

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
CREATING RULES

The Wisconsin Natural Resources Board proposes an order to create NR 45.04(1)(g) relating to regulation of firewood entering department lands and affecting small businesses.

FR-25-09

Analysis Prepared by the Department of Natural Resources

1. **Statutes interpreted:** Sections. 23.09(2)(intro), 23.091, 23.11(4), 23.17, 23.175, 23.22(2)(a), 23.28(3), 23.293 27.01(2)(i) and (j), and 28.04(2)Stats.

2. **Statutory authority:** Sections. 23.09(2)(intro), 23.091, 23.11(1), 23.22(2)(b) 1., 23.28(3), 27.01(2)(j) and 227.11(2)(a), Stats.

3. **Explanation of agency authority to promulgate the proposed rule under statutory authority:** Section 23.11(1), Stats., states that the department shall have and take general care, protection and supervision of all state parks, of all state fish hatcheries and lands used therewith, of all state forests, and of all lands owned by the state or in which it has any interests, except lands where the care and supervision of which are vested in some other officer, body or board; said department is granted such further powers as may be necessary or convenient to enable it to exercise the functions and perform the duties required of it by this chapter and by other provisions of the law. Sections 23.09(2)(intro), 23.091, 23.28(3), and 27.01(2)(j), Stats., describe department responsibilities on specific types of properties covered in s. 23.11(1), Stats.. The department interprets s. 23.22(2)(a), Stats., to require the department to establish a statewide program to control invasive species in this state. Rules to control the spread of emerald ash borer, and invasive species, are a part of that program. Finally, s. 227.11(2)(a), Stats., expressly confers rulemaking authority on the department to promulgate rules interpreting any statute enforced or administered by it, if the agency considers it necessary to effectuate the purpose of the statute.

4. **Related statute or rule:** Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) ch. ATCP 21 regulates import and movement of firewood and other host material of the emerald ash borer, Asian longhorn beetle, hemlock woolly adelgid and sudden oak death. The Wisconsin Department of Natural Resources ch. NR 40 prohibits the movement of materials carrying specific invasive species, such as firewood with emerald ash borer (EAB) or asian longhorned beetle. This rule supports ch. ATCP 21 and NR 40.

5. **Plain language analysis:** This rule will prohibit anyone from bringing onto department managed lands firewood from greater than 25 miles from the campground or property, from outside of Wisconsin, or from areas quarantined by the state, a federal agency or tribal government or designated zones of infestation if the property is outside of the quarantine or infested zone unless the firewood source is approved by the Wisconsin DATCP. The purpose of this rule is to reduce the risk of introduction and spread of EAB and other invasive insects and diseases of trees by reducing the distance firewood used on the properties is moved. Currently, EAB is moving primarily on firewood and parks and campgrounds in other states have been sites of new introductions as a result (Muirhead et al. 2006). This rule will provide additional protection for state parks and forests, set a good example for county, municipal and private campgrounds and reduce a reason people move firewood: for use while camping. While this rule may cause some inconvenience for campers, it is dwarfed by the cost of infestation or establishment of this pest to the public and the state. To minimize any inconvenience, the department is working with firewood dealers and the Wisconsin DATCP to assure a sufficient supply of safe and affordable firewood at department campgrounds.

Invasive, foreign pests and diseases are often very destructive as native trees typically have little resistance, there are rarely effective natural enemies to regulate infestations and effective pesticides may be unavailable. EAB is a dramatic example of this situation. Where it is established, it has eliminated all ash species in the region. Cities and towns in southeastern Michigan have been stripped of street trees and lowland forests decimated as this beetle has killed the ash trees that dominate these landscapes. The cost of removal of hazardous dead trees alone has cost communities millions and they continue to suffer

associated costs from reduced property values and increased energy and water costs. Wisconsin is at least as vulnerable to EAB as Michigan. Thirty percent of our community trees are ash and ash species are common to dominant in our northern hardwood, central hardwood and lowland forests. Dealing with EAB and other invasives once established is very expensive but EAB and many other invasives move slowly if not transported on firewood or other host material. If this artificial movement can be reduced, many communities and woodlands in Wisconsin need not suffer damage from EAB for many years.

