Comments to Saskatoon City Council meeting about a Phase-out Plan for the cosmetic use of pesticides
June 27, 2005

Sent to the City Clerk's office at
city.clerks@city.saskatoon.sk.ca

SNAP requests to be put on the speakers' list for Monday June 27 Council meeting.

Respectfully submitted,
Paule Hjertaas, B. Sc.
President and spokesperson for the Saskatchewan Network for Alternatives to Pesticides Inc. (SNAP)
15 Olson Place,
Regina, SK,
S4S 2J6

The Saskatchewan Network for Alternatives to Pesticides Inc, (SNAP) is a Saskatchewan registered non-profit organization. Our mission is to work towards environmental sustainability in Saskatchewan by promoting: better understanding of the impact of pesticides (insecticides, herbicides, fungicides, etc) on health and environment; greater awareness and availability of alternatives for controlling pests, diseases and weeds; and significant reductions in pesticide use.

Executive Summary

Your Worship, Mayor Atcheson and councilors,

Eliminating non-essential pesticides and sustainable landscaping is important for:
- protection of public health (appendix 4, attachment 1);
- environmental protection and pollution prevention; and
- sustainability of Saskatoon with respect to water, energy use and greenhouse gases.

All of these issues have substantial costs, both short and long-term, associated with them. Some are related to national and international priorities.

An effective pesticide-reduction initiative is cost-effective for the population because it prevents health care costs and lost productivity of the populace. Importantly, it also forestalls untold misery of victims of the ill effects of pesticides and their families.

Effective pesticide reduction involves altered landscaping practices that will in turn improve water quality, increase storage of carbon dioxide in soils and biomass, and increase biodiversity. Increased biodiversity has a myriad of benefits from aesthetic such as increased song-birds, to practical such as increased mosquito predators that will protect us from vector-borne diseases.

SNAP is asking Saskatoon City Council

1. That Saskatoon take another look at the lists of allowable products (app. 1) and reset the pesticide bylaw in acceptable terms

SNAP believes that the Advisory Committee Report as well as most of the media coverage about a bylaw in Saskatoon have been misleading on the feasibility of a bylaw, on what is happening in other municipalities, and on how well bylaws are working there. This does not serve either the truth, or the residents of Saskatoon, or financial accountability.

A good bylaw outline is attached (app 4, attachment 6).

The main change needed in the Committee report is to allow the use of the PMRA reduced-risk biopesticides section without a permit. That's all.

Failing reconsidering a bylaw,

2. That in any IPM program designed and implemented in Saskatoon, the pesticide industry must supply Saskatoon with the data needed for its effective monitoring and evaluation, including pesticide sales figures divided as to chemical and biopesticides following the PMRA reduced-risk document, reduction targets, monitoring and evaluation.

3. That Saskatoon does not set up a system where city Administration, <u>only</u> "in consultation with lawn and garden companies" will develop a plan regarding pesticides.

Considering the track record of the pesticide industry, such a move would really be not only a joke for a City Council truly interested in pesticide reduction, but also a waste of money.

I would like to point out the following facts:

1. **There is NO working Canadian pesticide bylaw that totally eliminates all registered products**

2. **There is expertise out there**

Misleading industry statements and fearmongering:

3. **No alternatives to chemical products**

4. **People can buy but not use products, so a bylaw won't work**

5. **Sales of pesticides have not decreased where there are bylaws.**

6. **The natural world is dangerous out there, and we are the only ones to provide you with the tools to protect yourself and your property.**

7. **Cost: A bylaw would be too expensive**

Saskatoon current plan will not achieve any meaningful pesticide reduction:

8. **Education by itself does not work to reduce pesticide use**
9.
10. **Integrated Pest Management (IPM): Industry definition is inappropriate, and has produced no reduction**

Good data, reduction targets, monitoring and evaluation are all essential to any good IPM program. We have currently no independent data, monitoring or evaluation of anything.

11. **Setting up a system so that city Administration, "in consultation with lawn and garden companies" only will develop a plan is a joke if Council is truly interested in pesticide reduction.**

It is inconceivable that a program designed and controlled by industry will have meaningful pesticide reduction as its main goal.

Surely, City Council must be accountable for the money they spend, and tax payers have the right to want something for their money.

