

The Browning of Lanark County



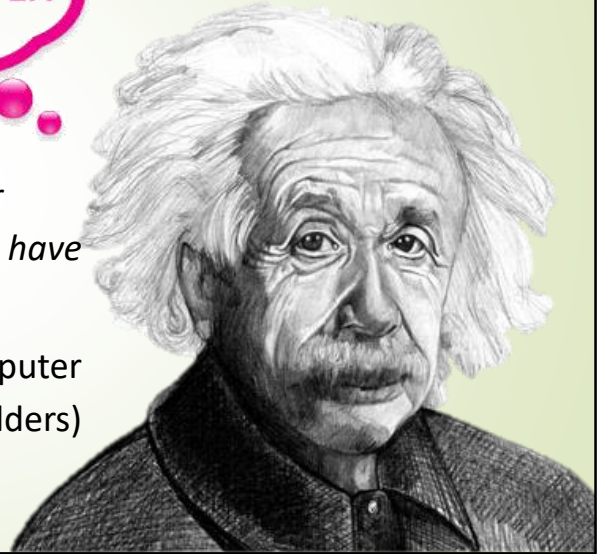
Hi, I'm Myrna Lee, resident of Lanark County and founder of Lanark Fights Lyme. Thank you for giving me the opportunity to address the issue of roadside spraying in Lanark County. I was asked by friends and family living in Lanark Highlands and other parts of Lanark County to explain why your electorate has such concerns about the spraying of a pesticide on public lands. Not one single person I've talked to since becoming involved in this issue can understand why, in this day and age, we would spray pesticides on public land. Most are unaware that there is already so much spraying being done on private land. Public education on the issue is so bad that some people I talked to thought the spray would kill ticks. And it's only because I educate people about ticks and Lyme disease, I can tell you, this spray will not bother ticks at all. When Friends of Lanark County asked for public support for a motion against spraying, they quickly garnered hundreds of names of Lanark residents in their petition. I can tell you that people are appalled that we are needlessly increasing the chemical burden on our environment. They seem to feel that because it is so obviously a bad idea, that we will come to our senses and find a better way. I hope that is true.

Facts vs Wishful Thinking

GOOD IDEA

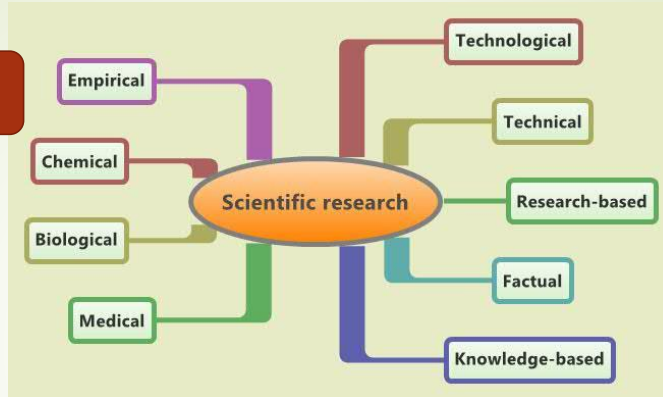
Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats.

Howard Aiken (One of IBM's first computer builders)



In hopes of a cheap, quick fix for a falsely perceived problem with Wild Parsnip, Lanark County used a validation system that was set up when we still had scientists doing real scientific research to guide us in our use of pesticides.

