

Northwest Territories Report 2012

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While 2012 was not an extra-ordinary year for most forest health agents, one prominent event occurred that has potential long term implications. On September 18, 2012 mountain pine beetle was officially found in the Northwest Territories (NWT).

This year's aerial surveys were carried out between July 8 -18, 2012 with nearly 4,000 kilometers travelled. Some areas in the southern NWT were not surveyed due to smoke visibility issues. Mountain pine beetle pheromone traps were set in early July and retrieved in mid-September.

Overall 272,000 hectares of the NWT were mapped as having spruce budworm, aspen serpentine leafminer or willow leaf blotch miner (Fig. 1). The North was predominantly affected by spruce budworm. The Southwest portion of the NWT (Dehcho Region) was predominantly affected by aspen serpentine leafminer, while the Southeast portion of the NWT (South Slave Region) was predominantly affected by willow leaf blotch miner. Mountain pine beetle was discovered in the southeast section of the Dehcho Region.

Mountain Pine Beetle

Mountain pine beetle pheromone baits have been deployed in the NWT since 2009; however, the sites used were mostly based on convenient access along highway routes and no beetles had been discovered. In 2011 Alberta discovered mountain pine beetle 50 kilometers south of the NWT border near the B.C. and Alberta junction. Alberta offered to assist the NWT in surveying the border area in 2012.

Three areas in the NWT, near the NWT / Alberta/ BC border, had pheromone baits deployed in the summer of 2012 and all three areas had mountain pine beetle in the fall. Each site had various stages of development from adults to well-developed larvae.

The NWT will look to expand its surveying area in 2013 to determine the extent to which the beetle has spread across southern NWT. Research needs and management options will be discussed further to identify the mountain pine beetle management needs into the future.

Spruce Budworm

Spruce budworm has remained at relatively low levels since 2004. In 2012, just over 63,000 hectares was attacked; the majority of area had severe defoliation (39,000 hectares) with another 22,000 hectares of moderate defoliation.

The majority of spruce budworm defoliation occurred in the Sahtu Region (from 64°30'N to 66°30'N). A new area of defoliation was discovered in the Dehcho Region in the Ebbitt Hills. Ongoing defoliation in the North Slave Region and South Slave Region changed little.

Aspen Serpentine Leafminer

Aspen serpentine leafminer has been persisting across the north for a few years. In 2012 however, more area had moderate defoliation than severe. This may be a sign that this insect is starting to lose steam. In total over 167,000 hectares was attacked by aspen serpentine leafminer, nearly 84,000 hectares of which was moderately defoliated and 75,000 was severely defoliated.

Willow Leaf Blotch Miner

Willow leaf blotch miner is another prevalent insect found from the southern NWT to the far north (Inuvik Region). Nearly 42,000 hectares of willow leaf blotch miner was mapped in 2012, the majority of which occurred in the South Slave Region. There was almost a 50/50 split between severe and moderate defoliation. As you move north the intensity of attack decreases and the areas affected are small isolated patches.

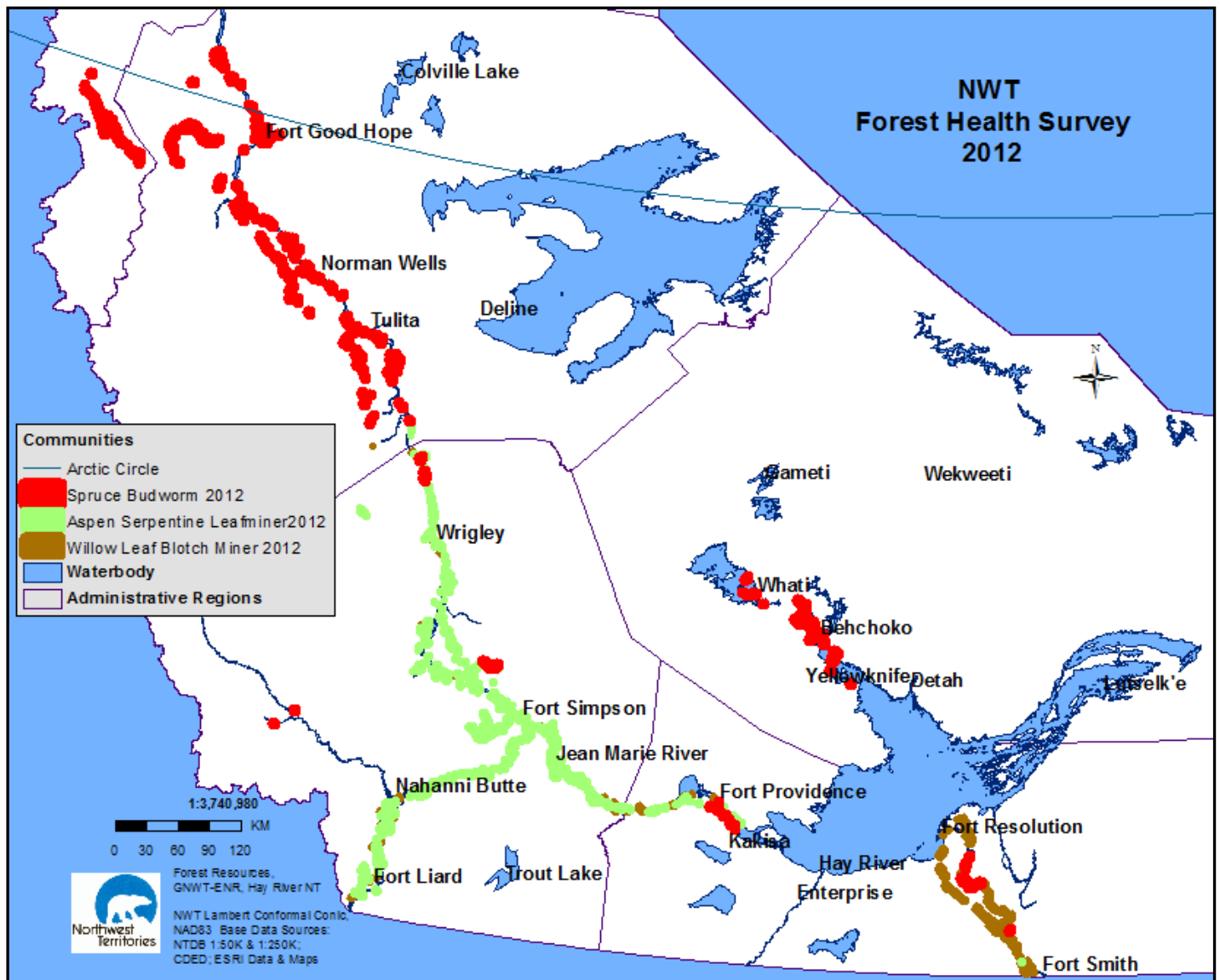


Figure 1. Aerial survey map showing NWT survey results: spruce budworm (red), aspen serpentine leafminer (green), and willow leaf blotch miner (brown).