While federal and state quarantines on nursery stock and logs have been effective, those on firewood have largely failed to prevent movement of this pest. Most infestations distant from the core infestation in southeastern Michigan have been traced back to firewood as the source of the introduction. Recognizing this risk, the Wisconsin DATCP and DNR have proposed additional limits on movement of firewood into and within the state. This rule supports DATCP's external quarantine and DNR's NR 40. In addition, the further tightening of restrictions on firewood allowed into state properties sends a strong message that we need to be even more active in preventing spread of EAB now that it is in the state. In the event that an infestation of emerald ash borer is discovered on a department property, movement from that property of all infested host material including firewood would be halted by the DATCP and NR 40, minimizing the risk of spread.

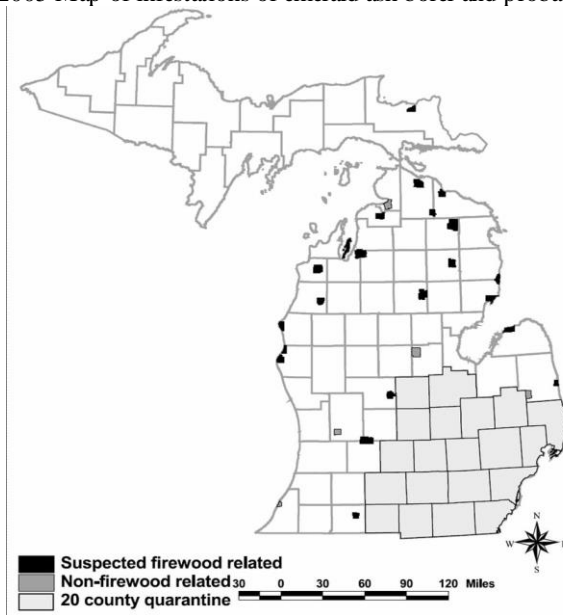
The regulation of firewood into department properties is supported by an intensive information and education program to reach campers who could be affected by the new regulation and to raise awareness of the risk posed by the movement of firewood. The department also reaches out to municipal and private campground managers to educate them on why we are taking this step and encourage and support them if they decide to do likewise. The department will also work with the DATCP and firewood dealers to ensure campers have a sufficient supply of safe and reasonably priced firewood.

6. Summary of, and comparison with, existing or proposed federal regulation: The Apostle Islands National Park has prohibited bringing any firewood into the park since 2006. The Chequamegon-Nicolet National Forest prohibits firewood from greater than 25 miles onto the forest. The Army Corp of Engineers regulates the firewood they allow onto their lands along the upper Mississippi.

7. Comparison with rules in adjacent states: Michigan prohibits movement of ash products including firewood from the quarantined counties. Campers from quarantined areas entering Michigan parks are questioned if they brought firewood from the quarantined area and if so confiscation of firewood and fines could result. Minnesota state parks allow wood from approved vendors that are within Minnesota and within 100 miles of the park. To be approved, vendors must either exclude ash from their wood, heat treat or debark the wood. Firewood from EAB quarantined counties is not allowed into parks outside the quarantined area. Iowa state parks prohibit wood from EAB or gypsy moth quarantined areas unless carrying a USDA certificate stamp indicating the wood has been treated to prevent transmission of the pest. Illinois prohibits the movement of host materials including wood from the area quarantined for Asian longhorned beetle and is considering regulation of firewood entering state lands.