Your Worship Mayor Atcheson and councilors,

I believe that city councilors originally seek office out of a desire to positively contribute to their community. You have to make decisions on many issue you are not entirely or not at all familiar with. In order to do so, you form committees to advise you on these issues, and depend on these committees for advice to make your decisions. If the advice is bad, you end up making a bad decision.

SNAP's understanding is that, on the basis of the environmental committee's report recommending that all pesticides be treated as equal and all equally banned, Saskatoon City Council went from requesting the drafting of a bylaw to a total acceptance of the pesticide industry's platform of adopting an Integrated Pest Management (IPM) approach, and referring the question of pesticides to the Administration who, "in consultation with lawn and garden companies" only will develop a plan.

This is quite a reversal in position, undoubtedly also due to public relations efforts by the pesticide industry resulting in a lot of name calling and one-sided press coverage, and a totally unrealistic report by the Environmental committee. This fearmongering has succeeded in polarizing the issue to the extreme.

Recommendations

SNAP recommends

1. That Saskatoon take another look at the lists of allowable products (app. 1) and reset the pesticide bylaw in acceptable terms.

The main change needed in the Committee report is to allow the use of the PMRA reduced-risk biopesticides section without a permit.

SNAP believes that the Environmental Advisory Committee Report as well as most of the media coverage about a bylaw in Saskatoon has been set in such terms to mislead on the feasibility of such a bylaw, on what is happening in other municipalities, and on how well bylaws are working there. This does not serve the truth or the residents of Saskatoon.

2. That if an IPM program is designed and implemented in Saskatoon, the pesticide industry must supply Saskatoon with the data needed for its effective monitoring and evaluation including pesticide sales figures divided as to chemical and biopesticides following the PMRA document, reduction targets, monitoring and evaluation.

The pesticide industry (App. 7) considers to "Document pesticide reduction and pesticide alternative strategies through IPM and agree to monitor and keep records of pesticide use (active ingredient per square metre) for audit purposes. (no 7) as essential to their IPM program.

Industry's failure in providing you with these data would indicate their lack of commitment to the principle of pesticide reduction. "Trust us" does not cut it in scientific terms. Furthermore, SNAP believes that appropriately implementing and monitoring an IPM program would be a lot more expensive than a bylaw, and leave citizens at risk.

3. That Saskatoon does not set up a system where city Administration, only "in consultation with lawn and garden companies" will develop a plan regarding pesticides.

The Pesticide industry is in the business of selling pesticides and therefore is not interested in decreasing sales of chemicals, as the tobacco industry is not really interested in reducing sales of tobacco. How could a strictly one-sided input from the pesticide industry achieve the meaningful pesticide reduction desired by Saskatoon citizens?

Considering the track record of the pesticide industry (points3 to 7 and 10 below), such a move would be not only a joke, but also a waste of money for a City Council truly interested in pesticide reduction. SNAP suggests that discussion should be maintained with the members of the Environmental Committee interested in a workable bylaw.

Reality check:

1. **There is NO working Canadian pesticide bylaw that totally eliminates all registered products.** All municipalities have allowable products. Lists are appended (App 1). Halifax even took the whole issue of choosing and grading pesticides as to safety away from its officials by adopting the list of an independent third party: the Organic Materials Review Institute, http://www.omri.org

It defies common sense that edible product like vinegar, or corn gluten have to be treated like products developed and designed to kill things, that something generally recognized as safe versus something with warnings on the label. Only industry and government could come up with something that ludicrous.

The committee charged with giving you advice misled you on that issue. Their recommendations were engineered to create disapproval instead of bringing a workable solution.

Yes, Halifax has experience with issuing permits to use pesticides, but the cost of this system was decreased by issuing them for more risky pesticides, instead of reduce-risk products such as insecticidal soap use.

2. **Whatever resources, people, and expertise we don't have here, we can get from somewhere else.**

Linking to U of S extension division site does not serve much purpose until it is updated to organic controls. One reason the Saskatoon Environmental committee originally thought only about education is that, in SK, we use 36 % of all pesticides used in Canada. Historically, our department of Agriculture and U of S have been pesticide pushers and remain pushers of technology related to pesticides such as gmos. We hardly teach anything else. We have very little SK resources and people who know anything else! Saskatchewan is pathetically behind and remaining blind to the advances in organics and natural methods and products available elsewhere.

