

**ORDER OF THE STATE OF WISCONSIN
NATURAL RESOURCES BOARD
CREATING RULES**

The Wisconsin Natural Resources Board proposes an order to create NR 40.02 (7g), (7r), (25m) and (46m), 40.04 (3m) and 40.07 (8) relating to the identification, classification and control of invasive species.

IS-47-10

Analysis Prepared by Department of Natural Resources

Statutes interpreted: Section 23.22 (2) (a), 29.924 (5) and 66.0119, Stats.

Statutory authority: Sections 23.09 (2) (intro.), 23.091, 23.11 (1), 23.22 (2) (a) and (b) and (5m), 23.28 (3), 27.01 (2) (j), 29.039 (1) and 227.11(2) (a), Stats.

Explanation of agency authority: The principal authority for the department's invasive species rules is s. 23.22 (2) (a) and (b) 6., Stats., which requires the department to establish a statewide program to control invasive species in this state and directs the department to promulgate rules to identify, classify and control invasive species for purposes of the program, which may include procedures and requirements for issuing permits to control invasive species. In order to fulfill this broad duty, the department adopted ch. NR 40 to provide it with all of the tools that are required to control invasive species, wherever found in the state, including regulation of the possession, transportation, transfer and introduction of specific invasive species, general preventive measures designed to restrict pathways by which humans commonly spread or introduce invasive species, authority to enter property in order to inspect, survey and control invasive species, and authority to recover the state's costs when it must carry out necessary control measures because responsible parties do not comply with department orders to control invasives themselves.

Section 23.11 (1), Stats., delegates to the department such further powers as may be necessary or convenient to enable it to exercise the functions and perform the duties required of it by ch. 23, Stats., and by other provisions of law.

Invasive species have caused environmental and economic damage and threaten human health, and will continue doing so unless adequate control measures are adopted and implemented. The general legislative delegation to the department of all necessary or convenient powers set out in s. 23.11 (1), Stats., combined with the broad directive in s. 23.22 (2) (a) and (b) 6., Stats., to control invasive species in this state give the department sufficient power to adopt and revise as needed rules for the protection of public health, safety, welfare and the environment, but particularly for the promotion of public welfare, convenience and general prosperity. The department's exercise of legislatively delegated police powers, as embodied in its invasive species rules, has its basis in the inherent power and duty of government to protect and promote the life, comfort, safety and welfare of society. In addition to these rules, s. 23.22 (5m), Stats., authorizes the department to promulgate rules establishing procedures for conducting investigations and inspections necessary to carry out s. 23.22, Stats.

Section 23.09 (2) (intro), Stats., grants the department general authority to adopt rules for the protection, development and use of forests, fish and game, lakes, streams, plant life, flowers and other outdoor

resources in this state. Section 23.091, Stats., authorizes the department to acquire, develop, operate and maintain state recreation areas, to establish use zones within state recreation areas providing for the full range of recreational uses, including hunting and fishing, and to promulgate rules to control uses within zones and limit the number of persons using any zone. Section 23.11 (1), Stats., gives the department the authority to have and take the 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.

Section 23.28 (3), Stats., prohibits the department from allowing any use of a designated state natural area which is inconsistent with or injurious to its natural values, and authorizes the department to establish use zones, control uses within a zone and limit the number of persons using zones in designated state natural areas. Section 27.01 (2) (j), Stats., grants the department authority to promulgate rules necessary to govern the conduct of state park visitors, and for the protection of state park property, or the use of facilities, including the use of boats and other watercraft on lakes or rivers within the limits of a state park, and the use of roads, trails or bridle paths.

Section 29.039 (1), Stats., authorizes the department to develop conservation programs to ensure the perpetuation of nongame species, require harvest information and establish limitations relating to taking, possession, transportation, processing and sale or offer for sale, of nongame species. "Nongame species" is defined as any mammal, bird, fish, or other creature of a wild nature endowed with sensation and the power of voluntary motion that is living in the wild and that is not classified as a game fish, game animal, game bird or furbearing animal.

Section 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. The department considers the rules created by this Order to be necessary to effectuate the purposes of ss. 23.22 and s. 29.924 (5), Stats.

