Northwest Territories Forest Health Report - 2011

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. Only areas identified as high risk are surveyed (major rivers and water ways). In 2011, over 5,000 kilometres were surveyed (Fig. 1).

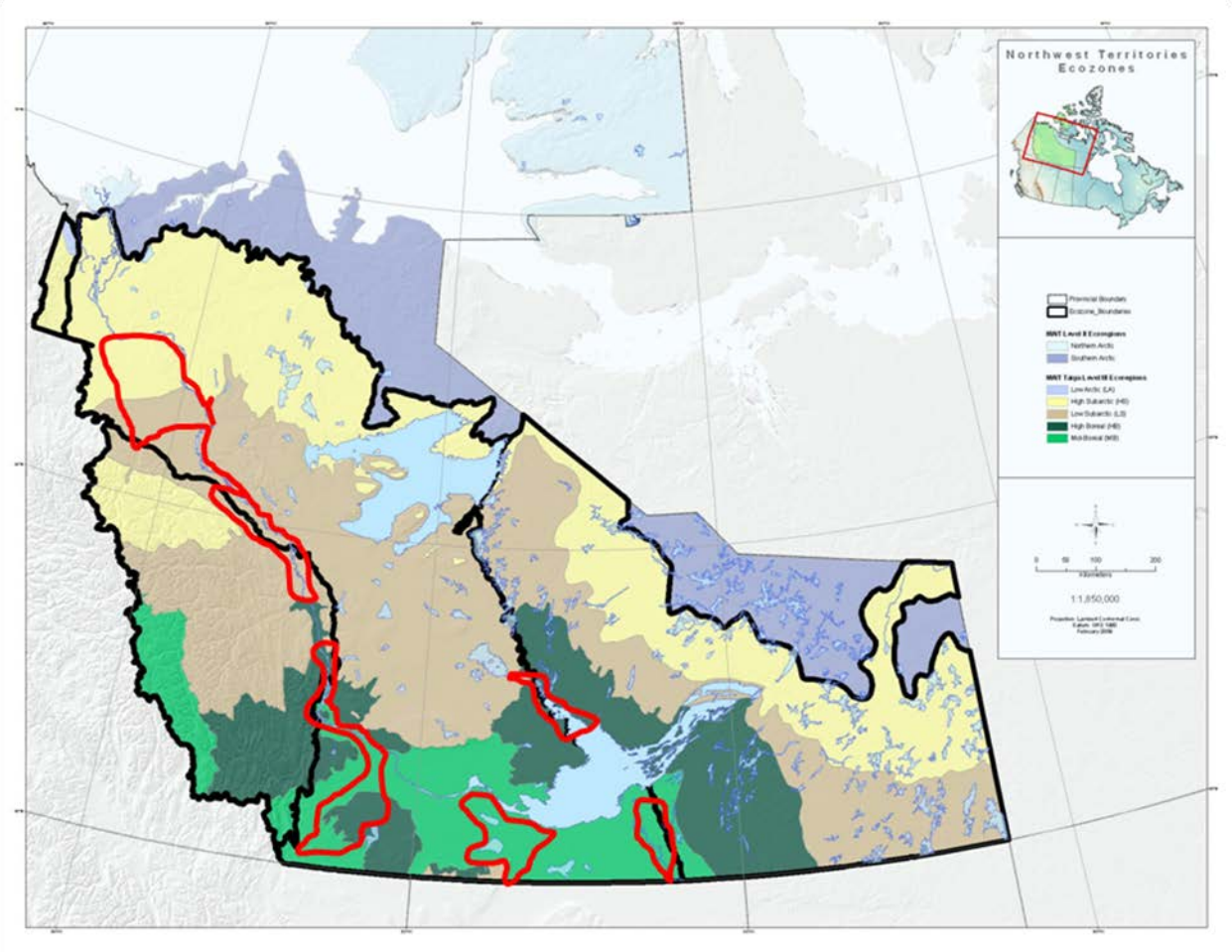

Figure 1. Approximate flight lines for aerial forest health surveys conducted in 2011, the area flown is greater than 5,000 kilometres.

Overall, 2011 was another slow year with respect to serious insect infestation. A cold snap in early summer appears to have had a dramatic effect on many of the insects. The area affected was much lower in 2011 and the severity of the infestations was much lower as well. While over 100,000 hectares of forests were affected by various pests or abiotic factors, no serious problems were observed.

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 2011 was almost half of what we saw in 2010 with approximately 41,328 hectares (ha) affected.