For instance, CAP-Quebec has formed a consortium with two other groups to provide and administer green lines (help to the public – Q&A's and even checking out the property and suggesting alternatives) and help to municipalities to support and implement the bylaws. This also includes training of green space workers, and information sessions to the public.
Nature Action Quebec has developed programs to train municipal workers and I am sure that, with political will, we can do the same here.

One of the lawn solutions is a more biodiverse lawn.

In the next section I will identify several issues where **industry misinforms** public and health officials and the public. You will undoubtedly recognize many of the arguments which have appeared in the press.

3. **No alternatives to chemical products – Fearmongering by the pesticide industry**

Alternatives exist and they work.
There is a course in organic land care http://www.organic-land-care.com/
, products certified for organic land care, and an Organic Landscape Alliance http://www.organiclandscape.org/ . We now have one real Saskatchewan organic lawn care company out of Yorkton, which also wants to operate in Saskatoon and Regina. If it wasn't possible, it would not exist.

4. **People can buy but not use products, so a bylaw won't work – Fearmongering by the pesticide industry**

People will keep buying our products and use them in the dark of night without any notification, and it will be your fault. The reality is that, down East, there are many alternative reduced risk products available in the stores. Why not in Saskatchewan? Because they don't have to.

Spring correspondence with Loblaws asking them why they carry so few of the reduced risk pesticides West of Ontario indicates that they do not feel there is a demand and that, if the demand is there, they will start carrying them.
The best way to create this demand is by going for a pesticide bylaw.

5. **Sales of pesticides have not decreased where there are bylaws. – Fearmongering by the pesticide industry**

Saskatoon Environment Committee recognizes that reduced risk products are classified as pesticides and even gave council the web site indicating so. (repeated in appendix 1) Similarly, industry sales figures include them in their sales.

The reality is that no stores or garden center has lost any business, that they have replaced their toxic products by reduced risk and alternative ones, because the others were not selling any more. (Helen Jones, Halifax) Lawn care companies similarly are not going out of business, they have merely changed the services they offer.

6. **The natural world is dangerous out there and we are there to provide you with the tools to protect yourself and your property. Fearmongering by the pesticide industry**

Whenever industry speakers open their mouth, we hear how dangerous the world is and that they are the only ones providing us with valid solutions. We need to be worried about the danger of caterpillars, spiders, ants and all kinds of mostly inoffensive insects and weeds. Industry also fearmonger that pesticide bylaws will not allow use of pesticides for public health, that bylaws won't work, that most home remedies are as toxic as chemical pesticides (the famous rhubarb leaves argument- never any other example), that allergenic plants will become rampant etc.

What do you think you should be more worried about? A bunch of aphids which can be dislodged with a strong jet of water or by favouring predators in your environment, an edible and medicinal plant like dandelion, or a poison with warning sign on it?

7. **Cost – Fearmongering by the pesticide industry**

Always a big issue. Regina administration gave Council a very very unrealistic and inflated cost for bylaw implementation, way out of other municipalities' experience. Total cost of bylaw implementation (including education) varies from 18 to 54 cents per citizen, and education forms the largest part of cost. (Appendix 3)

If Saskatoon wants to educate only, you will therefore spend most of the money anyways, and for what result?

This section looks at what Saskatoon wants to do that won't achieve a meaningful pesticide reduction:

8. Education by itself does not work to reduce pesticide use

Surely, tax payers have the right to want something for their money.

Ottawa polls and *The Pesticide Reduction Strategy* report attached to the Ottawa Health, Recreation and Social Services Committee agenda indicate that the anticipated 16 % reduction in pesticide use did not materialize, but that there was a 6% increase. (Appendix 4)

Saskatoon Environmental Committee must also know it too because they quote a report that shows exactly that: *The Impact of By-Laws and Public Education Programs on Reducing the Cosmetic/Non-Essential, Residential Use of Pesticides: A Best Practice Review*; jointly prepared by: The Canadian Center for Pollution Prevention and Cullbridge Marketing and Communications; March 24, 2004

9. Integrated Pest Management.

Industry's definition is inadequate, and has produced no reduction

Essential to the definition: data collection, reduction targets, monitoring and evaluation and lists of allowable and prohibited products.