8. Summary of factual data and analytical methodologies: Firewood is generally recognized as a major source of new infestations of EAB (Muirhead et al 2006) and other invasives that infest wood. Figure 1. shows the outlying infestations of EAB in Michigan in 2005 and their probable source. Note that most of the colonies outside epicenter in the Detroit area were traced back to infested firewood brought in from the quarantined area. Quarantines on nursery stock and logs have been successful in discouraging exportation of infested host material from these sources. When such quarantines are broken, it is often detected quickly and material can be retrieved or at least the potentially infested area can be accurately delineated and treated. This happened in Maryland and Virginia where a dealer received an illegal shipment of nursery stock from Michigan. The Virginia introduction appears to have been successfully eradicated though the one in Maryland is still being treated. In contrast, much firewood is moved by individuals and there is little that can be done to regulate its movement out of a quarantined area except to try and educate the public to the risk. An external quarantine can add a second opportunity to intercept the infested host material and enforcement is often more vigorous since the people enforcing the quarantine are trying to protect their own resources.

Figure 1. 2005 Map of infestations of emerald ash borer and probable source of infestation.



One advantage we have in dealing with wood infesting pests and diseases is that many move slowly on their own, like EAB. If we can reduce the distance infested firewood moves, we can slow the spread of these invasives. Slowing the expansion of infestations and establishment of new populations has benefits. It buys time for the development of new control options. It delays the time when a community or forest will suffer impacts allowing time to prepare, minimizing losses. Once an invasive has become established in the state it is even more important to prevent spread, even locally. It is our communities and forests that directly benefit. Further restricting the distance from which firewood may be brought into state lands sends a strong message that we must increase our efforts to prevent spread of invasives like EAB and not give up just because it is now found in the state. Recently, Forestry staff working with a Forest Service scientist developed a model of the risk of introducing a wood borne invasive into Wisconsin state campgrounds given increasing numbers of populations of the invasive in the state and differing distances from which firewood was allowed into the property. Figure 2. shows the results of this model. As the number of populations of an invasive increases in Wisconsin, the number of state campgrounds that are at risk because a population of the pest is within the circumference for allowable firewood also increases. However, the rate at which the number of campgrounds at risk increases is very different for the four distances modeled. For example, at 8 populations of invasive X in Wisconsin, 54% of the state campgrounds were at risk in the 50 mile radius model, 21% were at risk in the 25 mile radius, and only 4% were at risk when only wood from 10 miles away was allowed into the campground. This model shows the importance of reducing the distance firewood moves in reducing the risk of introductions into our parks, communities and forests.

While risk of introduction of EAB or other wood borne pests and diseases would be minimized if we did not allow wood from outside the property to enter, that is not practical. Many state campgrounds could not supply wood from within their boundaries. We presented the results of our model to Parks program leaders and State Forest staff and asked for input on whether to reduce the distance from which wood could be brought into their properties. They responded that the distance should be reduced to reduce the risk of introduction and send the right message to the public but that they felt that they could not reliably supply enough firewood at all campgrounds if we reduced the distance below 25 miles. For these reasons, the DNR recommends that firewood be allowed onto state lands from no more than 25 miles from its point of origin.

9. Analysis and supporting documents used to determine effect on small business or in preparation of economic impact report: This rule is designed to reduce the spread of invasive forest pests and diseases such as the EAB which pose a grave threat to Wisconsin forest and urban landscapes. This rule will help protect Wisconsin industries associated with tourism and forest products by protecting the resources on which they depend. Some

Mean					Standard Deviation				
	10mi radius	25mi radius	50mi radius	100mi radius		10mi radius	25mi radius	50mi radius	100mi radius
1	0.81	4.83	17.85	59.28	1	2.01	4.75	9.68	14.33
2	1.17	8.90	32.16	94.29	2	2.05	7.02	12.29	20.85
4	3.34	19.36	59.24	135.37	4	4.06	9.41	16.32	18.70
8	7.21	37.09	94.35	160.44	8	5.67	12.29	15.56	10.77
16	11.68	60.30	135.55	170.68	16	6.86	13.07	12.52	2.88
32	25.76	99.99	157.77	171.73	32	10.74	15.20	8.59	1.58
64	47.76	138.44	167.96	172.00	64	12.78	9.76	4.55	0.00

