

## **Water testing results following spray application of Mimic (tebufenozide)**

In 2015 forested areas in northwestern New Brunswick were sprayed with two applications of Mimic (tebufenozide) to control a growing spruce budworm population in that area. Mimic is a synthetic insect growth regulator that was developed to control caterpillar pests in agriculture and forestry. Mimic is being used in the early intervention research to control spruce budworm populations.

In response to concerns about water quality by municipalities in New Brunswick a water monitoring project was initiated by the Healthy Forest Partnership to determine the impact to water quality caused by spraying of Mimic on foliage within watersheds. Samples were taken 1 week prior to and 1 day, 2 weeks and 2 months after the spraying of Mimic. No Mimic was detected in watercourses on any of these monitoring times.

Many studies have been conducted to determine the effect of Mimic on aquatic organisms. These studies found that Mimic is not harmful to fish and most stream-dwelling organisms. One exception is the larvae of non-biting midges that live in stream sediment. However, this group is very resilient and populations are able to recover quickly without significant effect to the environment.

The spraying of Mimic over open bodies of water (including ponds and streams) is not permitted. Studies have shown that most of the spray from aerial applications is intercepted by foliage and does not reach the ground. The small amount of spray that reaches the ground binds to organic matter and is later broken down. This likely contributed to the fact that Mimic was not detected in the watercourses that were monitored.

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March, 2016