

File: 18818-60/DFB

March 10, 2016

To Whom it May Concern:

The purpose of this letter is to provide information on the best management practices for decked Douglas-fir beetle infested trees in log yards. Hot milling is the best practice for infested Douglas-fir. If infested wood cannot be processed by March 31st the correct use of Lindgren funnel traps is extremely important in order to prevent emerging beetles from infesting neighbouring areas.

Lindgren funnel traps are a specialized flight intercept trap that capitalizes on the behaviour of beetles to drop toward the ground after hitting a solid object in flight. Beetles hitting any of the funnels arranged in a vertical array are deflected and fall into the next lowest funnel until they fall into the collector cup attached below the bottom-most funnel.

Below are guidelines for the proper set-up and deployment of Lindgren funnel traps:

- A minimum of 6, and preferably 12 funnels should be used on each trap. Traps mimic tree stems in order to attract Douglas-fir beetles. Traps should be hung so that the cups are at least a few feet off the ground.
- Funnel traps should be deployed and baited in log-yards no later than April 1st.
- Individual traps must be baited to maximize catch of beetles emerging from decked wood. Field trials indicate that enhanced Douglas-fir baits, available through Synergy Semiochemical Corp. catch significantly more beetles than “standard” lures.
- There are two different collector cup options with Lindgren funnel traps:
 - A dry-cup collector (screen at the bottom of cup) – it is recommended that an insect fumigant (i.e., plastic strip impregnated with dichlorvos) be suspended into the cup. Collected insects must be frozen for 24 – 48 hours to ensure a complete kill.
 - A wet-cup collection (screen near the top of cup) – the cup should be filled about half full with a 50 percent solution of propylene glycol (not ethylene glycol), and the fluid replaced at weekly or bi-weekly intervals. Proper disposal of the fluid is required to prevent pollution of drinking water, ground water, or ground surfaces.
- To minimize negative impacts on surrounding properties (i.e., “spill-over” attack) funnel traps should be placed in the interior of log yard. Traps should be placed 25 m apart and cover the area that includes all decked wood infested with Douglas-fir beetle.

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- Ensure funnel traps are located at least 100 m away from live standing Douglas-fir. If standing live Douglas-fir is within 100-200 m of funnel traps treat standing trees with the anti-aggregation pheromone MCH:
 - Staple bubble caps to the north side of all live standing Douglas-fir. In a single location a minimum of 16 bubble caps should be placed in order to be effective (if there are fewer trees in single location place more than one bubble cap per tree).
- Funnel traps require regular maintenance. Traps should be checked, primarily to empty collector cups, on the following schedule or until all infested wood has been processed:
 - a) once per week from April 1 to May 15;
 - b) twice per week from May 16 to July 15; and
 - c) once per week from July 16 to August 31. (Note: if traps are not catching beetles during second beetle flight (July 16 - August 31) trap maintenance schedule can be reduced to 10-14 days).

If you have questions, please call email me at jodi.axelson@gov.bc.ca.

Sincerely,

A handwritten signature in black ink, appearing to read "Jodi Axelson", followed by a long horizontal flourish.

Jodi Axelson, Ph.D., P.Ag.
Forest Entomologist
Cariboo Region

Attachments

cc: Harold Stolar, Acting District Manager, Cariboo-Chilcotin Natural Resource District