of the owner. Pursuit of animals released under this subdivision by dogs may not occur in an area where a wild animal has been released for a period of 2 hours after release of the animal, except dogs may be released to pursue raccoons at anytime after the raccoon has reached cover by climbing a tree or pole to a height of at least 10 ~~fee~~ feet.

Section 33. NR 12.15(11)(e) is created to read:

NR 12.15(11)(e) *Wolf damage shooting permits.* Others participating under a wolf damage shooting permit shall possess any valid license authorizing hunting with a firearm or trapping, depending on the method used, and a valid shooting permit when engaged in wolf damage shooting permit activities.

Section 34. NR 12.15(13) is amended to read:

NR 12.15(13) **USE RESTRICTIONS.** Hunting bear or wolves with the aid of dogs under this chapter is prohibited, unless the department determines there are extraordinary conditions which warrant an exemption. When the department grants an exemption, permittees may restrict hunting access of bear hunters using dogs if trespass problems on adjoining private properties are likely to occur..

SECTION 35. NR 12.60 to 12.63 are created to read:

Subchapter IV – Wolf Damage

NR 12.60 **Purpose.** This subchapter is adopted to implement and administer the payment of claims for damage associated with gray wolves authorized by s. 29.888, Stats. In administration of the wolf depredation program the department shall assure that the funds appropriated by the legislature are used first to pay wolf damage claims and if any funds remain after paying claims, funds may be used to pay for wolf management and control activities.

NR 12.61 **Applicability.** This subchapter applies to claims for damages caused by gray wolves. It is not applicable to damage caused by gray wolves when if the wolf is listed on the federal and/or the state endangered species list.

NR 12.62 Definitions. For the purposes of this subchapter:

(1) "Confirmed depredation" means that the department has found clear evidence that wolves were responsible for the depredation or injury, such as a carcass present with bite marks and associated hemorrhaging, tracks in the immediate vicinity or other sign.

(2) "Confirmed non-wolf depredation" means the department has found conclusive evidence that something other than a wolf killed or injured the animal.

(3) "Department" means the Wisconsin department of natural resources or agents designated by the department.

(4) "Hunting dogs" means any dog used in the pursuit of game animals other than wolves.

(5) "Livestock" means the following farm animals: bison and other bovine animals, sheep, goats, swine, farm-raised deer, equine animals, poultry, ratites, llamas, alpacas, captive game animals, guard animals for livestock, and fish.

(6) "Pets" mean dogs and other domestic animals maintained as companion animals.

(7) "Probable depredation" means that the department did not find a carcass from a reported depredation or the damage observed on the carcass was inconclusive but there is evidence of depredation such as a kill site, blood trails, or tracks or scat located in the immediate vicinity.

(8) "Unconfirmed depredation" means any depredation that is not a confirmed depredation or a probable depredation.

NR 12.63 Depredation verification procedures.

(1) **RESPONSE TIME.** Any person who believes that livestock, pets or hunting dogs, other than those used to hunt or pursue wolves, owned by the person has been injured or killed by a gray wolf and wishes to seek compensation under this subchapter shall contact the department or its agent within 24 hours of the depredation or within 24 hours of becoming aware of missing livestock, pets or hunting dogs other than those used to hunt or pursue wolves. The complainant shall provide the location of the depredation and a description of the animals injured, killed or missing. The department or its agent shall make an onsite inspection within 48 hours of receipt of the complaint and draft a written report of the investigation, which shall include an estimate of the value of the loss.

Note: The Department will contract with the U.S. Department of Agriculture-APHIS-Wildlife Services to handle complaint contacts and response.

(2) **VERIFICATION CATEGORIES.** Each complaint received under this section shall be classified by the department under one of the following:

- (a) Confirmed wolf depredation.
- (b) Probable wolf depredation.
- (c) Confirmed non-wolf depredation.
- (d) Unconfirmed depredation.

(3) **CLAIM SUBMITTAL.** The complainant shall submit a claim for reimbursement within 14 days of the loss on forms provided by the department.

Section 36. NR 12.64(1)(a) and (b)(intro.)1. are created to read:

NR 12.64 Depredation reimbursement procedures.