All is in the definition. There is no official definition of "Integrated Pest Management". It is like "Sustainable Development", subject to many interpretations. One should go back to the original definition described in "Are you living with a Junkie?" (ASUPCA). Industry and government's definition puts chemical controls on the same foot as reduced risk ones and, in Toronto, they wanted to set the target for spraying a lawn for dandelions at 5 plants.

In Quebec, at the hearings leading to the Pesticide Code, the lawn care industry had to admit that their 2 year IPM program had not achieved much. That is why the government of Quebec rejected IPM in favour of the Pesticide Code.

In order to implement and evaluate IPM, one needs to **keep data.** Neither the Canadian or Saskatchewan government is currently (or historically) collecting data on urban and/or domestic pesticide use.

The pesticide industry must provide Saskatoon with data on the historical, current and future pesticide sales for the city, separated into regular and reduced risk categories.

The lawn care industry must also provide the City of Saskatoon with the quantity of pesticide active ingredient they use in Saskatoon on a yearly basis, as well as details on their "organic" or "IPM" options, how well they were advertised compared to their regular program, and the number of customers who choose these options.

IPM as well as any well-designed program, also needs **targets**. Does Saskatoon have targets for reduction?

Ottawa lawn care companies spread 5 tonnes a year of purified poisons a year. That the industry is apparently not at all interested in reducing pesticide use is apparent from the following quote:

"The industry reached the extraordinary conclusion that they could *increase* pesticide applications from 5 to 73 tonnes of purified poison per year, and still attain Ottawa's pesticide *reduction* targets. Clearly this sector is not committed to meaningful reductions. The reduction observed between 2003 and 2004 can be explained by switching to imidacloprid, an insecticide that is more persistent and potent, so smaller quantities are effective."

(App. 5)

IPM needs **monitoring** and evaluation

In Ottawa, the City also monitors water and has found widespread contamination at levels that kill aquatic organisms (App. 5)
Who is monitoring water in Saskatoon? What is the water monitored for? At what times of year?

10. **Setting up a system so that city Administration, "in consultation with lawn and garden companies" only will develop a plan is a joke if Council is truly interested in pesticide reduction. It is also a waste of money.**

The Pesticide industry is in the business of selling pesticides and therefore is not interested in decreasing sales of chemicals, as the tobacco industry is not really interested in reducing sales of tobacco.

The Pesticide industry
- is forecasting growth for the next several years.
- has not met its reduction targets in Quebec or Ottawa.
- is not committed to meaningful reductions. (App 5)
- is consistently misleading the public and officials on issues and numbers. (points 3-7 above)
- commonly makes misleading statements in its advertising about the safety of pesticides, even though such claims are illegal in Canada and the United States (App 6: 1, 6, 7)
- has set up NO container return system for their domestic products. Instead the cost falls on the city of Saskatoon to collect old or outdated pesticides and containers.
- In a Hort Week class, a local Saskatoon store owner even went as far as ridiculing the PMRA ban of pesticides such as diazinon and chlorpyrifos, and ILLEGALLY encouraging users of domestic products to purchase commercial products so they could get the chemicals they wanted.

Lawn care companies
- use a lot more pesticide than home owners would "at least 3 times more herbicide and 39 times more insecticide per hectare" (App 6: 1,3,4, 8)
- do not give adequate information regarding pesticides to people who hire them (App. 6: 1,3), as there is no Acts and regulations require companies to provide detailed information to their clients. (App 6: 1, 5,6,7)
- are still falsely and illegally advertising their chemical services as "safe" (App 6: 1, 2 , App 7 quote)
- have not been found to use pesticides according to regulations (App 6: 1, 9, 10)
- do not notify their clients in advance of when they will apply pesticides (pers. comm.)

In conclusion,I would like to reiterate SNAP's recommendations:

1. That Saskatoon take another look at the lists of allowable products (app. 1) and reset the pesticide bylaw in acceptable terms.