Good Research

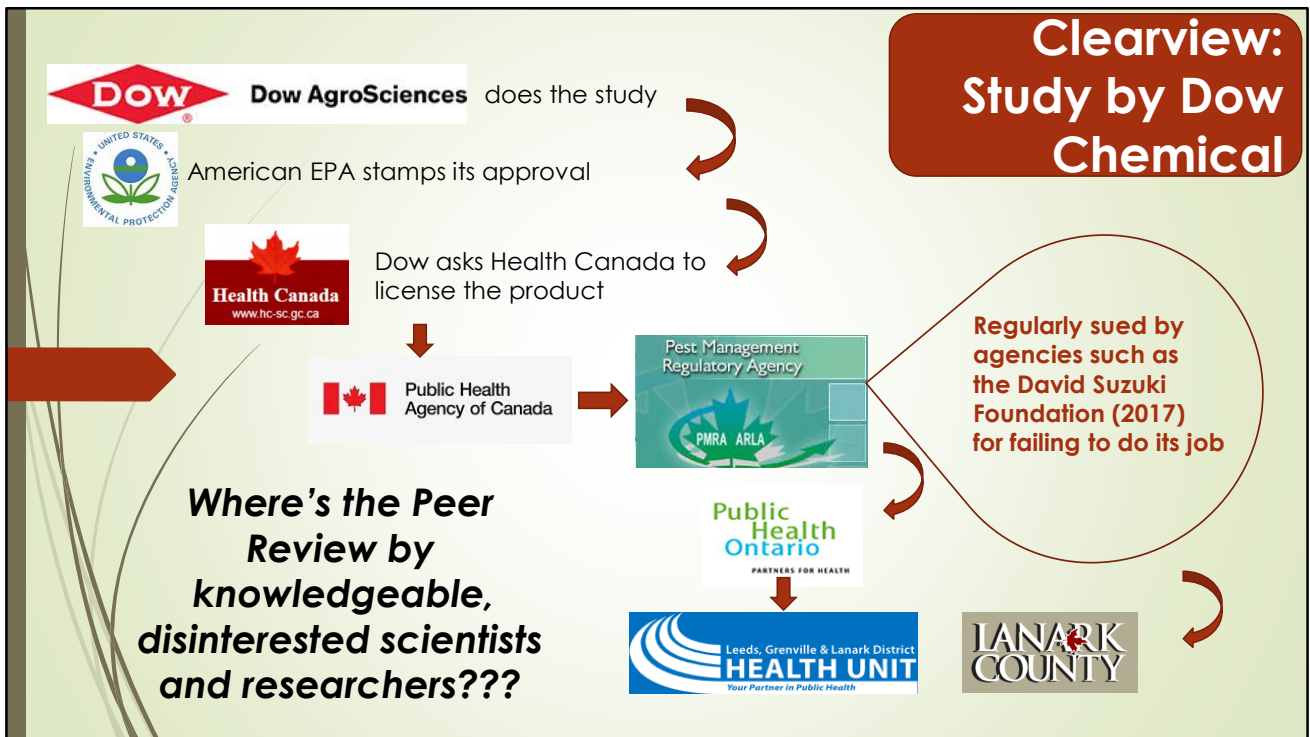


RCT: Randomized Controlled Trial

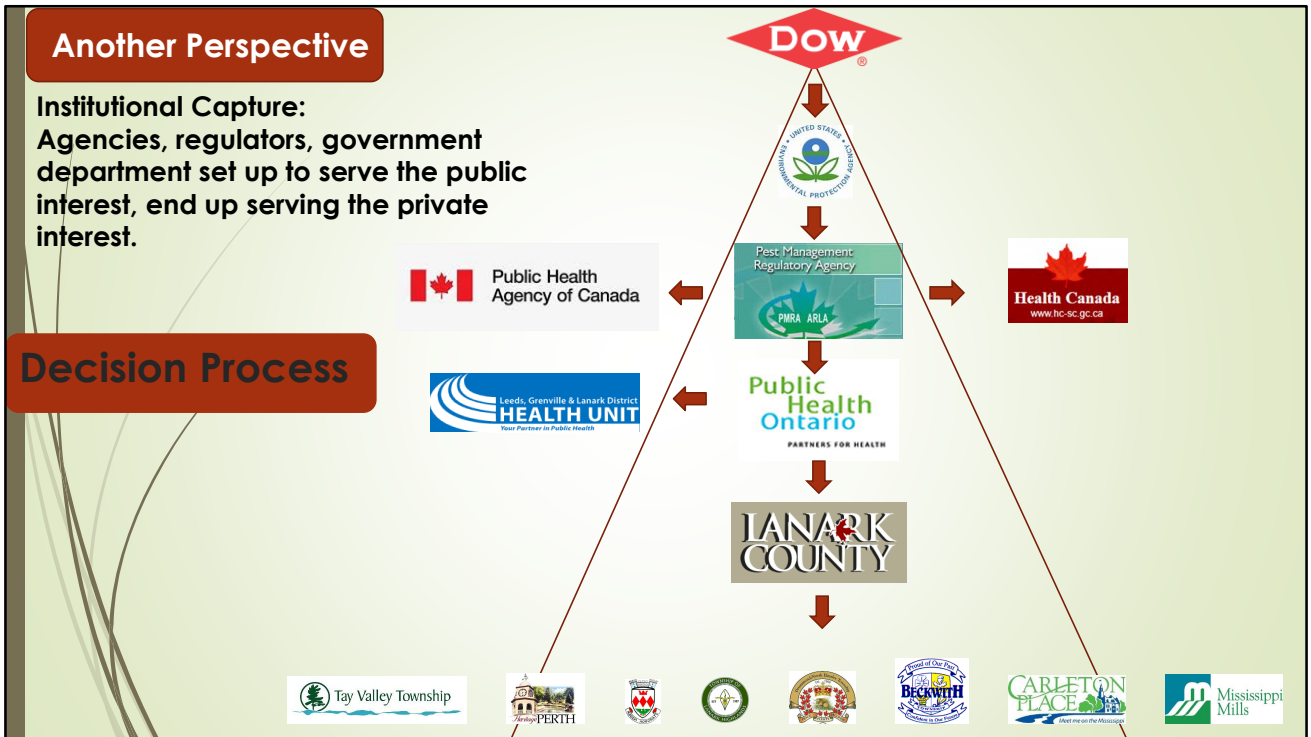
DBRPC: Double-blind Randomized Placebo-controlled

