Northwest Territories Report - 2010
Mike Gravel
Forest Management Division
Government of Northwest Territories

The Government of the Northwest Territories' Department of Environment and Natural Resources (ENR) delivers forest health monitoring across the NWT. Given that the territory is greater than 100 million hectares, only areas identified as high risk are surveyed (major rivers and water ways) (Fig. 1). Overall, 2010 was a slow year with respect to insect infestation, but several species are on the rise.

Figure 1. Approximate flight lines for aerial forest health surveys conducted in 2010, the area flown is greater than 5,000 kilometres.

Spruce budworm (*Choristoneura fumiferana)*
Spruce budworm is the most serious forest insect pest in the NWT; Spruce budworm populations crashed following 2002 and have remained at low numbers in the years since. The total area affected by spruce budworm in 2010 was approximately 84,380 hectares (ha), a 25% increase from 2009.

Small populations of spruce budworm have remained in the Slave River area and a new area has been detected along the north arm of Great Slave Lake (Fig. 2). The majority of NWT infestations however are occurring in the Sahtu Region (Norman Wells). A recent find of spruce budworm along the Arctic Red River is the farthest west we have seen the insect cause damage, and it has spread north of the Arctic Circle along the Mackenzie River (Fig. 3).

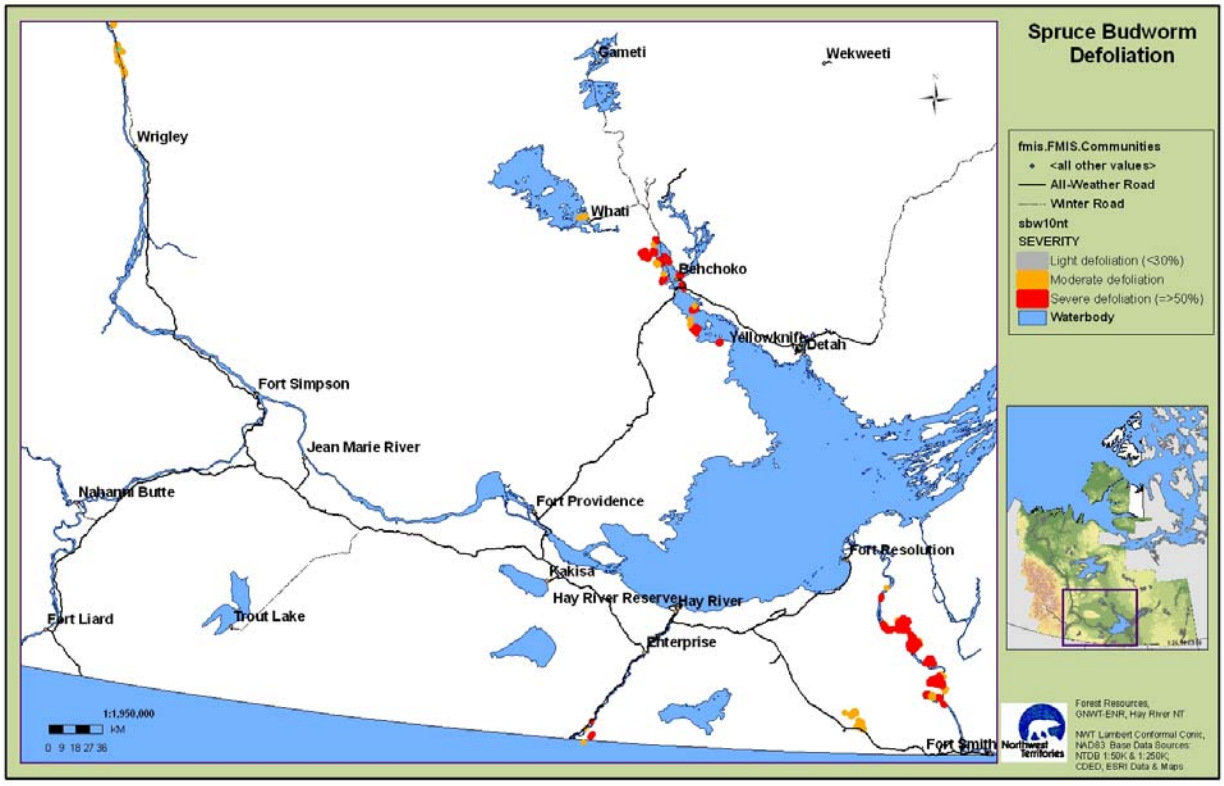

Figure 2. Spruce Budworm defoliation along the Slave River and north arm of Great Slave Lake.