2. That if an IPM program is designed and implemented in Saskatoon, the pesticide industry must supply Saskatoon with the data needed for its effective monitoring and evaluation including pesticide sales figures divided as to chemical and biopesticides following the PMRA document, reduction targets, monitoring and evaluation.

3. That Saskatoon does not set up a system where city Administration, only "in consultation with lawn and garden companies" will develop a plan regarding pesticides.

Appendix 1 List of allowable pesticides

1. The **Organic Materials Review Institute** are one of the world experts on this issue and that is where Halifax and Quebec went to in developing their 'green list' of acceptable products.

Halifax follows this list, as long as the products are registered in Canada.

The Organic Materials Review Institute
Box 11558
Eugene, Oregon 97440-3758
USA
Voice: (541) 343-7600
Fax: (541) 343-8971
Email: info@omri.org Scott Rice is their Projects Coordinator
Website: http://www.omri.org

2. The proposed Quebec 'green list' is as follows:

d'acides caprique et pélargonique - *No English Translation*N/A Numéro de CAS

Savon herbicide - N/A Numéro de CAS...HERBICIDAL SOAP

Savon insecticide - N/A Numéro de CAS...INSECTICIDAL SOAP

Silice absorbante - 7631-86-9...SILICA GEL

Dioxyde de silicium (terre diatomée) - 60676-86-0...(DIATOMACEOUS EARTH) SILICON DIOXIDE

Acide borique - 10043-35-3...BORACIC ACID

Pyréthrines - 8003-34-7...PYRETHRINS

Méthoprène - 40596-69-8...METHOPRENE

Octaborate disodique tétrahydrate - 120078-41-2...DISODIUM OCTABORATE TETRAHYDRATE

Soufre - 7704-34-9...SULPHUR

Sulfurede calcium ou polysulfure de calcium - 1344-81-6...LIME SULPHUR OR CALCIUM POLYSULPHIDE

3. There is also a list of Regulated Products and Materials for Organic Land Care Standard, 2005; List 2: Landscape Pest Control Products

http://www.organiclandcare.org/standard/products_pest.htm

4. As mentioned in the Saskatoon Environmental Committee report, the PMRA has a reduced-risk document which is divided in two sections, chemical pesticides and biopesticides. The latter section would be acceptable for use under a pesticide bylaw without needing a permit. http://www.pmra-arla.gc.ca/english/pdf/rr/rr2005-01-e.pdf

Appendix 2

Quebec's new Pesticide Management Code will <u>prohibit</u> the use of products with the following active ingredients:

Piperonyl butoxide
1.3-dichloropropene
Dicofol
Lindane
Malathion
Methoxychlor
N-octyl bicyclopheptene dicarboximide
Permethrin
Phenylmercuric acetate
Benomyl
Captan
Chlorothalonil
Mercury chloride
Iprodione
Maneb
Metam-sodium
2,4-D esters
2,4-D acid

NOTE: In spite of the Feb 21. 2005 2.4-D draft assessment, the province of Quebec has judged they were on solid ground and are maintaining 2,4-D on the prohibited list.

Appendix 3 cost of bylaw and education

By-law Implementation Costs, Including Public Education

City	*Population*	*spent/budget*	*cost per capitayear*
Toronto 2004	2,481,494	$450,000	18 cents
Vancouver 2004	545,671	$179,120	33 cents
Vancouver 2005	545,671	$100,000	18 cents
Halifax * 2001	359,111	$120,000	33 cents 1st year of bylaw
Halifax 2002	359,111	$197,000	55 cents
Halifax 2003	359,111	$195,000	54 cents

*achieved over 90% compliance in first year (2001).

Public Education Campaigns

City	*Population*	*spent/budget*	*cost per capitayear*
Vancouver 2004	545,671	$94,120	17 cents
Vancouver 2005	545,671	$15,000	3 cents
Oakville 2004	144,738	$167,000	$1.15
Ottawa ** 2002	774,072	$400,000	52 cents
Ottawa ** 2003	774,072	$319,000	41 cents

** Includes Ontario MoH contributions of $150,000 in 2002 and $109,000 in 2003
"Beautiful Lawn" campaign coincided with 6% INCREASE in use of synthetic lawn pesticides

Reference documents:

City of Toronto

2004 Operating Budget - New Requests
http://www.city.toronto.on.ca/budget2004/background.htm#news

Vancouver
http://www.city.vancouver.bc.ca/ctyclerk/cclerk/20040115/pe5.htm

Halifax

Overview Reports available at
http://www.region.halifax.ns.ca/pesticides/index.html

Appendix 4 (most attachments not included but available on request)

Meg Sears (M.Eng., Ph.D.); February 19, 2004; **City of Ottawa Pesticide Reduction Strategy for Private Property**; prepared for the Coalition for a Healthy Ottawa **www.healthyottawa.ca**

The CHO is a coalition of health care professionals, scientists, health and environmental organisations and individuals working to reduce the cosmetic use of pesticides in Ottawa. The CHO supports healthy, sustainable landscapes by encouraging non-toxic pest management strategies, and seeking a bylaw restricting the cosmetic use of pesticides.
Honourary co-chairs:
- *Dr. Joe Reisman (Head of Paediatrics, Children's Hospital of Eastern Ontario) and*
- *Dr. Alex MacKenzie (Director of the CHEO Research Institute)*

Quote:
"The Pesticide Reduction Strategy has not resulted in anticipated desirable behaviour change."

"The Pesticide Reduction Strategy report attached to the HRSS agenda, as well as the Decima polling reports, make it clear that anticipated behaviour change isn't happening. In December 2002 Ottawa City Council approved the Pesticide Reduction Strategy with the assurance of staff that a 16% reduction in pesticide use would have materialised by the end of 2003. Instead there was a 6% increase. This is a 22% spread between reality and the expectation should the Pesticide Reduction Campaign be "on track"."

Report:

The Coalition for a Healthy Ottawa asks Ottawa City Council to pass a bylaw restricting pesticide use in the City of Ottawa.

Eliminating non-essential pesticides and sustainable landscaping is important for:
- protection of public health (attachment 1);
- environmental protection and pollution prevention; and
- sustainability of Ottawa with respect to water, energy use and greenhouse gases.

All of these issues have substantial costs, both short and long-term, associated with them. Some are related to national and international priorities.

An effective pesticide-reduction initiative is cost-effective for the population because it prevents health care costs and lost productivity of the populace. Importantly, it also forestalls untold misery of victims of the ill effects of pesticides and their families.

Effective pesticide reduction involves altered landscaping practices that will in turn improve water quality, increase storage of carbon dioxide in soils and biomass, and increase biodiversity. Increased biodiversity has a myriad of benefits from aesthetic such as increased song-birds, to practical such as increased mosquito predators that will protect us from vector-borne diseases.

People are being harmed.

Many of the CHO's members identify pesticides as being harmful to their personal or family's health. Medical doctors and health care professionals are supporting the CHO because in their professional opinion it is both plausible and probable that pesticides are contributing to their health problems, ranging from childhood respiratory problems, allergic reactions, autoimmune diseases such as type 1 (childhood onset) diabetes, autism and attention deficits, reproductive difficulties, birth defects etc. (for more details, see Attachment 1).

Pesticides polluting our environment are harming society and putting us at increased risk.

We see pollution that is ongoing, pervasive, and serious. The 2003 Surface Water Pesticide Monitoring Program Summary Report revealed that pesticides running off Ottawa turf are contaminating surface water at levels harmful to aquatic species (CHO comments, attachment 2).
Examination of this issue raises the spectre of Canadian drinking water standards being out of date and the possibility that this pesticide runoff (that is not monitored to standards for aquatic species) is affecting our health.

The impairment and "dumbing down" of society as a result of chronic exposure to the "chemical soup", and particularly to neurotoxic insecticides, may be a serious threat to our future. (Attachment 3)

The ecological ramifications put people at increased risk of vector borne diseases such as West Nile virus. Prevalence of organophosphates in the environment could render the pesticide malathion ineffective against adult mosquitoes.

The Pesticide Reduction Strategy has not resulted in anticipated desirable behaviour change.

The Pesticide Reduction Strategy report attached to the HRSS agenda, as well as the Decima polling reports, make it clear that anticipated behaviour change isn't happening. In December 2002 Ottawa City Council approved the Pesticide Reduction Strategy with the assurance of staff that a 16% reduction in pesticide use would have materialised by the end of 2003. Instead there was a 6% increase. This is a 22% spread between reality and the expectation should the Pesticide Reduction Campaign be "on track".