Related statute or rule: Related statutes or rules include but are not limited to the following provisions which, to varying degrees, may apply to the identification, classification, control or other regulation of species that are invasive, or to conduct that may result in the introduction or spread of invasive species:

Statutory section

Title [or subject]

- 15.347 (18) Invasive species council.
- 23.093 Carp control research.
- 23.235 Nuisance weeds.
- 23.24 Aquatic plants.
- 26.20 (4) [Railroad right-of-way annual weed removal]
- 26.30 Forest insects and diseases; department jurisdiction; procedure.
- 27.019 (7) (c) [County rural planning – highways - only native plantings allowed]
- 27.05 (5) and (7) [County authority to manage plants and control weeds in county waters, parks and county lands]
- 29.011 Title to wild animals.
- 29.047 Interstate transportation of game.
- 29.053 Specific open and closed seasons.
- 29.055 Wild animals; possession in closed season or in excess of bag limit.
- 29.057 Wild animals; possession in open season.
- 29.089 Hunting on land in state parks and state fish hatcheries.
- 29.091 Hunting or trapping in wildlife refuge.
- 29.192 Regulation of takings of certain wild animals.

- 29.301 General restrictions on hunting.
- 29.307 Hunting with aid of aircraft prohibited.
- 29.314 Shining animals.
- 29.327 Regulation of waterfowl blinds.
- 29.331 Trapping regulation.
- 29.334 Hunting and trapping; treatment of wild animals.
- 29.335 Feeding wild animals for nonhunting purposes.
- 29.337 Hunting and trapping by landowners and occupants.
- 29.354 Possession of game birds and animals.
- 29.407 Transportation of fish.
- 29.414 Erection of barriers to exclude rough fish.
- 29.417 Permit to take rough fish.
- 29.421 Removal of rough fish.
- 29.424 Control of detrimental fish.
- 29.509 Bait dealer license.
- 29.516 Fishing with nets and setlines.
- 29.601 Noxious substances.
- 29.604 Endangered and threatened species protected.
- 29.614 Scientific collector permit.
- 29.627 Domestic fur-bearing animal farms.
- 29.701 Propagation of fish; protected wild animals.
- 29.705 Propagation of fish; removal of fish.
- 29.733 Natural waters used in fish farms.
- 29.734 Barriers required for fish farms.
- 29.735 Importation of fish.
- 29.736 Stocking of fish.
- 29.737 Permit for private management.
- 29.738 Private fishing preserves.
- 29.741 Food in the wild for game birds.
- 29.875 Disposal of escaped deer or elk.
- 29.885 Removal of wild animals.
- 29.887 Wildlife control in urban communities.
- 29.924 Investigations; Searches.
- 29.927 Public nuisances.
- 29.931 Seizures.
- 29.934 Sale of confiscated game and objects.
- 30.07 Transportation of aquatic plants and animals; placement of objects in navigable waters.
- 30.1255 Report on control of aquatic nuisance species.
- 59.70 (17) and (18) [County funds, equipment, fees for pest and weed control, plant or animal diseases.]
- 66.0407 Noxious weeds. [local governments]
- 66.0517 Weed commissioner. [local governments]
- 66.0627 Special charges for current services. [charges for weed elimination]
- 84.07 (3) [DOT highway patrol officers to destroy noxious weeds on highways]
- 93.07 Department duties. [Dept. of Agriculture, Trade and Consumer Protection - pests]
- 94.01 Plant inspection and pest control authority.
- 94.02 Abatement of pests.
- 94.03 Shipment of pests and biological control agents; permits.
- 94.10 Nursery stock; inspection and licensing.
- 94.38 Agricultural and vegetable seeds; definitions.
- 94.41 Prohibitions. [Sale or distribution of noxious weed seed]
- 94.45 Powers and authority of the department.

