Bugs & Diseases

August 2005

info note

Beetle battle in Alberta parks

Christine Kominek

A significant new area of mountain pine beetle (MPB) infestation has been discovered in the Willmore Wilderness Park and the adjacent Kakwa Wildland Park. Aerial surveying at the end of June located MPB-attacked lodgepole pine trees in the Muddywater and Sheep Creek Drainages, located in the northeastern portion of the Willmore Wilderness. Based on recent detailed aerial and ground surveys of the Willmore and Kakwa parks, the total number of MPB-attacked trees is estimated at approximately 5,000.

A cut and burn control program began on July 11, 2005. As of August 2, 4,713 MPB-attacked trees have been cut and burned. The objective is to burn all attacked trees before the beetles emerge and fly to infest new host trees. Based on beetle development in the area, the flight period is estimated to begin in early August. Cut and burn operations are scheduled to be completed by August 7.

Pheromone baits have been placed on trees in select locations to attract flying beetles to contain the infestation. Pheromone-baited trees that are attacked will later be cut and burned.

As of August 2, current resources dedicated to the project include: 9 helicopters, 130 firefighters, a Level II Incident Command Team, and one Forest Health Specialist.

For information on mountain pine beetle, control program updates and maps, visit the forest health website at: http://www3.gov.ab.ca/srd/forests/health/mpb.html

Tansy infests riverbanks of the Northeast Region

Marty Robillard & Gennie Alejos

One goal of Sustainable Resource Development's 2005 invasive plant program in the northeast is to survey Common tansy (*Tanacetum vulgare)* infestations along the many river systems within the region. Tansy infestations have been noted at many locations within the region. However, no attempt has previously been made to determine the extent of riparian infestations.

Alberta
SUSTAINABLE RESOURCE DEVELOPMENT

In mid-July, approximately 35 km of the Athabasca River north of Fort McMurray was surveyed by boat. Tansy was observed in patches the entire length of the survey area, primarily on the west bank of the river, including areas lush with natural vegetation. Tansy was also present on most of the islands. Another portion of the Athabasca River further south (Poacher's Landing to Pelican Rapids) is scheduled to be surveyed in mid-August.

To date, portions of the Pembina, Calling and Rock Island rivers have been surveyed on foot. In all locations, various sized tansy patches have been found.

It is hypothesized that a significant portion of the tansy now found along the rivers is a result of seeds migrating from upstream infestations. Other methods of seed introduction and spread likely include human activities such as road construction and off-highway vehicle recreation.

Common tansy (*Tanacetum vulgare)*

There is no question that tansy occupies a large amount of riparian habitat within the northeast region. This leads to a few questions:

- What is the overall ecological impact of these tansy infestations?
- If the infestation is as widespread as we believe it to be, is there a way of dealing with it?
- If control is mandated, what is the most cost-effective and environmentally sound method?

Various counties (including the County of Athabasca) have recognized the tansy problem and are implementing targeted control programs specific to this weed.

Conducting these initial surveys along the watercourses in the northeast region has helped to identify the scope of the problem, and will be used to plan future management activities. ◘

New MPB Management Coordinator

Hideji Ono

Daniel Lux, Regional Forest Health Officer, was recently chosen as the successful candidate for Sustainable Resource Development's new MPB Management Coordinator position. Dan has accepted this challenging position to further develop and coordinate the province's MPB program.

There is no doubt that Dan's knowledge, experience and professionalism will be a valuable contribution to the management of this destructive forest pest. Congratulations, Dan! ◘

Sawflies Beware

Sunil Ranasinghe & Tom Hutchison

Ed Kettela, a Canadian Forest Service Research Scientist, carried out a field trial in Alberta to control the yellowheaded spruce sawfly by aerially spraying Spinosad® (Entrust 80W Naturalyte). This insecticide is biologically derived from the fermentation of a naturally occurring soil organism. The project

was carried out in collaboration with Suncor at Fort McMurray and the Forest Health Section of SRD.

Three different doses of Spinosad® were sprayed using a rotary-winged aircraft at one of Suncor's reclamation sites planted with white spruce. Ed's crew, who came from New Brunswick for the trial, completed the pre- and post spray sampling to find the efficacy of the product in controlling the sawflies. Preliminary data indicate good sawfly control. ◘

Partnering to prevent the spread of MPB into Alberta

Hideji Ono

Under the direction of the Alberta – British Columbia Memorandum of Agreement to control mountain pine beetle (MPB) infestations along the provinces shared border, both agencies are establishing a special beetle management zone.

British Columbia Ministry of Forests is allocating over $10 million to control MPB in the British Columbia zone this fall and winter to help prevent the spread of MPB into Alberta. Sustainable Resource Development is committed to surveying the Alberta zone and controlling 100% of all detected infestations.

A detailed work plan will be developed by the end of October. ◘

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Bugs & Diseases informs PLFD, Industry and other forestry-related personnel about current forest health issues. Articles and ideas are welcome! Submission deadline is the 15th of the month before publication.

Junior Forest Wardens meet the bugs of the boreal

Marty Robillard

On July 11th and 12th, the Northeast Region forest health staff conducted two "Bugs of the Boreal" presentations to campers at their Junior Forest Warden National Camp. For one week in July, this campout transformed the abandoned airstrip near Narrow Lake (approximately 30 km southwest of Athabasca) into a beehive of activity.