DBPR: Double-Blind Peer Review by knowledgeable, disinterested scientists and researchers

The decision-making process that we have used since the 1970s no longer works. Since 2006, the regulators that we depend on for guidance have been stealthily stripped of their effectiveness. Government scientists gone, environmental protections reduced, monitoring stations closed and research institutes funds cuts leaving us dependent on the integrity of this crippled system to keep us safe and healthy. Even the basic concept of peer reviews performed by knowledgeable, **disinterested** scientists and researchers is gone.



I was shocked to learn that, due to changes in legislation, there is essentially no protection to the public against harmful pesticides. Dow Chemical did the only research studies. Right down the chain of command in Canada, not one agency questions the validity of the study. The total product is never studied. There are no studies on effects on humans, nor are any animals exposed to Clearview. Their studies are not peer-reviewed and the quality of the studies is not questioned.



It was clear when I spoke with Nancy Cain, the horticulturist who authored the V.M.P., that the plan depended on the integrity of the process, which is now about 40 years out of date. My main concern with this is that I cannot find anyone in Canada who has looked at the primary research, the actual studies. I have been in contact with bureaucrats at every level of this chart and there is no documentation of anyone looking at the Dow-produced studies or the data packages available by law. I believe that if anyone in this chain of command had done so, they would have come to the same conclusion as the many scientists and local experts who know how to read these things: that we should not spray without further investigation.

Lawsuits

David Suzuki Foundation and Equiterre vs Health Canada



**Is the PMRA rubber-stamping chemical registration applications?
Lanark County won't know until it's too late!**

And then I found this: PMRA named in a class action lawsuit for failing to do its duty. More bad news for Lanark County: we are totally dependent on the PMRA, an organization that no longer has the legal right or ability to properly protect us.



That effectively leaves us at the mercy of Dow Chemical. Americans have been protesting the use of Dow chemicals since 1967. Dow produced the infamous napalm and Agent Orange. The world didn't want them to sponsor the 2012 London Olympics because of its bad record. The idea that Lanark County should take Dow's word for the safety of its products is naive at best.



**Public
Health
Ontario**

PARTNERS FOR HEALTH

**Santé
publique
Ontario**

PARTENAIRES POUR LA SANTÉ

“Research” done by PHO

Databases including Pubmed, Environment Complete, Scopus and Google Scholar were searched with a combination of the terms ClearView, aminopyralid, metsulfuron methyl, wild parsnip, giant hog weed, herbicide, and health effects. In addition, a number of grey literature resources were reviewed including the EFSA, USEPA, OMAFRA and Health Canada’s PMRA.

The **endorsement (approval)** by our local health unit (LHIN), is limited to human health and whatever Health Canada has passed down to the province. The Local Health Integration Networks (LHINs) employ medical doctors, not scientists or researchers and it is not their mandate to approve these plans. In an effort to assuage the concerns of their constituents, Lanark County Council asked for clarification. “Research” was commissioned. We once again referred to our crippled process by way of Public Health Ontario (PHO). PHO found, not surprisingly, that we were safe to spray our public roadsides with Clearview.