- 94.46 Stop sale; penalties; enforcement.
- 94.69 Pesticides; rules.
- 94.76 Honeybee disease and pest control.
- 146.60 Notice of release of genetically engineered organisms into the environment.
- 169.04 Possession of live wild animals.
- 169.06 Introduction, stocking, and release of wild animals.
- 169.07 Exhibition of live wild animals.
- 169.08 Propagation of wild animals.
- 169.10 Sale and purchase of live wild animals.
- 169.11 Harmful wild animals.
- 169.36 Record-keeping and reporting requirements.
- 182.017 Transmission lines; privileges; damages. [utility weed control along transmission lines]
- 281.17 (2) [DNR to supervise chemical treatment of waters for the suppression of nuisance-producing organisms that are not regulated by the program established under s. 23.24 (2).]
- 237.10 Rapide Croche lock [Fox River lamprey barrier]

Plain language analysis: Chapter NR 40, Wis. Adm. Code, establishes a classification system for invasive species and regulates those in the prohibited and restricted categories. It also establishes preventive measures that when followed, will help minimize the spread of invasive species into or within Wisconsin. In a previous emergency rule, the department listed *Geomyces destructans* as a prohibited invasive fungus species. *Geomyces destructans* has been identified as the fungus associated with white-nose syndrome (WNS) in cave bats. Because the department has little if any control over the natural movements of bats, the main focus in WNS management is on limiting the anthropogenic spread of *G. destructans*.

This Order adds provisions to ss. NR 40.04 and 40.07 relating to early detection and prevention of the spread of WNS due to anthropogenic activities, as follows:

1. For purposes of early detection, with permission or pursuant to an inspection warrant, department staff may access caves and mines in order to monitor, survey, and inspect for the presence of *G. destructans*.
2. Equipment, gear, clothing and other objects may not be brought or placed into or near a cave or mine if they have been in or near a cave or mine located outside of Wisconsin.
3. Equipment, gear, clothing and other objects that have been in or near a cave or mine located in this state must be cleaned following department-approved protocols before they can be brought into another cave or mine in this state.
4. The cleaning process for all equipment, gear, clothing and other objects that have been in or near a cave or mine in Wisconsin must begin immediately upon exit following department-approved protocols.
5. All equipment, gear, clothing and other objects that will be or have come in contact with bats (including, but not limited to nets, traps, weighing tubes, bat bags, wing punches, rulers, clothing, gloves, electronic equipment and exclusion materials) and all individuals handling bats must be decontaminated prior to and immediately after contact.
6. Owners and operators of active mines and of commercial caves and mines must ensure that individuals entering or leaving their caves or mines comply with department-approved cleaning protocols.

7. Owners and operators of certain caves and mines must develop and implement a department-approved, site-specific plan setting out practices that they will follow for the prevention of the introduction and transmission of *G. destructans*.

The Order also adds key definitions and sets out authority for the department to grant written exemptions from the new prohibitions and cleaning requirements if the exemption will not significantly increase the risk that *G. destructans* would be introduced or transported to other locations. Conditional exemptions may be issued, and the conditions will have the force of law.

Summary of, and comparison with, existing or proposed federal regulations: None known. The US Fish and Wildlife Service has ordered the closure of federally-owned or controlled caves. It appears that this is being done via the federal government's proprietary authority as the owner or manager of federal lands where the caves or mines are located, rather than through any regulatory measures comparable to the proposed rules.

Comparison with rules in adjacent states: The department is not aware of any other states or provinces that have taken similar actions.

Summary of factual data and analytical methodologies: Bats affected with WNS were first observed in 2006 at a single cave near Albany, New York. WNS has since been found in 14 states and 2 Canadian provinces, spreading up to 800 miles in the last year. Mortality rates of affected colonies reach 100%. WNS has been linked to the death of over one-million bats since 2007 and threatens to cause the extinction of several bat species in the near future. According to a Consensus Statement issued at the WNS Emergency Science Strategy Meeting in May 2009, white-nose syndrome "... has caused the most precipitous decline of North American wildlife in recorded history." Last spring, the disease was detected within 225 miles of Wisconsin's southern border and 300 miles from the northern border. That means a WNS-infected cave is now located within the 280-mile dispersal range of Wisconsin little brown bats. Based on the disease's current location and known rate of spread, we anticipate the detection of WNS in Wisconsin as early as January, 2011.

Hibernating bats are susceptible to WNS. Those infected tend to show a white fungal growth on their face, arms, legs, wings, and/or tail caused by the newly isolated and named fungus, *Geomyces destructans*. Infected bats exhibit atypical behavior such as daytime activity during winter hibernation, which rapidly depletes stored energy reserves. Wing damage and emaciation are also common.

