

Genome research may help kill beetle

Prescribed burns 'tried and true' control strategy

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Prescribed burns in Alberta forests is one tried-and-true control strategy for the mountain pine beetle, but Genome Alberta hopes to add its two cents worth to the toolkit by deciphering the relationship between the tree, the beetle and the blue stain fungi it leaves behind.

Genome Alberta and its partners have embarked on a project that will examine the interaction between the tree, the beetle and the fungus — which does as much, if not more damage to the tree than the beetle itself, the organization said.

The genome for the fungus has not been sequenced, and the joint Genome Alberta-B.C. team is at the forefront of this research.

Having a complete picture of the relationship between the three species will enable researchers to predict mountain pine beetle growth, spread and behaviour so that industry and policy-makers can develop stronger forest management practices, Genome Alberta said.

An estimated 1.5 million trees have been infected by the beetle in the province so far. When last estimated, the insect threatened \$23 billion worth of timber from the working forest, according to Sustainable Resource Development.

Alberta has six million hectares of pine forests, and 4.5 million hectares of that is in the working forest. The majority of the remaining 1.5 million hectares is in Kananaskis Country.

The Alberta government has spent nearly \$200 million in the last three years to combat the pest.

Parker Hogan, spokesman for the Alberta Forest Products Association, said a huge number of research projects are underway related to the mountain pine beetle.

Any information gleaned from new research would be helpful, but in this case it can't replace the current control measures being used in Alberta, he said.

This includes single tree cut and burn treatment in parkland sites, block or patch harvesting, and prescribed burns.

"At this point in time, dealing with the incidents that we're dealing with, we need to stay with the tried and true because there is such little room for error," Hogan said.

Given the beetle is endemic in Alberta's alpine forests, the work might be helpful as a longer-term strategy to look at how to manage and ensure the integrity of the forests, he said.

Duncan MacDonnell, public affairs officer with the Sustainable Resource and Development, said the department does support and fund research but its priority is with the situation as it exists today. "Everything else is nice to look at, and when it comes to fruition it's another tool in the toolbox, but for the moment, SRD's priority is what's happening in the forest today," he said.