PHO Research: BROWSING THE INTERNET

FREE SEARCH ENGINES ACCESSING VARIOUS SCIENTIFIC DATABASES

Pubmed
Google Scholar
Environment Complete
Scopus



Search Words:
ClearView,
aminopyralid,
metsulfuron
methyl,
wild parsnip,
giant hog weed,
herbicide,
health effects

GREY LITERATURE

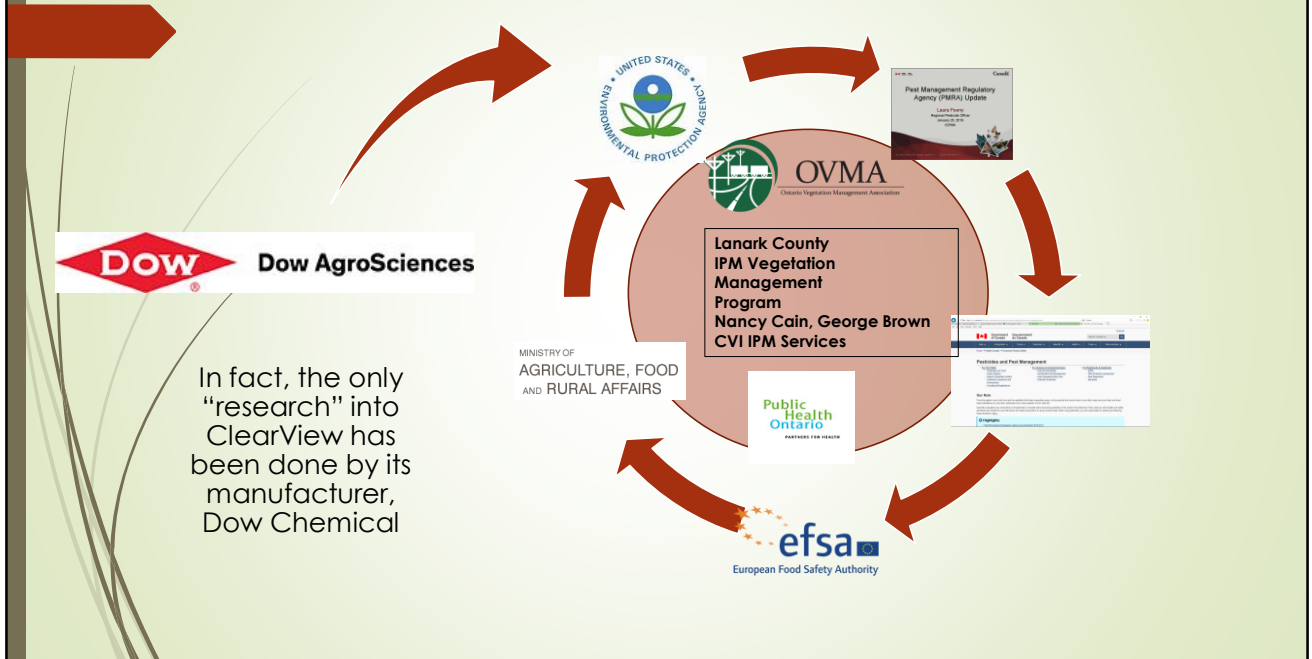
EFSA
USEPA
OMAFRA
Health Canada's PMRA

Grey/Gray Literature deals with the production, distribution, and access to multiple document types produced on all levels of government, academics, business, and organization in electronic and print formats, not controlled by commercial publishing.

It is **beneficial** to search grey literature **when creating comprehensive health care documents such as guidelines, systematic reviews, and meta-analyses**, as the information contained in such documents can **provide a broader perspective which is useful in reducing bias**.

I hope we didn't spend any money on this. I've studied research methodology. The best I can say about this study is someone knows how to browse the Internet. This report should not be construed as providing new information or credible support for Lanark's position. It is, in fact, just a review of some literature that is available to all on the Internet – sloppy and unscientific.

Fallacy of Authority



While it appears that due diligence has been done, in fact, Dow Chemical, a completely vested interest, did the only actual scientific studies. PHO, like Health Canada, PHAC, and the PMRA, is not mandated to assess environmental impacts. Like our LHIN, its mandate is human health, not plants, animals or the environment.

FYI:

EFSA: European Food Safety Authority

USEPA: U.S. Environmental Protection Agency

OMAFRA: Ontario Ministry of Agriculture, Food and Rural Affairs

PMRA: Pesticide Management Regulatory Agency

PHO Report

- The plants in question are highly toxic
- The mode of action through which ClearView acts is specific to plants, resulting in low toxicity to non-target species
- the use of ClearView herbicide to control these toxic plant species does not appear to pose a significant risk to human, animal or insect (pollinator) health
- ClearView has a very low acute and chronic toxicity to most non-plant based species and does not tend to bio-accumulate in the environment.
- ClearView has a low toxicity to species such as humans, animals and water fleas.
- Aminopyralid is classified as non-persistent to slightly persistent in most soils with a half-life ranging from 6-533 days, with a typical length of 103 days.