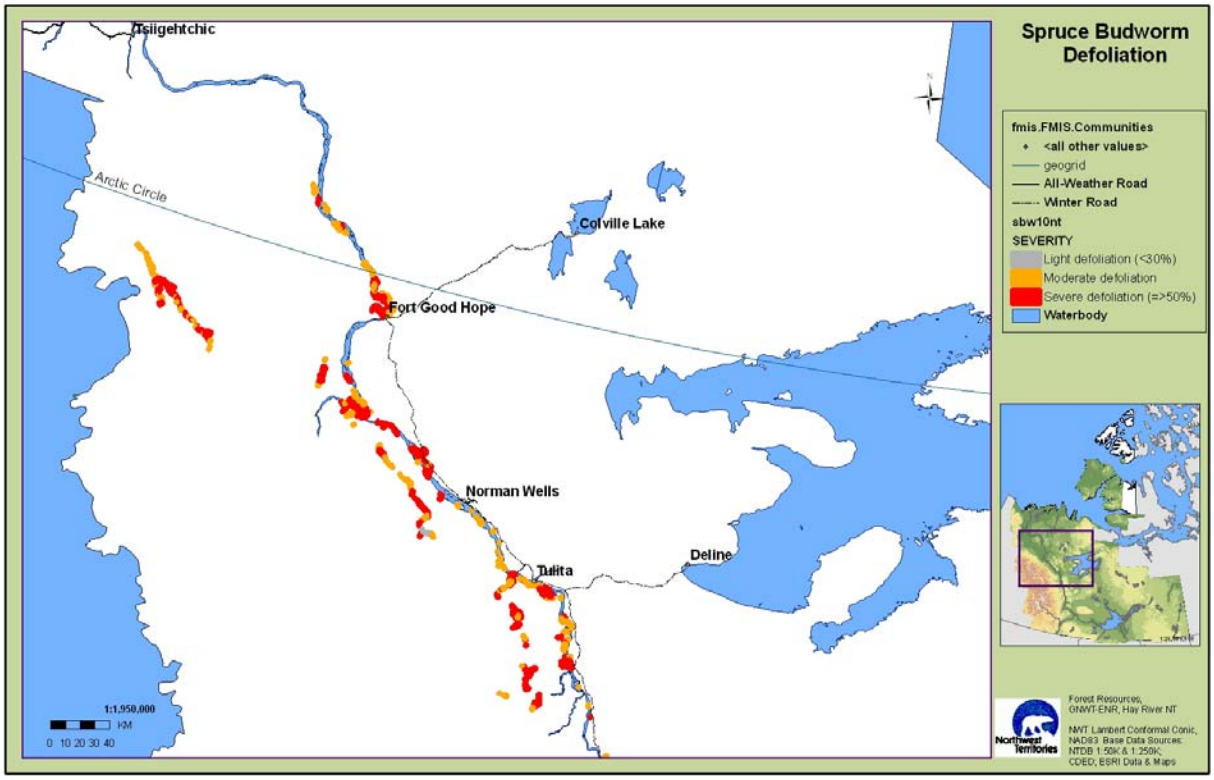

Figure 3. Spruce Budworm defoliation along the Mackenzie River and Arctic Red River (western most defoliation). Note the area above the Arctic Circle.

Aspen Serpentine Leafminer (*Phyllocnistis populiella)*
Aspen Serpentine Leafminer is common in the NWT's forest, but current infestations are very high and are spread across southern NWT. In many cases, monitoring this insect at this time is more about where the Aspen Serpentine Leafminer is not found rather than where it is found, it is that widespread in aspen forests. There was considerable severe aspen defoliation caused by Aspen Serpentine Leafminer across the southern NWT (Fig. 4) affecting 292,446 ha.