To date, nine species of cave bats are affected by WNS, including the federally endangered Indiana bat, which historically was found in Wisconsin. All Wisconsin cave bats, which include the little brown bat (*Myotis lucifugus*), northern long-eared bat (*Myotis septentrionalis*), eastern pipistrelle (*Perimyotis subflavus*), and big brown bat (*Eptesicus fuscus*), are among the species fatally affected by WNS. Consequently, Wisconsin's cave bat population as a whole is threatened by this devastating disease. The little brown bat is Wisconsin's most common bat species and because this species has seen the greatest mortality rate due to WNS, Wisconsin anticipates significant impacts to its cave bat populations when WNS begins to affect Wisconsin bats. Research published in the journal *Science* (August 2010) states "...we expect a 99% chance of regional extinction of little brown myotis within the next 16 years."

Research conducted at the United States Geological Survey (USGS) Wildlife Health Center has shown that *G. destructans* is transferred from bat to bat, and a multi-agency project demonstrated bats can develop white-nose syndrome (WNS) through infection directly from an affected cave environment, in the absence of infected bats.

There is also evidence of human transfer of *G. destructans* from site to site and/or bat via contaminated equipment, gear or clothing. There have been long-distance jumps in the spread of WNS, beyond the distance bats would likely transmit the disease. These “jump” sites have been frequently-visited caves, often with small bat populations. The U.S. Geological Survey, National Wildlife Health Center has detected *G. destructans* fungal spores in cave sediment, demonstrating persistence of the fungus in the absence of bats. The New York Department of Environmental Conservation, Wildlife Pathology Unit has isolated *G. destructans* fungal spores on equipment and clothing after exiting an affected cave.

Even in the face of incomplete information, general epidemiological principles should be used to inform the WNS investigation and response. All available evidence indicates that WNS is caused by an infectious agent and can therefore potentially be spread by all known modes of disease transmission, including direct contact, inhalation, ingestion, fomites (inanimate objects), and human or animal vectors. Wildlife diseases such as WNS spread rapidly when there is high prevalence of pathogen(s), efficient chains of transmission, abundant susceptible hosts, and/or environments that allow pathogen persistence without a host. Regardless of the infectious agent (fungus, bacterium, or virus), universal precautions should be implemented. Universal precautions are procedures and guidelines designed to reduce incidence of disease by both preventing infections and breaking chains of transmission.

These rules were developed with the assistance of the Bureau of Endangered Resources and Legal Services. Department of Justice opinion was also sought and confirmed the need to put the proposed actions into rule. The department has also recently met with stakeholders, including mine and commercial cave owners to discuss WNS and possible management options. All known cave and mine owners in Wisconsin were contacted this year as well to provide background information on WNS and cave management.

Analysis and supporting documents used to determine effect on small business or in preparation of economic impact report: None.

Effect on small business, including how the rule will be enforced: The rule is not expected to have a significant adverse effect on a substantial number of small businesses. Therefore, under s. 227.19 (3m), Stats., a final regulatory flexibility analysis is not required. The rule may have favorable effects on a number of businesses by preventing the introduction or limiting the spread of WNS, thereby preserving the agricultural, economic and environmental benefits associated with healthy bat populations.

There are approximately 120 known bat hibernacula in Wisconsin, and approximately 12 of these are public caves. In addition, less than 20 of the caves and mines in Wisconsin are routinely caved. Affected constituencies include commercial caves and mines, active underground mines, private cave and mine owners, recreational cavers, agriculture and forest industries, and conservation organizations. Concerns will likely include how the proposed rules will affect current activities. Many of these potential concerns may be addressed through cost-sharing, technical support, and education provided by the department. Examples include: cost-sharing for installation of bat-friendly gates or other physical barriers, cost-sharing for conservation actions, providing cave closure signage and cleaning protocols, and providing locations of caves that may be used for recreational caving activities (where bats are known to have been excluded). Agriculture industries, forest industries and conservation organizations would be negatively affected by not attempting to control or slow the spread of WNS.