And last but not least

- **The use of ClearView herbicide to control these toxic plant species does not appear to pose a significant risk to human, animal or insect (pollinator) health.**

No Basis in Research

Based on the literature review that PHO did to produce this report, PHO cannot possibly make any of these assertions. Despite the many references and citations in the report, there is only one source of information available and that is Dow Chemical and to pretend otherwise is duplicitous. Every single reference in the report is either a bureaucracy paid to support the flawed decision-making process or a vested interest. The final statement is particularly careless as the Clearview study did not look at cumulative impacts of the various products being used. Clearview has not been tested on human, animals or the insect population.

This PHO Claim is Dead Right



“Residents may be exposed to spray drift, dermal contact and ingestion of contaminated drinking water”

Use of ClearView Herbicide in Wild Parsnip
and Giant Hog Weed Control
Public Health Ontario Report Pg. 3

“Do not enter or allow worker entry to treated area for 12 hours following application” - Clearview Label.

And yet our children walk across freshly-sprayed strips to get home!!!

Included in the report, but glossed over like an afterthought, is one quite true statement: residents and our water supply may be at risk. TRUE STORY: In Lanark County, a school bus followed a spray truck. Children crossed the freshly sprayed strip to get home. Also glossed over is a warning on the Clearview label: sprayed areas should be cordoned off for at least 12 hours after application.

What the Experts Say

Increased Cancer Rates:

15% of Canadians contracted cancer in 1965.
That rate was considered horrendous.

The current rate is **46%**, a threefold increase.
Health Canada has very little prevention strategy.

Pesticide Health Effects:

Health Canada regulates to control
“adverse” and “established” effects.
Communication with HC revealed that there is no
consistent, continuous monitoring being done.
Based on current practices, it could take
generations to recognize adverse effects of this
poison.



Those of us opposed to spraying want to present the information that has not been provided to the townships and County:

It is a verifiable fact that increased use of pesticides increases the rate of cancer. That is not debateable.

Waiting for Health Canada to discover “adverse” and “established effects” is irrational – they are not looking.

We are depending on reports produced by biased non-experts.

Our experts tell us:

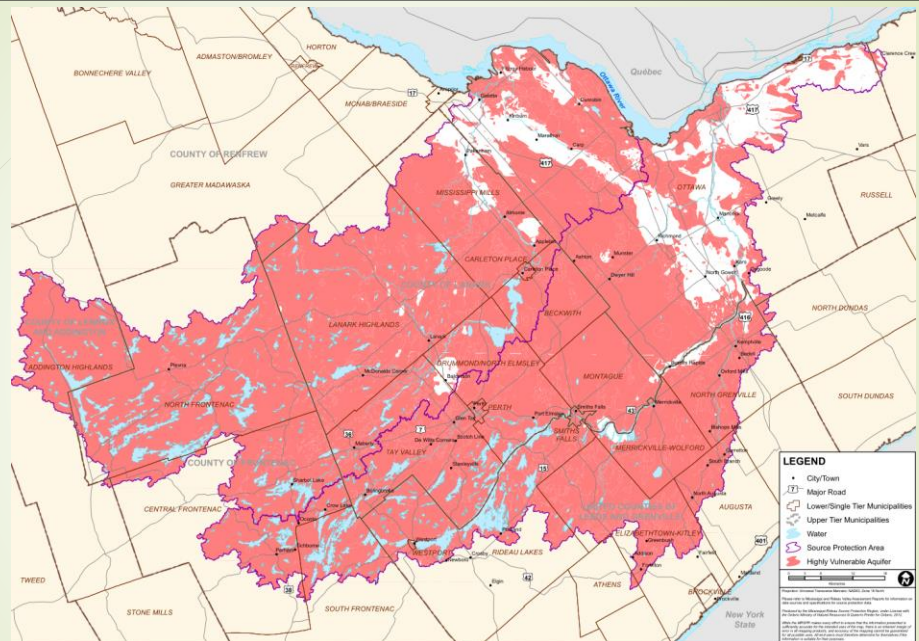
There are probably no tests done on humans.

We don't know how the poisons in this pesticide affect our children, our elderly or us.

We don't know how the chemicals in this poison interact with each other.

We don't know what lethal effects may exist in the chemical mixture. This has never been tested.

What we do know



Mississippi-Rideau Source Protection Region Highly Vulnerable Aquifers (fractured bedrock)
Mississippi-Rideau Source Protection Plan 2013

At a recent public meeting, we were informed that some of this poison might leach into our water system. This is a map of Lanark County and surrounding areas that are vulnerable to leaching due to fractured bedrock. The Clearview label states, "The fact that the herbicide components affect aquatic life does not mean that they affect human health." What that means is that Dow doesn't know and apparently has no intention of finding out. Our MOH, Paula Stewart, says, "We are in an area with fractured rock and little ground cover which can easily lead to contamination of the aquifer at varying depths."