A Pesticide Bylaw is necessary to achieve the behaviour change necessary to protect Ottawa's health.

The CHO sees that the dismal failure of Ottawa's campaign to bring about behaviour change is related in part to the subtle initial message of the campaign, with emphasis on "a beautiful lawn" rather than health. Nevertheless, a lot of excellent sustainable gardening educational material relevant to Ottawa has been developed, and these resources should be used to support a clearer message, that pesticides are **not** going to be used for cosmetic purposes any more in Ottawa.

Ongoing education is essential to achieving pesticide reduction and to the success of a bylaw.
The single Community Coordinator position is key to maximise benefits from a multitude of volunteer community initiatives and to disseminate the excellent information that has been compiled. A horticultural expert who does not have a conflict with a direct interest in a company carrying out landscaping activities, is also key to gaining public credibility, and to "enforcement with education", particularly during the phasing in of a bylaw.

Other major Canadian cities have adopted pesticide bylaws because it is now clear that voluntary initiatives are not sufficient to protect public health. It is hoped that this will "trickle up" and result in improved pesticide regulation at higher levels of government, as has happened in Québec.

Support for a Pesticide Bylaw

- Prominent Ottawa doctors, including CHO co-chairs from CHEO, Dr. Richard van der Jagt the Chair of the Canadian Leukemia Studies group, Dr. Paul Claman Prof. of Obstetrics and Gynecology and dozens of others wrote and spoke about this issue, and who are calling for a Pesticide Bylaw.
- A pesticide bylaw is a means of acting according to the Precautionary Principle. The city supports the Precautionary Principle, as was enunciated in the 20/20 – Environment Strategy http://www.ottawa.ca/calendar/ottawa/citycouncil/occ/2003/10-22/minutes63.htm
- The 6,000-plus people on the CHO mailing list support a pesticide bylaw.
- Experts in Ottawa support a bylaw (Attachment 4)

Pesticide Reduction Expenses

Major Canadian municipalities have achieved, and plan to achieve ambitious pesticide reduction targets within a year or two, using similar or less funding than Ottawa has for its less successful campaign. (Attachment 5)

Bylaw Drafting

The CHO does not support a long citizen committee process that would delay the drafting of a bylaw. Texts are available for other major cities that already have bylaws, such as Toronto, Vancouver, Halifax and Montreal. The CHO has proposed a bylaw (attachment 6 – Bylaw proposed for Public Discussion).

In support of pesticide reduction, the CHO would like to see the adoption of a Pesticide Code in Ontario similar to that in Québec. http://www.menv.gouv.qc.ca/pesticides/permis-en/code-gestion-en/index.htm

Recommendations:

That the City of Ottawa:

- Continue a public education campaign regarding pesticides and sustainable landscaping practices, with a community coordinator and a horticultural expert.
- That the City of Ottawa request staff to draft a pesticide bylaw according to the outline attached.
- Ask the Province of Ontario to pass a Pesticide Code similar to that in Québec, to restrict sales and outdoor use of toxic chemicals.

The Coalition for a Healthy Ottawa would be pleased to assist and support the City of Ottawa in protecting public health with public education and institution of a pesticide bylaw.

Respectfully submitted by

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Attachment 1

Pesticides and Health

Pesticides have cumulative, multigenerational destructive impacts on human health, especially on the physical, emotional and mental development of children.

Pesticides are linked to birth defects and interfere with sexual development. They also trigger allergies, immunotoxicity, neurotoxicity, genetic damage, cancer and other health problems. Health problems may be inherited by the children and become magnified with successive generations.

