

301.50 PINE SHOOT BEETLE

Federal Domestic Quarantine

A. Pest. Pine Shoot Beetle, *Tomicus piniperda*.

B. Quarantined Area.

Connecticut: The entire state.

Illinois: The entire counties of Boone, Bureau, Carroll, Champaign, Christian, Clark, Coles, Cook, Cumberland, De Kalb, De Witt, Douglas, Du Page, Edgar, Effingham, Fayette, Ford, Grundy, Henry, Iroquois, JoDaviess, Kane, Kankakee, Kendall, Knox, Lake, La Salle, Lee, Livingston, Macon, Marshall, Mason, McHenry, McLean, Mercer, Moultrie, Ogle, Peoria, Piatt, Putnam, Rock Island, Shelby, Stark, Stephenson, Tazewell, Vermilion, Whiteside, Will, Winnebago and Woodford.

Indiana: The entire state.

Iowa: The entire state.

Maine: The entire counties of Androscoggin, Cumberland, Hancock, Franklin, Kennebec, Knox, Lincoln, Oxford, Penobscot, Piscataquis, Sagadahoc, Somerset, Waldo, and York.

Maryland: The entire state.

Massachusetts: The entire state.

Michigan: The entire state.

Minnesota: The entire state

New Hampshire: The entire state.

New Jersey: The entire state.

New York: The entire counties of Albany Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Stueben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming and Yates.

Ohio: The entire state.

Pennsylvania: The entire state.

Rhode Island: The entire state.

Vermont: The entire state.

Virginia: The entire counties of Clarke and Loudoun.

West Virginia: The entire state.

Wisconsin: The entire state.

C. Regulated Articles.

1. Pine products (*Pinus* spp.) as follows: Pine bark products (pieces of pine bark including bark chips, bark nuggets, bark mulch and bark compost); Christmas trees; logs with bark attached; lumber with bark attached; nursery stock; raw [see Appendix B] pine materials for pine wreaths and garlands; and stumps.

has 2. Any article, product, or means of conveyance not covered by paragraph (1) of this section, that presents a risk of spread of the pine shoot

beetle once an inspector notified the person in possession that the article is regulated.

D. Restrictions.

1. Regulated articles may be moved interstate from any quarantined area only in accordance with the following conditions:

- a. With a certificate or limited permit; or,
- b. Without a certificate or limited permit, if the point of origin of the regulated article is indicated on the waybill and:

1. The regulated article originates outside any quarantined area and is moved through the quarantined area without stopping (except for drop-off loads, refueling, or traffic conditions, such as traffic lights or stop signs) during October, November, or December, or when ambient air temperature is below 10°C (50°F); or

2. The regulated article originates outside any quarantined area and, during the period of January through September, is moved through the quarantined area at a temperature higher than 10°C (50°F), if the article is shipped in an enclosed vehicle or completely covered (such as with plastic, canvas, or other closely woven cloth) so as to prevent access by the pine shoot beetle.

- c. With a limited permit if the regulated article is moved:

1. By the United States Department of Agriculture for experimental or scientific purposes;

2. Under conditions, specified on the permit, which have been found to be adequate to prevent the spread of the pine shoot beetle; and;

3. With a tag or label bearing the number of the permit issued for the regulated article, attached to the outside of the container of the regulated article or attached to the regulated article itself, if the regulated article is not in a container.

E. Certification.

1. A certificate will be issued by an inspector for the interstate movement of a regulated article if the inspector determines that:

- a. The regulated article has been treated under the direction of an inspector, or, if pine bark products, produced according to the requirements of the management method (see I.4a-c); or,

- b. Based on inspection of the premises of origin, if the regulated article is a greenhouse-grown pine (such as bonsai), that the greenhouse is free from the pine shoot beetle and is screened to prevent entry of the pine shoot beetle; or,

- c. Based on inspection of the regulated article, if the regulated article is a pine seedling or a pine transplant and is no greater than 36 inches high with a bole diameter at soil level of 1 inch or less, that it is free of the pine shoot beetle; or

- d. Based on inspection by an inspector (branch tip-by-branch tip) of pine nursery stock, that it is free from the pine shoot beetle; or

