The Miramichi Naturalist - PLANTS ON THE MOVE *by Dave McLeod and Jim Saunders*

Recently the authors made two outings along local railroad tracks looking for plants whose seeds most likely had been brought into the area by railway cars. The first section walked was from West Collette to Rogersville. The second was from just south of the Via Rail Station (just opposite Doran's Recycling) to the Domtar siding and a short section in Beaverbrook.

One of the most common plants that was found was the Common Milkweed. This is a plant that is native to North America, but which had not been reported from northeastern New Brunswick until just recently when it began showing up only along the railroad. Approximately 2100 plants were counted in 20 locations on the West Collette to Rogersville section while many plants were also present in the Miramichi sections.

Wind is the normal means of dispersal for a milkweed seed that is attached to a silky parachute. One can be seen blowing away from an open seedpod in the photo. However, in the Miramichi area the winds usually vary from the northwest to the northeast generally resulting in dispersal to the south. Long distance northward movement of a wind-dispersed plant thus requires another means. Voila! – the railroad. Two stages are involved in this case. First, the normal way by wind over a short distance, and second, through actual physical attachment to rail cars, usually when either the seed or the car is wet. Sometimes the first short distance movement is assisted by air turbulence as the train is passing near a milkweed patch. A variation on the attachment scenario was seen at a siding in Miramichi West where a Common Milkweed seed had been held fast by ice that had formed overnight on an open railcar (see photo).

A mature common milkweed seedpod

A mature seed caught in ice of a box car hitches a ride.

Another example of a wind-dispersed plant is Helleborine, an orchid that is native to Europe. As for the milkweed, this plant had not been found until recently in the northeastern part of the province. In this case 5 plants were found at the end of the "Y" track between the Via Station and the Domtar siding that is used to turn locomotives. Its seeds are fine, light and downy, making them suitable for blowing toward and sticking to a wet car. They could then be transported to a new site many

miles away where they could drop off when the car becomes dry again or when shaken violently while a car is being shunted onto a siding.

A Helleborine grows among fallen leaves.

A dwarf Snapdragon grows amongst the

Three other plants were also found to have extended their ranges into the Miramichi area along the railway corridor. They are the Dwarf Snapdragon, Field Pepper-grass (sometimes called Poor-man's-pepper), and Russian Thistle. All have extremely small seeds less than 2 mm in length that can easily be thrown up from an open capsule on a plant growing between rails or in the ballast beside the tracks, as these were, by the turbulence created by a passing train. These seeds are usually sticky when wet by rain and easily stick to any solid surface they may contact like a railway car.

A close-up of a Russian Thistle plant

Field Pepper Grass

It is of interest that these three species have not yet been found elsewhere in this area away from the railroad, although Dwarf Snapdragon and Field Pepper-grass occurred many times in all sections of the railroad that were surveyed. On the other hand, Russian Thistle was found only at one location on the tracks near the Rogersville station, perhaps an indication that it is only now beginning to move into our area.

As is the case on most nature outings, other interesting things popup. A short-tailed weasel did just that from under a bridge made of railway ties near West Collette. It was kind enough to pose for a picture.

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