The majority of NWT infestations are occurring in the Sahtu Region. Small populations of spruce budworm have remained in the Slave River area and a new area has been detected in the far north in the Ramparts River area near Fort Good Hope (Fig. 2).

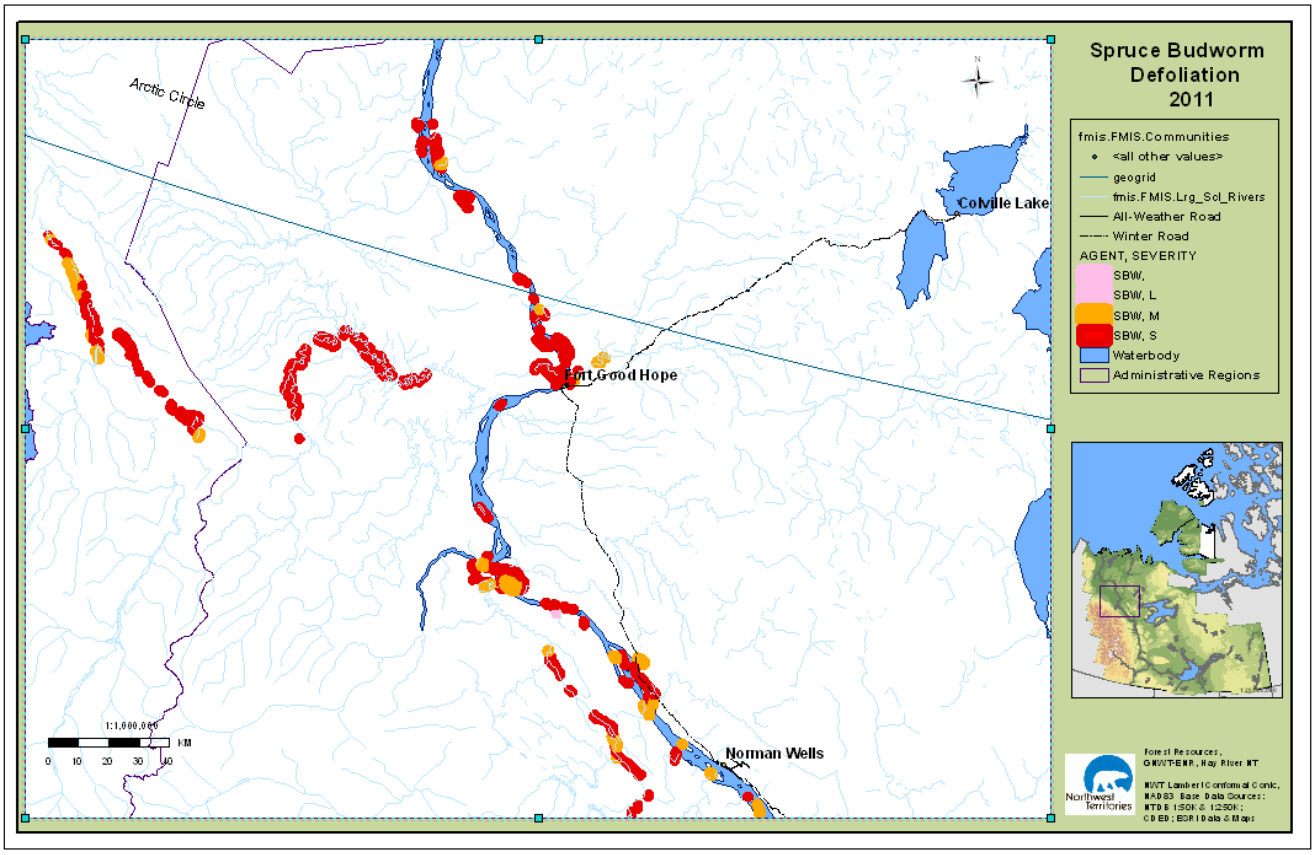

Figure 2. Spruce Budworm in northern NWT. An new area along the Ramparts River was found in 2011 (between Fort Good Hope and Arctic Red River (western most defoliation). An area of spruce budworm also persisted north of the Arctic Circle.

Aspen Serpentine Leafminer (*Phyllocnistis populiella)*
Aspen Serpentine Leafminer has been very prevalent in recent years; however, in 2011 Aspen Serpentine Leafminer appears to have dropped considerably. The area of defoliation dropped nearly 75% from 2010. No areas surveyed showed severe defoliation, all defoliation was moderate or low. The majority of defoliation was in the Dehcho Region with just over 40,000 hectares affected (Fig. 3). Another 6,000 hectares was defoliated in the Cameron Hills area.