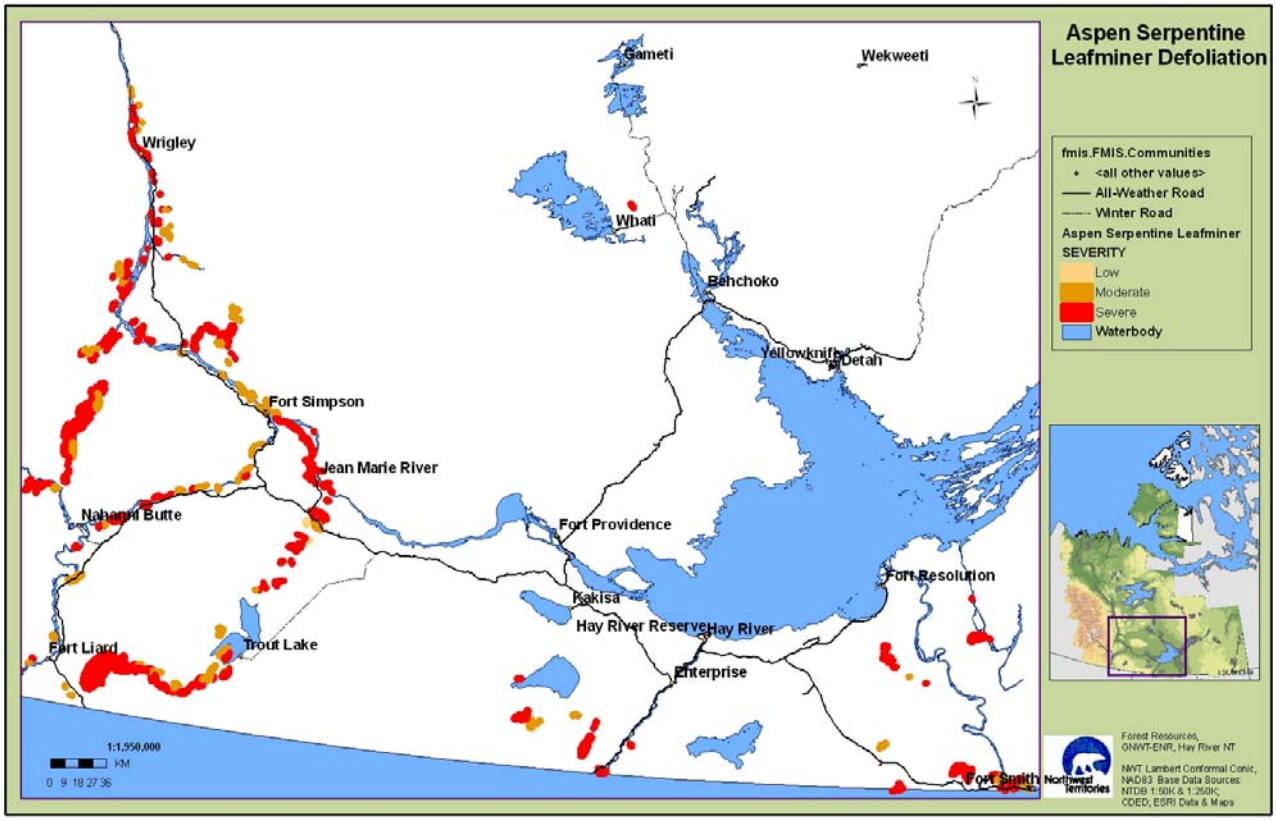

Figure 4. Severe defoliation in aspen caused by Aspen Serpentine Leafminer.

Willow Leaf Blotch Miner *(Micrurapteryx salicifoliella)*
The Willow Leaf Blotch Miner was widely noticeable along the highways in southern NWT. The Willow Leaf Blotch Miner was seen as far north as Wrigley.

Mountain Pine Beetle (*Dendroctonus ponderosae)*
No incidents or signs of Mountain Pine Beetle have been detected in the NWT.