The cost of cleaning equipment, gear, clothing and other objects will be minimal. The cost of caving gear typically ranges from \$125-\$750. Very few sites in Wisconsin require vertical climbing gear. The cost of commercially cleaning gear according to department protocols typically ranges from \$10 to \$12 per set of gear. The cost of signage at caves and mines would be \$0 because the department will provide the signs.

Under current ch. NR 40, the department may ask any person who owns, controls, or manages property where a prohibited species is present to control the prohibited species in accordance with a plan approved by the department. While a person who owns, controls, or manages property where a prohibited species is present is responsible for controlling the prohibited species that exists on the property, the department will seek funds to assist in the control of prohibited species.

The department will normally follow an informal, stepped enforcement process in order to obtain compliance with invasive species rules. This involves informal discussions between department staff and the individual, landowner or company, notifying the person of potential violations and providing guidance on how to comply with the rules. Notices of non-compliance may follow if necessary. If formal enforcement is necessary, ch. NR 40 will be enforced by department conservation wardens, county district attorneys, and circuit courts through the use of citations and civil or criminal complaints. Civil and criminal enforcement may also be carried out by department referral of violations to the Wisconsin Attorney General, with prosecution and abatement actions in the circuit courts. Criminal enforcement will be limited to intentional violations. Finally, violations of the permits issued under ch. NR 40 also may be enforced by administrative permit revocation proceedings.

Under s. 227.19 (3m), Stats., a final regulatory flexibility analysis is not required.

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SECTION 1. NR 40.02 (7g), (7r), (25m) and (46m) are created to read:

NR 40.02 (7g) “Cave” means any naturally occurring void, cavity, recess or system of interconnected passageways beneath the surface of the earth or in a bluff, cliff or ledge, including pits and sinkholes, but does not include a rock shelter.

(7r) “Commercial cave or mine” means a cave or mine that has more than 1,000 visitors per year and charges a fee.

(25m) “Mine” means any artificial excavation, shaft, underground passageway, slope, tunnel or working from which ore or mineral is or was extracted, but does not include an open pit mine. However, caves or mines may be located adjacent to open pit mines.

(46m) “Rock shelter” means an overhang or cave-like opening in a bluff, cliff or ledge that is shallow and does not provide an area of substantial daytime darkness.

SECTION 2. NR 40.04 (3m) is created to read:

NR 40.04 (3m) EARLY DETECTION MONITORING. Unless entry is otherwise authorized by law, as part of an invasive species early detection program, the department or its designee may enter property where a cave or mine may be located to monitor, survey or inspect for the presence of the

prohibited invasive fungus species *Geomyces destructans* (white-nose syndrome fungal pathogen) in the cave or mine, with permission of the person who owns, controls or manages the property, but if the person does not grant permission or cannot be located by the department after making reasonable effort, the department may seek an inspection warrant under s. 66.0119, Stats., from the appropriate circuit court authorizing entry. Data obtained by the department under this subsection shall be made available to the person who owns, controls or manages the property.

SECTION 3. NR 40.07 (8) is created to read:

NR 40.07 (8) WHITE-NOSE SYNDROME PREVENTION. (a) *Definition.* In this subsection “near a cave or mine” means within 100 feet of a cave or mine.

(b) *Entry with imported items prohibited.* Except as provided in par. (e), no person may bring or place any equipment, gear, clothing or other object of any kind in or near a cave or mine if the equipment, gear, clothing or other object has been in or near a cave or mine located outside of Wisconsin.

(c) *Requirements.* 1. Except as provided in subd. 5. and par. (e), no person may bring or place any equipment, gear, clothing or other object of any kind in or near a cave or mine if the equipment, gear, clothing or other object has been in or near a cave or mine located in this state unless the equipment, gear, clothing or other object has first been cleaned in accordance with par. (d).

2. Except as provided in subd. 5. and par. (e), any person removing any equipment, gear, clothing or other object of any kind from any cave or mine or from within 100 feet of any cave or mine or exiting any cave or mine or the area within 100 feet of any cave or mine with any equipment, gear, clothing or other object of any kind shall clean the equipment, gear, clothing and other objects in accordance with par. (d).