Each "Bugs of the Boreal" session focused on the diversity of insect life found in the boreal forest.

The first part of each presentation introduced various insect species and the damage some of these insects cause. Using numerous hands-on examples, both the Junior Forest Wardens (JFW) and their camp leaders gained an appreciation and a different perspective on what's happening in the forest.

For the second part of each session the group walked through the bush, finding not only real insects but also pointing out numerous examples of where insects had been. Some of the things found on these tours included leaf miner activity, gall aphids, spittle bugs, wood borers, and of course mosquitoes.

JFW finds leaf miner evidence on an aspen leaf.

One humorous moment occurred when the forest health staff was showing a spruce budworm pheromone trap to the group. They explained that a trap placed in a heavily infested area might catch thousands of moths, all of which had to be counted. At that moment, one young boy's eyes got really big and he exclaimed, "Boy, I sure wish I had your job!"

After each session, educational activity books were provided to all participants to take home with them. Educational packages, including weed, insect and disease posters and booklets, were also provided to each of the 50 JFW clubs attending the national campout.

There was no doubt all who attended had fun learning about the "Bugs of the Boreal". ◘

Get to know your Forest Health Officer

Tom Hutchison & Mike Undershultz

We at the Bugs & Diseases newsletter thought it would be a good idea for you to get to know Sustainable Resource Development's Forest Health Officers (FHO) through a series of interviews. This interview represents the first in this series.

The FHO for SRD's Northeast Region is Tom Hutchison. Tom assumed this role in July 2000 after moving to Athabasca from McBride, British Columbia. Tom brought with him a substantial amount of experience and education related to forest health. Tom graduated from the University of Northern British Columbia (UNBC) in 1997 with a B.Sc. in Natural Resource Management, Forestry. During the time Tom was attending UNBC he worked for two summers as a Forest Health Assistant in the Invermere Forest District. Upon graduating from UNBC Tom worked as a forestry contractor and performed a wide variety of tasks, including survey and control operations for mountain pine beetle in the Robson Valley.

Mike Undershultz: Hello Tom - I though we'd start by getting to know more about you. Tell me when you were born and where.

Tom: That's kind of personal isn't it? I don't know if I want to broadcast my age, but I'll give you a hint: it was the same year as Ty Cobb died and Barbie found Ken. As to where I was born, that would be Cranbrook, British Columbia. I grew up in Invermere and that's where I finished high school.

Mike: Speaking of high school, did the other kids have any sort of nickname for you?

Tom: Pretty well everyone called me Hutch. Which is kind of boring considering my sisters and my brother were all called the same thing. The one exception was Melanie Hascarl - who for some reason called me Spike.

Mike: Were you always interested in forest health or was there something else you wanted to do when you grew up?

Tom: I wasn't always interested in forest health. When I was young I wanted to be a hockey player. One year at hockey school Dunc Wilson (who was playing for the Pittsburgh Penguins at the time) told me there was a place for me in the NHL. All I had to do was work on my skating, passing, shooting and stick handling. I have managed to maintain that general lack of ability right up to now.

Forest Health Officer, Tom Hutchison

Mike: Really, aside from hockey do you have any other hobbies or interests?

Tom: Well I like sports in general, watching and playing. I like to fish but I don't get out very often. Over the last year or so I've taken up archery and I really enjoy that.

Mike: Do you have a favourite forest health pest?

Tom: Hmmm… I would have to say many of the *Dendroctonus* species of bark beetles are the ones I find the most interesting.

Mike: What do you like about them?

Tom: Aside from their incredible potential to cause damage at landscape levels, the adaptations and associations they have evolved to help them be successful at what they do constantly amaze me. You know, things like the symbiotic relationship they have with stain fungi to help them overcome a tree's defences; that they create their own antifreeze to help themselves over-winter; and their use of aggregation and anti-aggregation pheromones. It's all pretty interesting, I think.

Mike: Have you had any bad forest health related experiences?

Tom: Sure, when I was doing forest health contract work in the Robson Valley. I don't know how many of this newsletter's readers have been to the Robson Valley but it has a lot of steep, wet, icy conditions. In my last year there I slipped on a log and hurt my back, I slipped on an icy slope and broke my wrist, I slipped on a steep hill and tore my rotator cuff, and my knees were constantly sore from climbing up and down hills.

Mike: Ouch… that sounds pretty painful. Anyhow, I think we'll end on that note. Thanks for letting us get to know you a little better.

Tom: Thanks, Mike. ◘

Black Days in July

Sung to the tune of Gordon Lightfoot's
"Black Day in July"

Tom Hutchison

Black days in July
Black days in July
The pines they are a fading
And the beetles soon will fly

So there's crews up in the Willmore
And they'll fall and then they'll burn
All the trees that are chlorotic
And the ones that soon will turn

Black days in July
Black days in July
The pines they are a fading
And the beetles soon will fly

There's beetles in the Kakwa
And the Sheep and the Jackpine
And the crews will keep on falling
And we hope it will be fine

Black days in July
Black days in July

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