(1) **ELIGIBLE CLAIMS.** (a) **Verified claims.** Only cases classified as confirmed depredation or probable depredation by the department shall be eligible for reimbursement, except as provided in sub. (2) (d).

(b) **Compliance.** All claimants for damage payments shall meet all of the following eligibility requirements:

1. Carcass Disposal. Claimants need to be in compliance with carcass disposal requirements of s. 95.50, Stats., for livestock claims and, for farm-raised deer claims, the farm-raised deer fencing requirements of ss. 90.20 and 90.21, Stats., in order to be eligible for reimbursement.

Note: Section 95.50, Stats., regulates disposal of livestock carcasses and requires burning or burying the carcass when the animal is suspected of dying from highly dangerous diseases. Sections 90.20 and 90.21, Stats., specify fencing requirements for those who raise or keep farm-raised deer.

SECTION 37. NR 12.64(1)(b)2. and 3. are created to read:

NR 12.64(1)(b)2. Open Hunting Access. Unless exempted by the department claimants, seeking compensation for wolf damages that occurred on property they own or lease must have hunting access control over all contiguous land on which they seek wildlife damage abatement assistance or claims. Enrollees shall open their land to hunting or trapping wolves during the wolf hunting and trapping seasons established in s. NR 10.01(3)(j). Claimants may not charge any fees for hunting or trapping, hunting or trapping access or any other activity that includes hunting or trapping wolves. This hunting access requirement shall also apply to enrollees who have also been issued a wolf removal permit under the authority of s. 29.885, Stats., and this chapter. Enrollees may restrict hunting access to normal daylight hunting hours and may restrict wolf hunters using dogs if trespass on adjoining private properties is likely to occur. Enrollees may refuse hunting access for reasonable cause as defined in s. NR 12.31 (7).

3. Hunter Density and Registration. The enrollee shall allow at least 2 hunters per 40 acres of land suitable for hunting, as determined by the department using the criteria established in s. NR 12.36(3)(b)1. at any given time of the appropriate hunting season. The enrollee and hunting members of the immediate family that reside in the enrollee's household may be counted towards the hunter density requirement. To register for hunting and/or trapping access, licensed hunters and trappers shall contact the claimant and arrange a meeting where the claimant shall describe any hunting constraints on the property, and any information necessary to promote safety and prevent trespass.

Section 38. NR 12.64(1)(b)4. and 5. Are created to read:

NR 12.64(1)(b)4. Compliance with wildlife damage abatement measures. In order to be eligible for wolf damage claim payments for an occurrence of wolf damage, a person seeking damage claim payments shall have complied with any wolf damage abatement measures to abate that wolf damage which were recommended by the department or its agent. Recommended measures shall be consistent with normal animal husbandry practices and may not interfere significantly with other normal animal husbandry practices in use on that farm.

5. Entry to land. Enrollees shall allow the department or its agent to enter and inspect, at reasonable times, any land for which a wild depredation claim has been filed or for which wolf damage abatement measures have been implemented.

SECTION 39. NR 12.64(2)(a) to (c) are created to read:

NR 12.64(2) AMOUNT OF PAYMENTS. (a) Livestock. The department shall reimburse the claimant the fair market value, that is the feeder market value for young of the year or replacement value for adult (1+ years), of livestock killed by wolves not to exceed the established maximum for that animal type. A maximum amount to be paid for each type of animal may be established annually by the department. These maximums shall be determined each year by January 30, by a panel of 3 agriculture experts, one each from Wisconsin Department of Agriculture, Trade and Consumer Protection, University of Wisconsin-Madison Agricultural Extension, and the Wisconsin Farm Bureau Federation or the federation's designee.

Note: The list of maximum allowable claims will be available from the Bureau of Wildlife Management, P.O. Box 7921, Madison, WI 53707-7921.

(b) Hunting dogs and pets. The department shall reimburse the claimant the fair market value for hunting dogs, other than those used to hunt or pursue wolves, or pets killed by wolves up to a maximum of \$2,500 per animal. Fair market value will be based upon recent sale records for similar dogs or pets.