Clearview Literature: Environmental Hazards

From Dow

- TOXIC to terrestrial and aquatic plants. Observe terrestrial and aquatic buffer zones specified under DIRECTIONS FOR USE.
- **The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable (e.g., sandy soil) and/or the depth to the water table is shallow.**
- To reduce runoff from treated areas into aquatic habitats **avoid application to areas with a moderate to steep slope**, compacted soil, or clay.
- Avoid application when heavy rain is forecast as runoff water may flow onto adjacent areas and injure crops and other desirable non-target vegetation.
- Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

13.22%
unknown
ingredients

ClearView Herbicide E 29752 May15f SPECIMEN.docx

This is what DOW puts in the Material Safety Data Sheet and the label that accompanies Clearview. Does this sound like anything we should be spraying on our land?

Clearview

From Dow

- Legume growth can be affected for 60 months or more post application"
- Small amounts of spray drift can be responsible for significant damage to adjacent plants and trees
- Highly toxic to fish and/or other aquatic organisms" and "may cause cancer



With our local environment clearly under siege, with the loss of hundreds of species of frogs, snakes, spiders, bees, birds turtles and so on – surely all our levels of government should be taking steps to protect our environment, not destroy it.

Gateway:

From Dow

- Contains aromatic petroleum distillates which are **toxic to aquatic organisms**.
- Do not contaminate any body of water by direct application, cleaning of equipment or disposal of wastes.
- Do not apply directly to water or wetlands.
- Do not apply when weather conditions favour drift or run-off from areas treated.
- 12.3% unknown ingredients

Dow Agrosciences

SAFETY DATA SHEET
DOW AGROSCIENCES CANADA INC.

Product name: GATEWAY™ Adjuvant Issue Date: 11/14/2016
Print Date: 11/14/2016

DOW AGROSCIENCES CANADA INC. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: GATEWAY™ Adjuvant

Recommended use of the chemical and restrictions on use
Identified uses: Adjuvants

COMPANY IDENTIFICATION
DOW AGROSCIENCES CANADA INC.
#2400, 215 - 2ND STREET S.W.
CALGARY AB T2P 1M4
CANADA

Customer Information Number: 800-667-3852
solutions@dow.com

EMERGENCY TELEPHONE NUMBER
24-Hour Emergency Contact: 613-996-6666
Local Emergency Contact: 613-996-6666

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	
Physical state	Liquid.
Color	Colorless
Odor	Aromatic

Hazard Summary

CAUTION!!!
Combustible liquid and vapor.
May cause eye irritation.
Aspiration hazard. Can enter lungs and cause damage.
Isolate area.
Possible cancer hazard. May cause cancer based on animal data.
Highly toxic to fish and/or other aquatic organisms.

Gateway is an **adjuvant**, an agent that modifies the effect of other agents, added to Clearview to increase its toxic effects. Lanark County is covered with wetland. There are very few areas of Lanark County that are safe for Gateway, let alone Clearview.

Falsely Attributed to Canadian Association of Physicians for the Environment (CAPE):

From LHIN

"Bottom line that I take from an albeit brief search is that human health concerns appear to be unlikely, (caveat - pesticide risk is rarely based on anywhere near complete information) and for roadside use it makes sense for people with livestock to avoid gathering any cuttings and or allowing horses, to graze on roadsides, to avoid contamination of their manure piles, assuming they would in turn use the composited manure for gardens."

(Kathleen Cooper, Senior Researcher and Paralegal,
Canadian Environmental Law Association)

Refuted by Ms Cooper:

"...wherein you quote me as providing an "opinion from CAPE." Please note that I do not work for CAPE - the Canadian Association of Physicians for the Environment - and nor did I provide you with an "opinion" on behalf of either CAPE or my own organization, the Canadian Environmental Law Association."

I am concerned about the ecological impacts of the spraying of Clearview for wild parsnip. Most notably, I am very concerned by having seen expert opinion noting that it may not even be an effective solution to the problem raising the prospect of unnecessary use of pesticides contributing to environmental contamination, particularly in sensitive waterways.

Kathleen Cooper, Canadian Environmental Law Association

Lanark County is concerned about legal liability and rightly so. However, in attempting to alleviate future risk, the above quote was misattributed to the Canadian Association of Physicians for the Environment (CAPE), and misused by an officer of the County to validate roadside spraying as a viable option. It was refuted by the author.