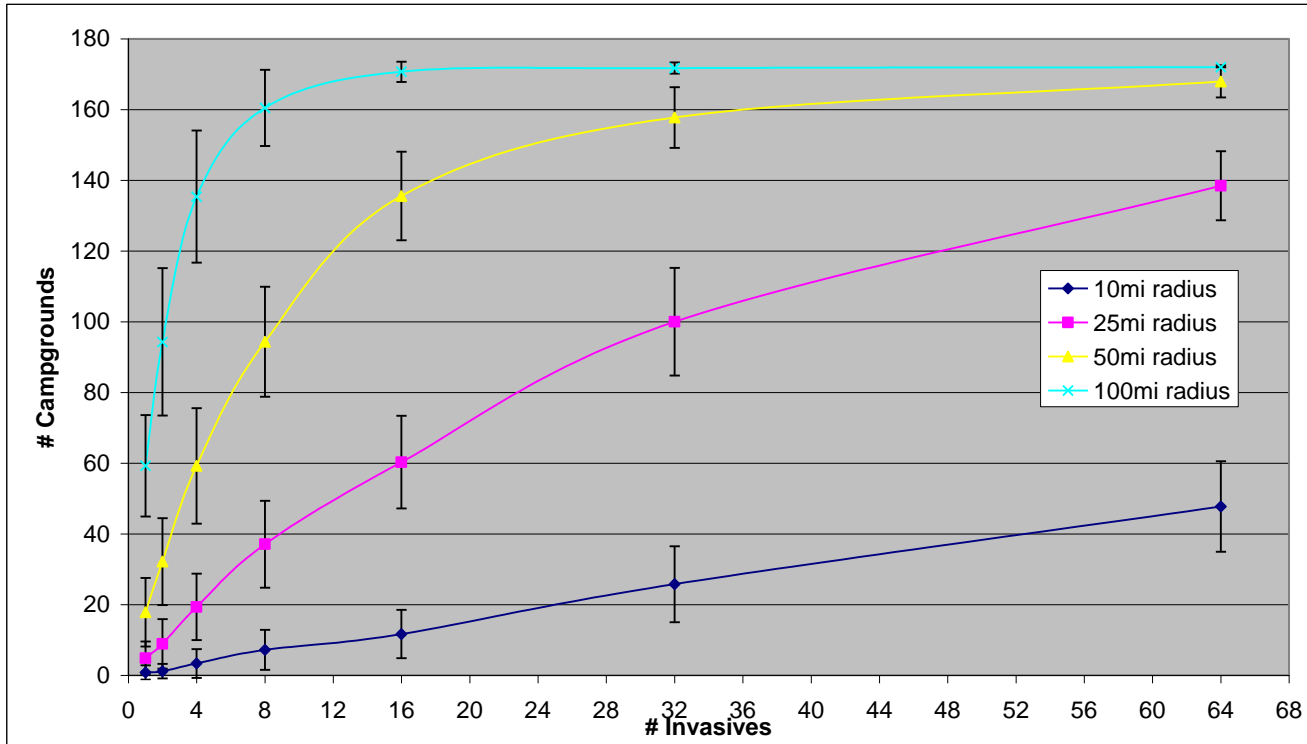


Figure 2. Mean number (+SD) of Wisconsin state campgrounds where a population of wood borne invasive X occurs within the distance firewood is allowed into the campground given a number of populations of invasive X (# Invasives) randomly distributed in Wisconsin. Four allowable distances were plotted; 100, 50, 25 and 10 miles from the campground. There are 172 state campgrounds used in this model.

firewood dealers may be initially impacted by this rule if they get firewood from greater than 25 miles from the state campgrounds or from out of state. Early analysis of a statewide survey of firewood dealers indicates that most dealers are obtaining their wood within 50 miles of the area where they sell it so fewer dealers may be impacted than might at first be thought. Dealers supplying firewood to state campgrounds have been able to segregate their wood into that from within the allowable distance and that from outside. DATCP has developed an approval process so that larger dealers that distribute over a wider area can have their wood approved for use on department properties using several treatments.

