Forest Management Before and With the Spruce Budworm

Forest Resource Association
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Thanks to the SBW Forest Management Task Team Members

Tom Charles
Mike Dann
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And to Bob Wagner for his positive leadership, patience and persistence

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Words of Wisdom

“The time to manage SBW damage is between outbreaks, not during an outbreak”
Robert Seymour 2009

“Silviculture may not budworm proof the forest, but it can make the forest both easier and less expensive to protect, and more worth protecting”
Lloyd Irland 1988
Forest Management Task Team Objectives

1. Provide management recommendations for foresters and landowners
2. Develop strategies for managing through life with the SBW
3. Raise awareness for foresters without history or experience with the SBW
4. Coordinate with other task teams to assure alignment of the message
If it’s a balsam fir, cut it
What is 
the real 
problem?
Key Task Team Recommendations

1. Reduce high-risk stands before the outbreak begins by categorizing stands (levels of risk) based on the potential impacts of spruce budworm

2. Shift timber harvest to higher level risk stands
Level 1 (highest risk): Intensively managed stands (PCT or commercially thinned with high balsam fir composition)

✓ Harvest merchantable stands
✓ Protect (spray) unmerchantable stands
Level 2: Natural stands with overstory of predominately balsam fir and white spruce (50% of trees greater than 60 years old) with advanced regeneration

✓ Harvest merchantable stands as soon as possible
Level 3: Natural stands with overstory of mature balsam fir and white spruce with at least 50% hardwoods, red spruce, cedar, hemlock or white pine

✓ Harvest when advanced balsam fir regeneration present

✓ Postpone when advanced balsam fir regeneration absent
Level 4: Natural stands of 30% to 50% balsam fir with a strong component of red/or black spruce

✓ Harvest when advanced balsam fir regeneration present
✓ Postpone harvest when advanced balsam fir regeneration absent
Level 5: Natural stands of less than 30% balsam fir or white spruce that are free to grow and have no advanced understory

✓ Shelterwood harvest focused on removal of high risk trees
✓ Protect if high component of well formed crowns
Level 6 (lowest risk): Stands of hardwood, pine and cedar with little or no balsam fir or white spruce in the overstory or understory

✓ Postpone harvest
Takeaway messages

1. Map the location of high risk stands
2. Shift harvesting towards higher risk stands (level 1 to 4)
3. Avoid harvesting in lower risk stands (level 5 and 6)
4. It’s impossible to eradicate balsam fir but you can certainly decrease the risk
5. Be prepared to adapt (life as a forester)
Takeaway messages

6. Support monitoring efforts and understand spruce budworm population dynamics
7. Remember that good silviculture is always good silviculture (leave the best)
8. Avoid PCT when SBW outbreak is imminent
9. Start now . . . manage in anticipation of the spruce budworm
10. Mortality will occur
Takeaway messages

11. Do your part to push for low grade pulpwood markets

12. There is no silver bullet. It’s a crucial balance between replanning (adapt), salvage (harvest the high risk trees) and foliage protection (spray)

13. Last and most important . . . get rid of as much balsam fir as fast as possible
Thank you

Dave Struble will take your questions