What the Experts say



Comprehensive Review of Pesticide Research Confirms Dangers
Family doctors highlight link between pesticide exposure and serious illnesses and disease; children particularly vulnerable. OCFP 2004

PREVENT
CANCER

NOW

www.PreventCancerNow.ca

**Canadian Federal Pesticide Regulation:
Why Other Levels of Government Require
Least-Toxic Approaches to Pest Control**

BioMed Research
International



Hindawi Publishing Corporation
BioMed Research International
Volume 2014, Article ID 179691, 3 pages
<http://dx.doi.org/10.1155/2014/179691>



Research Article

**Major Pesticides Are More Toxic to Human Cells Than Their
Declared Active Principles**

Robin Mesnage,¹ Nicolas Defarge,¹ Joël Spiroux de Vendômois,² and Gilles-Eric Seralini¹

What do we find when we do the homework that should have been done long before it got to this chamber? We find that the expert, knowledgeable, disinterested scientists and researchers we should be listening to say that we should not be spraying:

1. Ontario College of Family Physicians agrees with us.
2. Since 1966, the rate of cancer in Lanark County has risen from less than 15% to over 40%. Many scientists without vested interests in the sale of pesticides/herbicides say that they are the major cause. Why we have chosen now to increase our use of these poisons is baffling.
3. Unbiased scientists and environmental experts ALWAYS say don't spray.

What the Experts Say



"I find parsnip to be over-rated in terms of how dangerous it is. For some reason, there was quite a bit of panic last year about a plant we have been living with for 100+ years."

Naomi Cappuccino,
Associate Professor, Department of Biology, Carleton
University

"There isn't enough incidence of interaction with wild parsnip to merit such a huge outlay of herbicide. All the information we need to know is on the Clearview label."

Dr. James Coupland, Entomologist,
Agricultural Research Scientist, Ecologist

We are also concerned with a statement from the LHIN: "Dr. Stewart added to the supposed urgency of "controlling" parsnip with the comment that the plants are getting more toxic over time and that small insects no longer eat the seeds - I've found no reference supporting this assertion." Dr. Meg Sears

What the Experts say

OOPs!



Did this good man give wild parsnip a bad rap?

Dr. Peter Carrington PHD in Plant Biology

"I imagine that you have heard that this sap is dangerous to the touch and can even cause blindness in a worse-case scenario. I personally may have inadvertently contributed to this impression (I am the person in the HAZMAT suit removing a Giant Hogweed plant in some of the most viral videos on this subject). Several of the media outlets covering my removal of a Giant Hogweed threw in the comment that "Touching this plant can make you go blind."

Dr. Carrington says that it will do no such thing and he had the media retract that statement whenever he ran across it.

Hysteria over the dangers of Wild Parsnip is stirred by sensational media statements such as ""Touching this plant can make you go blind."

What the Experts Say

Wild Parsnip is not a problem



Environmental consultant Dan Brunton called Ottawa's campaign "a waste of money. This stuff has been abundant in the Ottawa Valley for over a century without a significant problem. Nothing like poison ivy." He acknowledged that some people are sensitive to it but says this seems to be very rare. Brunton adds that spraying the parsnip won't help anyway. "It grows like stink."

Environmental consultant Dan Brunton

Dr. Stewart added to the supposed urgency of "controlling" parsnip with the comment that the plants are getting more toxic over time and that small insects no longer eat the seeds - I've found no reference supporting this assertion.

Dr. Meg Sears, PhD
Chair, Prevent Cancer Now



Across Eastern Ontario, many municipalities are warning that it can cause burns and even blindness. All of which mystifies some nature experts, who say it's not a big threat at all. Environmental consultant Dan Brunton has spent most of his 65 years doing field work and knows the plant well. He has never suffered a parsnip burn or met anyone else who has, though he gets poison ivy rashes each year. And he argues it's wrong to frighten people into avoiding nature.

What the Experts Say:

Wild Parsnip Poisoning is Rare



Monty Don, Horticulturalist

How to Get Wild Parsnip Poisoning

- If the plant is in flower
and
- If the stalk is broken
and,
- If you get sap on exposed skin
and,
- If you don't wash it off
and
- If the sap is exposed to sunlight

Mr. Don thinks you have to almost be trying to get wild parsnip poisoning. A little education will keep you safe.

Mr. Don thinks we should be cultivating the delicious wild parsnip. He says there is little danger of getting wild parsnip poisoning if you take a few precautions.