(c) Veterinary expenses. The department shall pay for all veterinary expenses incurred in the treatment of livestock, hunting dogs or pets injured by wolves. If the animal dies from the injury, the veterinary treatment costs shall be paid in addition to the fair market value of the animal. If the animal does not die, only the veterinary treatment costs shall be paid. A detailed receipt shall be submitted to the department within 14 days of paying the veterinarian bill.

SECTION 40. NR 12.64(2)(d) is created to read:

12.64(2)(d) Missing calves. The department shall reimburse the claimant for missing calves beyond those that would be lost according to the normal mortality rate determined by U.S. department of agriculture and that research has shown to be attributed to wolf depredation at a rate of up to 5 calves for each verified loss of livestock when all of the following criteria are met:

1. The claimant tags all calves within 2 weeks of birth and provides a list certifying to the department an exact count at the beginning of the grazing season including information on the tag number, date and sex of all calves.

2. The claimant records and provides a list certifying to the department an exact count of all calves rounded up at the end of the grazing season and a list of all tagged calves determined to be missing.

3. The claimant provides a list certifying to the department all known deaths and losses of calves during the grazing season.

4. The department has documented that at least one livestock loss on the claimant's property within the same grazing season that is verified as a confirmed or probable wolf depredation and there is evidence that wolves continued to be present on the property during that period of time.

5. The claimant certifies that they will cooperate with any research conducted by the department to determine the amount of mortality of missing calves that is caused by wolves, if such cooperation does not impact the claimant economically in a significant manner or impose an unreasonable burden or hardship on the claimant. Disputes as to whether claimants are impacted economically in a significant manner or what is an unreasonable burden or hardship shall be resolved by the panel of 3 agricultural experts identified in par. (a).

Note: The U.S. department of agriculture calculates the normal calf mortality rate for beef cow-calf operations nationwide. In 2003 that rate was 2.3%. The department will conduct scientific field research in Wisconsin to determine how much mortality to missing calves can be attributed to wolves.

SECTION 41. NR 12.64(3) is created to read:

NR 12.64 (3) CLAIM PAYMENTS.

1. The department will review and act on properly filed claims after December 31 of the year in which the damage occurred.

2. The department shall pay claimants the full amount of wolf damage claims if appropriations under s. 20.370(5)(fv), Stats., are sufficient to pay all wolf depredation claims in a given fiscal year.

3. If the approved claims exceed the funds available under appropriation s. 20.370 (5)(fv), claims shall be paid on a prorated basis. When prorating claims, the department shall pay a percent of each eligible claim equivalent to the percent of the total approved claim amount that can be paid with the total available funds.

4. The department shall reimburse owners for losses due to wolf depredation regardless of any other insurance the owner may have on the animals that were killed or injured.

SECTION 42. NR 12.65 is created to read:

NR 12.65 Personal property. The department may not provide compensation for damage done by wolves to personal property other than livestock, hunting dogs that are not dogs used or being trained for hunting or pursuing wolves, and pets.

SECTION 43. NR 19.25 is amended to read:

NR 19.25 **Wild animal protection.** Unless engaged in dog training or dog trials as authorized by the department in s. NR 17.001 (3) and (5), or other activity specifically authorized by the department or under (a), a closed season is established and no person may harass, disturb, pursue, shoot, trap, catch, take, or kill protected wild animals by any means, except as described under s. NR 12.10 (1) (b) 4. (a) On private land, the landowner, lessee or occupant of the land, or any other person with permission of the landowner, lessee or occupant may shoot and kill any gray wolf or cougar in the act of killing, wounding or biting a domestic animal. Shootings shall be reported within 24 hours to a department conservation warden. The carcass of the wolf or cougar shall be turned over to the department.

SECTION 44. STATEMENT OF EMERGENCY. A non-statutory provision, SECTION 21, of 2011 ACT 169 requires the department to submit rules necessary for implementation or interpretation and establishes that the department is not required to make a finding of emergency.

SECTION 45. EFFECTIVE DATE. This rule shall take effect on August 1, 2012 except for SECTIONS 37 and 40, which shall take effect on January 1, 2013.

SECTION 46. BOARD ADOPTION. This rule was approved and adopted by the State of Wisconsin Natural Resources Board on _____.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Cathy Stepp, Secretary

(SEAL)