



To: Judy Snider, Risk Manager
From: Mia Frankl, Forest Information Officer, and
James Rogers, Kestrel
Consulting/Northumberland Tree By-Law Officer
Re: Treatment of Dog Strangling Vine in
Northumberland County Forest
Date: September 19, 2007

REPORT

Purpose of this Report:

The purpose of this report is to debrief the County on the health of the Northumberland County Forest (NCF), specifically the issue of Dog strangling vine (DSV) and steps taken this year to treat it.

Background:

DSV, a.k.a. *Vincetoxicum nigrum* and *Vincetoxicum rossicum*, or Swallowwort, is a non-native highly invasive plant, actively over taking large open and semi-open natural areas in southern Ontario. This species has established itself in the understory of the pine plantations found in the Northumberland County Forest (NCF) over an estimated area of 95 acres. DSV is destructive to wildlife habitat, can cause allergic reactions in humans similar to poison ivy, and harm ecosystems by out competing native vegetation. It tends to form dense monocultures, eliminating native trees and other vegetation from the forest. (see Appendix A for pictures). The County is working with James Rogers (Forest Conservation Officer) to manage this invasive.

Treatment

Approximately 9 acres of DSV in the NCF were treated with two sprayings of herbicides in 2007; one in mid-July and again in early September. Signs were posted on trails and at the Beagle Club parking lot, as well as on the website to inform users of the treatment. Trailside areas were given top priority for treatment, followed by patches of DSV outside of the main infested area (see Appendix B for approximate total plant distribution).

Two types of herbicides were used - Turbo Prop™ and Round Up™. Turbo Prop™ appears to be the most effective in the treated areas; however, an annual commitment will be required to control the spread of this extremely invasive plant. We will also be working to increase public awareness on the risks of this plant and provide educational materials to help mitigate further spread. The Forest Trail Study is gathering GPS data on other areas where the plant is found to provide a full inventory of its extent in the NCF.

Impact

After 6 weeks many open areas were showing up to 90% or higher mortality while other areas in shady locations were showing severe decline but no mortality. At the 6 week point a second treatment of Turboprop™ was applied to areas showing severe decline and also to some new areas. Both herbicides are not plant specific, and other vegetation was also killed as a casualty of treating DSV such as poison ivy, grasses, and some young trees and shrubs. The County is not pursuing herbicidal treatment for any other plant at this time, we are only targeting DSV.

Conclusion

The goal of this project is to protect the ecological systems in the NCF forest by controlling/reducing the existing populations of DSV, and reducing the further spread of DSV. We will also want to consult with abutting landowners and property owners in mitigating this invasive as well as raising awareness and providing educational information to the public and users of the forest. It is expected that this project will become part of the overall Forest Master Plan, under an invasives section. It is recommended that a similar effort should be made in 2008 to follow up with areas treated in 2007.

Financial Impact

Total cost of the project, included in the forest budget for 2007, was \$2851.10

Appendix A: Before and after pictures of treated DSV

Before	After
	
Date: June 28, 2007	August 15, 2007
	
Date: June 28, 2007	August 15, 2007
	
Date: June 28, 2007	August 15, 2007

Appendix B: Approximate distribution range of DSV in the NCF shown in yellow