What The Experts Say: Spraying is not effective

This photo shows roadside that was sprayed (and mowed soon after) where a thick swath of wild parsnip is simply untouched.



I have watched the spraying this year ... and I am certain it will be ineffective. The boom sprayers ... only cover a few metres into the roadside. In mid-July, you could see the line of dead plants along roads in Lanark and Ottawa. The remaining live plants extend far further back than that, and they will already have seeded into the sprayed area this fall. Even the sprayed area is full of viable seed, and will come right back next spring. It is an unfortunate and needless expenditure that is very unlikely to be effective at controlling Wild Parsnip, and which is not ecologically benign".

Holly Bickerton, Species At Risk Biologist, November 22, 2016
Consulting Ecologist Expert, Committee on the Status of Species at Risk in Ontario (COSSARO),
(formerly Ontario Ministry of Natural Resources)

Lanark County Council has already received delegations from area farmers saying that spraying is not effective.

What the Experts Say

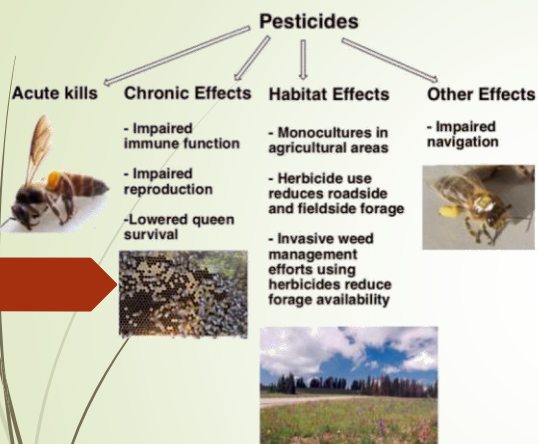


Roadside Spraying is not effective, as these photos show. We are stressing lots of healthy pollinators and native plants and leaving the field wide open to the remaining, untouched wild parsnip adjacent to the spraying range. Our farmers are already starting to complain about the increase in wild parsnip in these adjacent areas that make it harder for them to control the weeds in their fields.



We are already seeing devastation of our roadsides, with little control of the target, wild parsnip.

What The Experts say



We don't know:

- What Gateway (an **adjuvant**) does to water, plants or animals, including humans. The studies have not been done, because Dow doesn't have to test adjuvants.
- What the hormone mimicking chemicals in Clearview will do to our water, plants or animals, including humans. Hormone mimicry disrupts the endocrine system and has been linked to birth defects, lower IQ, obesity, diabetes, thyroid conditions, chronic disease and cancer. Pesticide testing does not cover endocrine disruption.
- What the Immunologic agents (drugs that can modify the **immune** response, either by enhancing or suppressing the **immune** system) in Clearview will do to aquatic life, plants, or animals, including humans.

We are depending on reports produced by non-experts whose job is to come up with the answer the people/organization who pay them want. Our experts tell us:

There are probably no tests done on humans. We don't know how the poisons in this pesticide affect our children, our elderly or us.

We don't know how the chemicals in this poison interact with each other. We don't know what lethal effects may exist in the chemical mixture. This has never been tested. In fact, it seems that we are hoping that what we don't know won't hurt us.

FYI: **adjuvant**: a pharmacological and/or immunological agent that modifies the effect of other agents

What is the
Answer?



Narrows Lock Road, Unsprayed

➤ EDUCATION

- Know your plants.
- Learn how to mitigate risk
- Parsnip burns are easily prevented.
- Avoid contact and wash if exposed.
- There is no Exit Strategy for the *War on Weeds*.
- Pesticides won't work and they put us at risk.
- Learn to live with parsnip.

➤ LONG TERM STRATEGY

- Alternate VMPs

There are a number of alternatives to spraying. Most people get at least 3 estimates before they undertake major projects. Our County should have offered at least two alternatives with reasonable solutions to a fairly simple problem. The current plan is like shooting mosquitoes with machine guns.



In summary, we have no idea what we're doing. We have one source of information and that is the company that sells the product. Although vested interests have hijacked the process that was set up to protect us, we at the municipal level can still control what happens locally. Please review roadside spraying and the process used to legitimize it. Please call for a moratorium on roadside spraying in Lanark County, at least until a complete Health Impact Assessment has been done and we study all the ramifications. Ensure that our well water is tested before and after spraying for contamination. Regular tests do not detect such chemicals. At best, you will be saving our environment our safety and our health. At worst, you will be erring on the side of caution.