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Jack Pine Budworm

Michigan State University Extension Service

Gary A. Simmons, Entomology Dept., MSU; Donald D. Grant, William J. Mahalak, Daniel G. Mosher, Ronald L. Murray, Michigan DNR; Louis F. Wilson, USDA Forest Service

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Jack Pine Budworm

How To Evaluate Damage



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IF your trees look like this, or better than this...



...and have these characteristics:

- * heaviest defoliation on tallest trees
- * defoliation mostly on tree tops and branch tips
- * little defoliation on longest branches
- * stands appear mostly green with some grayish tint

THEN:

...there is no immediate cause for alarm, but if the outbreak continues, the stand may be subject to further damage.

If the trees are low risk (see center column), monitor stand yearly for injury. If the trees are moderate to high risk (see center column), monitor yearly, expect further injury, and consider a harvest cut.

From September to May, compare conditions that you see in your stand with these photos and take proper forest management action.

IF your trees don't look like either of these categories (have "in-between" damage), CONTACT a professional forester or pest specialist for assistance (see back panel).

JACK PINE BUDWORM DAMAGE

Outbreaks of Jack Pine Budworm, a moth larvae, occur approximately every 10 years and last 2 to 4 years. To control budworm losses, keep stands out of high-risk situations.

MODERATE TO HIGH-RISK stands of trees are over 50 years old, are widely spaced (have some large openings) and have varied heights.

LOW RISK stands of trees are under 50 years old, are closely spaced (have no large openings), and have nearly the same heights.

The long-term approach to controlling Jack Pine Budworm losses is long-term forest management.

- Evaluate all trees yearly after larvae feeding is completed and when browned, partially-consumed needles have been blown or washed off the trees (from September to May).
- Chemical spraying is usually inadvisable because it is ineffective and costly.

Prepared by

Gary A. Simmons, Entomology Dept., MSU
Donald D. Grant, Michigan DNR
William J. Mahalak, Michigan DNR
Daniel G. Mosher, Michigan DNR
Ronald L. Murray, Michigan DNR
Louis F. Wilson, USDA Forest Service

Michigan Cooperative Forest
Pest Management Program
c/o Department of Entomology
Michigan State University
East Lansing, MI 48824



IF your trees look like this, or worse than this...



...and have these characteristics:

- * heavy defoliation on most trees in the stand (though occasional tree is unharmed)
- * defoliation throughout the tree
- * defoliation on long and short branches
- * some trees in the stand dying or dead
- * stands appear grayish-brown with some green remaining

THEN:

...cut and harvest trees as soon as possible, even if there is no commercial value.

Management action is needed immediately with trees killed or nearly killed by budworm because trees usually are no longer merchantable within 18-20 months after death and are also a fire risk.



Jack Pine is prone to explosive forest fires. Budworm-injured jackpine stands can be even more hazardous.

During periods safe from fire, salvage forest materials and clean up infested areas. Allowing the damaged material to remain will allow the forest fire problem to continue and delay effective use of the land.

Use extreme caution

- when using equipment such as power saws because exhaust sparks can start fires
- when burning slash materials

REMEMBER THAT BURNING REQUIRES A PERMIT. Contact a DNR field office for guidance and permits.

Need help? Field assistance is available from the local offices of:

- Michigan Department of Natural Resources, Forest Management Division
- Industrial Forestry Corporations
- Consulting Foresters

Additional services and advice on forest management and timber harvesting are available from:

- County Agents, Cooperative Extension Service, Michigan State University
- USDA Forest Service
- Soil Conservation Districts

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