- e. If the regulated article is a pine log with bark attached or pine lumber with bark attached or a pine stump, that its source tree has been felled during the period of July 1 through October 31, or if the regulated article is pine bark products produced from a tree felled and debarked during the period of July 1 and October 31; and

2.a. The regulated article will be moved through the quarantined area during October, November, or December, or when the ambient air temperature is below 10°C (50°F); or

b. The regulated article will be moved through the quarantined area during the period of January through September, if the ambient air temperature is 10°C (50°F); or higher, in an enclosed vehicle or completely enclosed by a covering adequate to prevent access by the pine shoot beetle; or

c. The pine log with bark attached, pine lumber with bark attached, or pine stump, from a tree felled during the period of July 1 through October 31, or the pine bark products produced from a tree felled and debarked during the period of July 1 through October 31, will be shipped interstate from the quarantined area during the period of July 1 through October 31 of the same year in which the source tree was felled; and

3. The regulated article is to be moved in compliance with any additional emergency conditions imposed to prevent the spread of the pine shoot beetle; and

4. The regulated article is eligible for unrestricted movement under all other Federal domestic plant quarantines and regulations applicable to the regulated articles.

F. Limited Permit.

A limited permit will be issued by an inspector if:

1. a. The regulated article is to be moved interstate to a specified destination for specified handling, processing, or utilization (the destination and other conditions to be listed in the limited permit), and this interstate movement will not result in the spread of the pine shoot beetle. If the regulated article is part of a shipment of pine Christmas trees, the inspector will make a pest-risk determination on the basis of an inspection; or

b. The regulated article is to be moved interstate from a quarantined area to a quarantined area and will transit any non-quarantined area in an enclosed vehicle or completely enclosed by a covering adequate to prevent access by the pine shoot beetle; and

2. The regulated article is to be moved in compliance with any additional emergency conditions imposed to prevent the spread of the pine shoot beetle; and

3. The regulated article is eligible for interstate movement under all other Federal domestic plant quarantines and regulations applicable to the regulated article.

G. Inspection Requirements.

The number of pine Christmas trees randomly selected for inspection is determined by the size and type of shipment, in accordance with the following tables. If a shipment mixes painted and natural trees, the inspection procedure for painted trees will apply.

Table 1: Painted (Color-Enhanced) Pine Christmas Trees*

No. of Trees in Shipment	No. of Trees to Sample
1-72	All
73-100	73
101-200	96
201-300	106
301-400	111
401-500	115
501-600	117
601-700	119
701-800	120
801-900	121
901-1,000	122
1,001-2,000	126
2,001-3,000	127
3,001-5,000	128
5,001-10,000	129
10,001 or more	130

Table 2: Natural (Unpainted) Christmas Trees*

No. of Trees in Shipment	No. of Trees to Sample
1-57	All
58-100	58
101-200	69
201-300	75
301-400	77
401-500	79
501-600	80
601-700	81
701-1,000	82
1,001-3,000	84
3,001-10,000	85
10,001 or more	86

* If a pine shoot beetle is detected in any one of the trees being sampled, the entire shipment must be rejected. If no pine shoot beetle is detected in any of the trees sampled, the shipment will be allowed to move with a limited permit. The limited permit must state, "All trees that remain unsold as of December 25 must be destroyed by burning or chipping, or must be fumigated, prior to January 1."

H. Compliance Agreements.

Certificates and limited permits for use for interstate movement of regulated articles may be issued by an inspector or person operating under a compliance agreement. A person operating under a compliance agreement may issue a certificate for the interstate movement of a regulated article if an inspector has determined that the regulated article is otherwise eligible

for a certificate in accordance with paragraph (e) of this section. A person operating under a compliance agreement may issue a limited permit for interstate movement of a regulated article when an inspector has determined that the regulated article is eligible for a limited permit in accordance with paragraph (F) of this section.