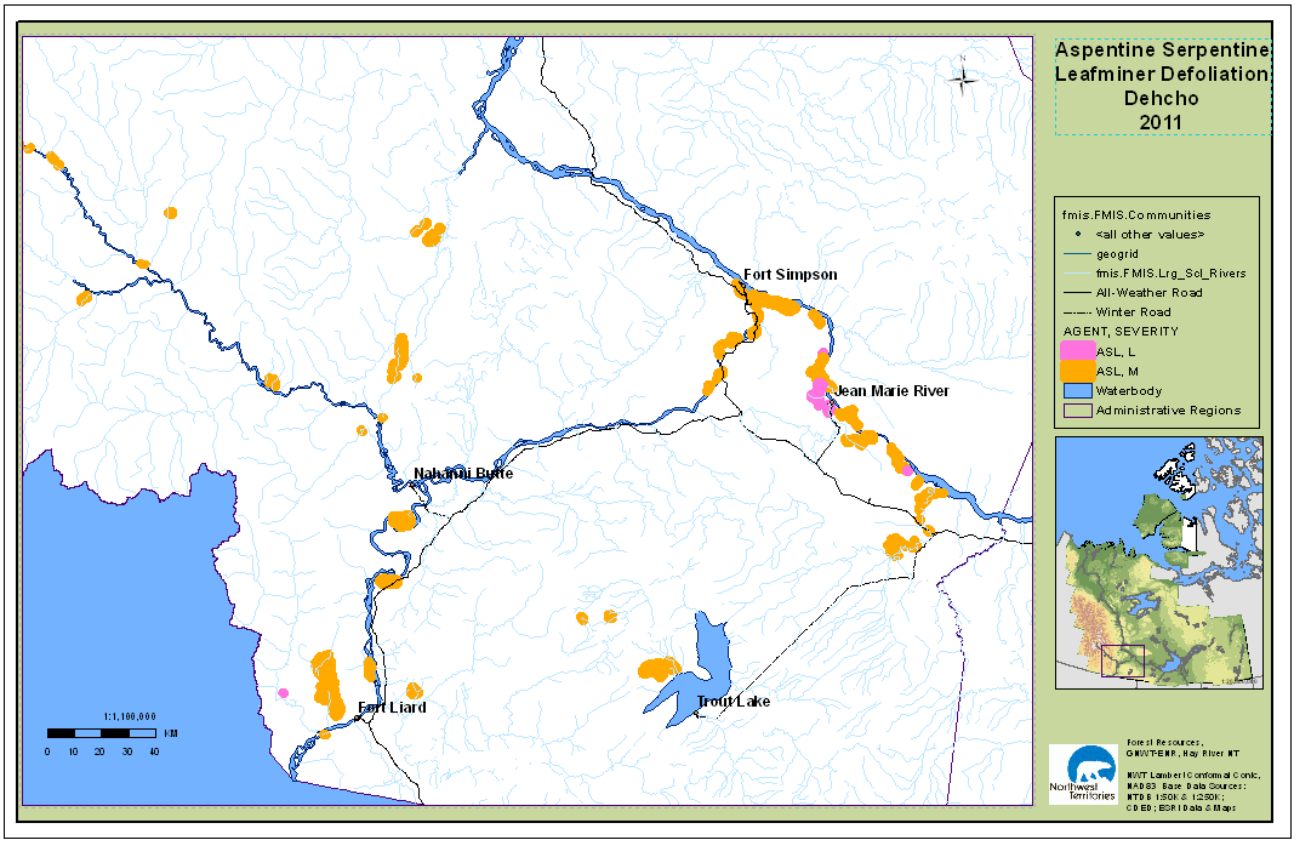

Figure 3. Defoliation in Aspen caused by Aspen Serpentine Leafminer in the Dehcho Region.

Willow Leafminer *(Micrurapteryx salicifoliella)*
The Willow Leafminer was widely noticeable along the highways in southern NWT. The Willow Leafminer was seen from Fort Smith all the way north to Tsiigehtchic. Like other infestations in 2011, the willow Leafminer did not appear to be as severe as in 2011.

Mountain Pine Beetle (*Dendroctonus ponderosae)*
No incidents or signs of Mountain Pine Beetle have been detected in the NWT; however, Alberta has positive findings only 50 kilometres south of the NWT border, near Bistcho Lake.

All other insects seem to be at natural levels and are not of significant concern.