3. Except as provided in subd. 5. and par. (e), any person who caused or will cause contact to occur between a bat and an individual or object of any kind, including but not limited to a net, trap, weighting tube, bat bag, wing punch, ruler, clothing, glove, electronic equipment or exclusion material shall, prior to and immediately following the contact, clean the individual or object in accordance with par. (d).

4. Except as provided in subd. 5. and par. (e), any person who owns or operates an active mine or a commercial cave or mine shall ensure that each individual entering or exiting the person’s active mine or commercial cave or mine complies with par. (b) and subds. 1. to 3.

5. The requirements of subs. 1. to 4. do not apply to dedicated equipment, gear, clothing and other objects of any kind that are used exclusively in or near and stored exclusively in or near a single cave or mine.

(d) *Protocols.* Individuals, equipment, gear, clothing and other objects of any kind to which the requirement of par. (c) 1., 2., or 3. applies shall be cleaned in accordance with protocols approved by the department. Unless it determines that emergency conditions require otherwise, the department shall provide notice and opportunity for public comment at least 14 days before it materially changes an approved protocol.

Note: Detailed information about department-approved cleaning protocols may be obtained at <http://dnr.wi.gov/org/land/er/bats/> or by writing to Wisconsin Department of Natural Resources, Wisconsin Bat Monitoring Program, Bureau of Endangered Resources, P.O. Box 7921, Madison, WI 53707-7921.

(e) *Written exemption.* The department may exempt any person in writing from par. (b) or (c) if it determines that the exemption will not significantly increase the risk that *Geomyces destructans* (white-nose syndrome fungal pathogen) would be introduced or transported to other locations. The department may set conditions in any written exemption granted under this paragraph. Any person who receives a conditional exemption from the department under this paragraph shall comply with the conditions of the exemption.

(f) *Site-specific prevention plan.* Except as provided in subd. 5., any person who owns or operates a cave or mine shall develop a written plan for each of the person's caves and mines to prevent the introduction and transmission of *Geomyces destructans* (white-nose syndrome fungal pathogen).

1. The prevention plan shall include a description of practices that will be installed or implemented by the owner or operator to prevent the introduction or transmission of *Geomyces destructans* via human transmission. The plan may include practices such as screening visitors, cleaning equipment, gear, clothing and other objects before they are brought into the cave or mine or upon their removal, the use of dedicated equipment, gear, clothing and other objects, and modification of the cave or mine environment to make it unsuitable for establishment and transmission of *Geomyces destructans*.

2. The prevention plan shall be submitted by the owner or operator to the department by the effective date of this subsection . . . [legislative reference bureau inserts date] for its review and approval. The department may set conditions for the approval of any plan required under this paragraph and shall include any exemption granted under par. (e) to the owner or operator of a cave or mine in a plan approval issued under this paragraph. In setting conditions for the approval of any plan, the department shall consider the site-specific risk of *Geomyces destructans* introduction and transmission

along with the feasibility and reasonableness of alternative practices for the prevention of *Geomyces destructans* transmission or introduction.

3. The owner or operator shall implement the plan as approved by the department and shall maintain as appropriate all practices specified in the plan.

4. The owner or operator shall maintain a copy of the approved prevention plan at the cave or mine covered by the plan or an alternate location approved by the department and shall make the copy available for inspection upon request by the department at any reasonable time.

5. This paragraph does not apply to any of the following:

a. A cave or mine that the department has determined in writing lacks the environmental conditions, including temperature and humidity, suitable for the introduction or transmission of *Geomyces destructans*.

b. A cave or mine where the owner or operator restricts human access through the use of department-supplied and maintained signage or bat-friendly barriers or gates.

c. A cave or mine where the primary reason for human presence in the cave or mine relates to the storage or processing of a food or beverage intended for human consumption.

SECTION 4. EFFECTIVE DATE. The rule contained herein shall take effect on the first day of the month following publication in the Wisconsin administrative register, as provided in s. 227.22 (2) (intro.), Stats.

SECTION 5. BOARD ADOPTION. The foregoing rule was approved and adopted by the State of Wisconsin Natural Resources Board on December 8, 2010.

Dated at Madison, Wisconsin _____.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

By _____
Matthew J. Frank, Secretary

(SEAL)