

May 27, 2002

Unauthorized Log Shipments Can Bring Danger To Alberta's Forests

Edmonton... Shipments of unauthorized logs and rough sawn timber originating from outside Alberta may be carrying the highly destructive mountain pine beetle, endangering the sustainability of Alberta's forests. As a result, all Forest Areas are on full alert for illegal log movement into and through Alberta.

Alberta Sustainable Resource Development is working closely with Alberta Transportation's Inspection Services Branch, at weigh scales to inspect all logs and forest products imported into the province. The inspections will check for the proper permits and the logs will be inspected for signs of the mountain pine beetle.

Travellers are also being cautioned to be extremely careful and to avoid transporting firewood (especially with bark), as it can carry the highly destructive mountain pine beetle.

If a shipment is contaminated with the mountain pine beetle, the Minister of Sustainable Resource Development has the authority under the *Forest and Prairie Protection Act* to take any necessary steps to destroy the beetles. All unauthorized log shipments turned back.

"Because of the mountain pine beetle epidemic in British Columbia we are seeing this as a serious threat to our forests. We will make every effort to stop the transportation of this highly destructive pest, before it affects the economic and environmental sustainability of our forests," said Sustainable Resource Development Minister Mike Cardinal. "Alberta accepts logs and timber products that have the required permits and have undergone the appropriate treatments for pest management."

This action was undertaken after Transportation Inspectors at a weigh scale found an unauthorized shipment of logs. After a further inspection by a forest health officer, it was determined that the logs were infested with mountain pine beetle adults and larvae. The logs were quickly processed, destroying the beetles.

Alberta will continue to work with the B.C. and Saskatchewan governments to co-ordinate pine log movement restrictions in an effort to save our forests.

Editors note that a backgrounder and questions and answers on the mountain pine beetle is attached.

Additional information on the mountain pine beetle is available on the Alberta Sustainable Resource Development website at www3.gov.ab.ca/srd/forests/health/i_mpinebeetle.html.

For further information, contact:

Robert Storrier
Communications
Alberta Sustainable Resource Development
Edmonton (780) 427-8636

Dial 310-0000 for toll-free connection.

Backgrounder

Alberta does not allow pine logs and products with bark attached to enter into the province. Late June is a start to a critical period as the adult mountain pine beetle (which is black and approximately 5 to 7 mm in length) emerges from a small round hole in the bark and searches for a host tree to lay their eggs. In late July and early August the larvae hatch and begin to feed on the living tissue under the bark of the tree.

The current outbreak of the mountain pine beetle in B.C. is affecting more than 5.7 million hectares of forest and it is estimated that the beetle has killed more than \$4 billion of timber.

Sustainable Resource Development is monitoring the mountain pine beetle along the Alberta – B.C border. Plans are in place to deal with the beetle infestation that has appeared in Banff National Park.

Alberta has experienced two previous outbreaks of the mountain pine beetle.

The first outbreak occurred in Alberta in the 1940s when 4,000 hectares of Banff National Park were damaged. Close to 27,000 trees were cut and burned to halt the spread of the beetle.

In the 1970s the second outbreak occurred. From 1977 to 1986, 3.48 million trees and a total volume of 1.15 m³ were estimated to be lost in the province.

Mountain Pine Beetle Questions and Answers

1. What does the mountain pine beetle look like?

The mountain pine beetle (*Dendroctonus ponderosae* Hopkins) is a member of the bark beetle family, and is the most damaging insect pest of pine trees in western North America. The adults are black and between 5-7mm long, while the larvae look like small maggots under the bark.

2. What damage can they cause?

Mountain pine beetles attack and kill mature pine trees. In mid-summer, the adults bore into suitable host trees and lay eggs in the bark. The larvae hatch and feed within the bark of the tree. Larvae develop into pupae, then to adult, and fly to the next host tree. The lifecycle normally takes one year to complete. The following spring, the needles of the attacked tree fade to yellow and then to reddish-brown.

The adult beetles introduce bluestain fungi into the tree when they attack. The fungi, along with insect feeding, kill the tree by cutting off paths for nutrients and water. Each female beetle lays 60-80 eggs, enabling populations to grow very quickly. There are often enough insects emerging from one tree to attack 15 additional trees.

If the beetles are not managed while their populations are low, severe damage to pine stands can result. Outbreaks can destroy thousands of hectares of mature pine forest in a single year. In co-operation with the forest industry, Alberta Sustainable Resource Development (ASRD) monitors beetle populations in various areas and attempts to control infestations before they reach epidemic levels.

3. Are mountain pine beetles common to Alberta? How do they get here?

Alberta is outside of their normal range. Since 1986, there have been no sustained beetle populations in the province. Alberta's winter is often too severe for the beetles to survive, and unless conditions are favourable, the beetles cannot sustain themselves in our climate.

4. How far can they fly?

Most species of bark beetles are good flyers. Mountain pine beetles can potentially disperse over great distances if the winds are in their favour. During the last outbreak, the beetle was discovered in many prairie towns hundreds of kilometers from the infested pine forests in the foothills.

5. How is the beetle normally controlled?

Healthy trees defend against beetle invasion by producing resin. This is effective when only a few beetles attack a tree, but if many insects attack, or if the tree is stressed, resin flow is reduced.

Temperature is also an important factor in determining beetle survival. Mountain pine beetle larvae must develop to a certain stage to tolerate cold winter weather.

6. How will an infestation be controlled?

Since the beetles spend most of their life in the bark, control will focus on treating individual trees. Infested trees are identified by aerial survey, then confirmed by ground checks.

The only effective way of managing beetles is to remove the infested trees before the beetles emerge and fly. Removal of trees can involve falling and burning, falling and peeling the bark or milling the wood.

If an infested tree cannot be treated before the flight, chemical attractants called pheromones are used. The pheromones lure most of the newly emerged beetles to a small area until the affected trees are treated.

7. Which areas in Alberta are currently threatened by the mountain pine beetle?

Due to large infestations in Banff National Park, the forest areas of the Bow, Crowsnest and Clearwater are currently of the greatest concern. ASRD is also closely monitoring the Willmore Wilderness Park.

8. Who will manage an outbreak?

With staff trained in forest health, ASRD will lead any control program on provincial Crown land, including wilderness areas and provincial parks. If an outbreak occurs, management will be a combined effort of ASRD, forest companies, and perhaps the federal government.