I. Treatments and Management Method.

1. Fumigation is authorized for use on pine logs with bark attached, pine lumber with bark attached, pine bark nuggets (including bark chips), pine stumps, as follows: logs, lumber and stumps may be treated with methyl bromide at normal atmospheric pressure with 48 g/m³ (3 lb/1000 ft³) for 16 hours at 21°C (70°F) or above, or 80 g/m³ (5 lb/1000 ft³) for 16 hours at 4.5° - 20.5°C (40° - 69 °F).
2. Cold treatment is authorized for cut pine Christmas trees, pine nursery stock, and raw pine materials for pine wreaths and garlands as follows: the regulated articles must be loaded into a refrigeration unit and held at -20.6°C (-5°F) for one hour; the period before the refrigeration unit reaches the specified temperature is not part of the treatment period.
3. Any one of these fumigation treatments is authorized for use on cut pine Christmas trees, pine wreaths and garlands, and raw pine materials for pine wreaths and garlands. Cut pine Christmas trees, pine wreaths and garlands, and raw pine materials for pine wreaths and garlands may be treated with methyl bromide at normal atmospheric pressure as follows:

Temperature	Dosage: pounds per 1000 ft ³	Exposure Hours	Concentration readings: ounces per 1000			
			2.0 hr.	3.0 hr.	3.5 hr.	4.0 hr.
40-49 °F	4.0	4.0	57	—	—	48
50-59 °F	4.0	3.5	57	—	48	—
50-59 °F	3.5	4.0	50	—	—	42
60 °F+	4.0	3.0	57	48	—	—
60 °F+	3.0	4.0	43	—	—	36

4. Management method for pine bark products. The following procedures are authorized for use with pine bark products derived from white pine (*Pinus strobus*), Scotch pine (*P. sylvestris*), red pine (*P. resinosa*), and jack pine (*P. banksiana*) trees. Pine bark products will only be considered to have been produced in accordance with this management method if the following procedures are followed:
 - a. For pine bark products produced from trees felled during the period November 1 through March 31:
 - (i) The trees must be harvested at a height of 4 inches or more above the duff line; and
 - (ii) The trees must have been mechanically debarked with a ring debarker or a Rosser head debarker; and
 - (iii) For Scotch pine, red pine, and jack pine, the bark must either be ground into pieces of 1 inch or less in diameter or composted in accordance with the procedure in paragraph (4)(c) of this section.
 - b. For pine bark products produced from trees felled

during the period April 1 through June 30:

- (i) The trees must have been mechanically debarked with a ring debarker or a Rosser head debarker; and
 - (ii) The bark must either be ground into pieces of 1 inch or less in size or composted in accordance with the procedure in paragraph (4)(c) of this section.
- c. Composting for pine bark products for the management method in this paragraph (4) must be performed as follows:
- (i) The pile of pine bark to be composted must be at least 200 cubic yards in size; and
 - (ii) The compost pile must remain undisturbed until the interior temperature of the pile reaches 120 °F (49 °C) and remains at or over that temperature for 4 consecutive days; and
 - (iii) After the 4-day period is completed, the outer layer of the compost pile must be removed to a depth of 3 feet; and
 - (iv) A second compost pile must be started using the cover material previously removed as a core. Core material must be removed from the first pile and used to cover the second compost pile to a depth of 3 feet; and
 - (v) The second compost pile must remain undisturbed until the interior temperature of the pile reaches 120 °F (49 °C) and remains at or over that temperature for 4 consecutive days. After this 4-day period, the composting procedure is complete.
 - (vi) Previously composted material generated using this procedure may be used as cover material for subsequent compost piles. A compost pile that uses previously composted material must remain undisturbed until the interior temperature of the pile reaches 120 °F (49 °C) and remains at or over that temperature for 4 consecutive days. After this 4-day period, the composting procedure is complete.

**ADDITIONAL INFESTED AREAS
APPENDIX A**

01-12-16

The following areas are considered to be infested with pine shoot beetle. Shipments of regulated articles from these areas should be inspected for this pest.

Missouri: The entire counties of Adair, Clark and **Scotland**
Illinois: The entire state.

**DEFINITION OF “RAW” PINE MATERIALS
APPENDIX B**

8-24-00

Any cut, fresh, untreated, unassembled pine materials that have not been manufactured into wreaths or garlands.