While this rule will require campers to obtain firewood near their campsite, this small expense will be dwarfed by savings to individuals and private business in its contribution to preventing or delaying the establishment of EAB and other invasive pests and diseases. Where EAB has been introduced, homeowners must pay hundreds of dollars to remove yard trees killed by the beetle as well as suffer property value decline due to loss of the trees. Communities must bear the cost of removal and replacement of killed ash trees along streets and in parks. Michigan communities have requested 6 million from Federal Emergency Management Agency to remove and replace street trees. Businesses that deal in nursery stock, logs and firewood

are also impacted by establishment of EAB as markets outside the infested area no longer want their products or require costly inspections to show the shipment is pest free.

10. **Effect on small business:** We expect that this rule will increase demand for firewood near state campgrounds and be an opportunity for many small firewood dealers. Property managers have reached out to local firewood dealers to have lists of where campers can buy allowable firewood outside of each park. This list is available at the main office or each park or by calling the park directly. The DATCP has posted a list of firewood dealers whose wood is certified to be taken onto any state property.

11. **Agency contact person:** Dr. Andrea Diss-Torrance, 608-264-9247, Andrea.DissTorrance@wisconsin.gov

12. **Place where comments are to be submitted and deadline for submission:** The deadline for submission is to be determined. Written comments may be submitted at the public hearings, by regular mail, fax or email to:

Dr. Andrea Diss-Torrance
Department of Natural Resources
Division of Forestry
PO Box 7921
Madison WI 53707
Fax: (608) 267-8576
dnrforestryrules@dnr.state.wi.us and include firewood in the subject line

Written comments may also be submitted to the Department using the Wisconsin Administrative Rules Internet Web site at <http://adminrules.wisconsin.gov>.

SECTION 1. NR 45.04 (1) (g) 1., 2. and 3. are amended and created to read:

NR 45.04(1)(g). No person may possess firewood that originates from:

1. ~~greater~~ Greater than 50 25 miles from the campground on that property where the to which the firewood will be used transported, or the property itself if there is no campground, or from outside
2. Outside the borders of the state.
3. Areas not containing the property where firewood is identified as a carrier of invasive terrestrial invertebrates and plant-disease causing microorganisms, which include the following:
 - a. A department infestation control designation under s. 26.30 (7).
 - b. Areas identified in a DATCP quarantine under s. 94.01, Stats.
 - c. Areas identified in a United States Department of Agriculture Animal and Plant Health Inspection Service quarantine declaration under 7 USC § 7714 or 7715.
 - d. Quarantine areas within the reservation of a federally recognized American Indian tribe put in place by that tribe.

~~Firewood from sources approved by the department of agriculture, trade and consumer protection is allowable. For the purposes of this paragraph, firewood includes limbs, branches, roots, unprocessed logs, lumber, slabs with bark, cut firewood and chips, intended for any use on the property. This paragraph does not apply to firewood from sources approved by DATCP or dimensional lumber that is debarked, kiln dried and smoothed, or artificial fireplace logs. Firewood includes all wood, processed or unprocessed, intended for use in a campfire. The department may seize and dispose of firewood possessed in violation of this paragraph.~~

~~**Note:** Consistent with preventing the spread of Emerald Ash Borer and other invasive forest pests and diseases and at the discretion of department staff on department property, the definition of “processed wood” does not include dimensional lumber that is dried, debarked, smoothed and solid wood. Processed wood referred to in the rule does include wood that is rough-hewn, with bark, not dried, pallets, slabs, or similarly minimally processed forest products which may not be brought onto state properties unless harvested within 50-25 miles of the area where it will be used and from within the state.~~

Note: a list of firewood sources approved by Wisconsin Department of Agriculture, Trade and Consumer Protection can be obtained by contacting Robert Dahl, WI DATCP.

SECTION 3. EFFECTIVE DATE. This rule shall take effect the first day of the month following publication in the Wisconsin administrative register as provided in s. 227.22(2)(intro), Stats.

SECTION 4. 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 _____
Matthew J Frank, Secretary

(SEAL)