- **Pesticides have been detected in the body tissues of *all* people tested.** The only exceptions were Indian tribes in the depth of the Amazon jungle, at the time still protected from global pollution by a dense forest canopy.
- **Our youngest generation is already exposed to pesticides not only prenatally but even before conception.** Pesticides have been detected in fluid surrounding eggs of infertile women, who were residents of major Canadian cities and who had no history of unusual exposure to these substances. The common herbicide 2,4-D has been measured in semen. Landscaping pesticide have been measured in children and adults not known to be exposed to them.
- **Pesticides and other pollutants penetrate the placenta** – the fetus' protective shield. A Canadian-USA study detected pesticides in the amniotic fluid in 1/3 of human pregnancies.
- **Today children are born with a deposit of toxic pesticides and other foreign chemicals caused by dumping of the maternal lifelong storage of pesticides**, (so called "body burden") into the body of the developing child.
- **Prenatal life and early childhood are especially vulnerable periods** because cells are dividing rapidly and detoxifying enzymes have not yet developed.
- **Pesticide exposure levels are higher in children in relation to their body weight than in adults.** This is because children breathe more air; consume more foods with pesticide residues and drink more water; their detoxifying enzymes have not yet fully developed; their skin is thinner and more permeable; and their activities increase exposure to pesticides on the ground.

Pesticides and Human Health
This is an essential resource for physicians and other health providers for understanding the chronic health impacts of pesticides.
Written by Gina Solomon, M.D., M.P.H., Oladele Ogunseitan, Ph.D., M.P.H., and Jan Kirsch, M.D., M.P.H. -- and reviewed by nine health professionals -- this extensive review study, culled exclusively from peer-reviewed published medical data, delivers a sobering and overwhelming diagnosis that public health institutions, regulators and policymakers are largely unaware of pesticides' many deleterious effects.
http://www.psrla.org/pesthealth.htm

Pesticides and Human Health
Ontario College of Family Physicians
http://www.cfpc.ca/ocfp/commun/pest.html

Health Effects of Pesticides

Acute effects of pesticide exposure range from irritation of the nose, eyes and throat, burning, itching and rashes, to difficulty breathing,

nausea, vomiting, headaches and general malaise[1]. In the longer term, scientific studies reveal links between pesticide exposure and higher risk of leukemia[2], non-Hodgkin's lymphoma[3], soft tissue sarcomas[4], neuroblastoma[5] and prostate cancer.[6] Children are particularly susceptible to harm from pesticides, even before birth and possibly before conception[7]. Pesticides may cause birth defects[8], developmental delays[9], hyperactivity[10], behavioural disorders[11], motor dysfunction[12], nervous system disruption[13] and immunotoxicity[14]. These translate into cancer, diabetes, autoimmune diseases, Parkinson's disease, autism and attention deficits, lower IQ and

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hypothyroidism. Harm from pesticides is responsible for high social and monetary costs[15]

(Sorry, the references did not copy. They are available upon request)

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Attachment 6 :Pesticide By-law Proposal

To protect public health by banning the use of pesticides for cosmetic purposes in Ottawa

Key Elements of the Proposed Pesticide-Use By-law:

- Applies outdoors, and does NOT apply to agriculture or forestry
- Deals with non-essential, cosmetic pesticide uses. Uses for public health purposes continue
- Allows for permits for professional treatment of infestations
- Golf courses to have a 3-year phase-in
- Enforcement on a complaint basis as a standard nuisance by-law, with education as the first response (*NO pesticide police*!)
- Pesticide-use bylaw to be phased-in – no fines for one year (public education continues)

Preamble: The City of Ottawa's pesticide-use policy is directed at the protection of public health. Many hospitals, schools, churches, housing co-operatives, seniors' residences and commercial enterprises have followed suit. The City of Ottawa has public education materials and a web site about safer alternatives for turf and garden care. These initiatives will be further developed to support the purpose of this by-law.

Prohibition: The application and use of pesticides is prohibited throughout the City of Ottawa.

Exceptions:

1. *Low Toxicity Pesticides and Specific Use Pest Control Strategies (to protect public health) are permitted.*
2. *The use of other pesticides is authorized:*
   - *For agricultural and forestry purposes;*
   - *Inside of a building;*
   - *In public or private swimming pools, the contents of which will not enter a natural water body; and*
   - *for purifying water destined for human or animal consumption;*
   - To control an Infestation, with a Temporary Pesticide Application Permit granted by the City of Ottawa.
3. Pesticides may be applied to golf courses within the City of Ottawa for an interim period. Afterwards, only Low Toxicity Pesticides and Specific Pest Control Strategies may be used on golf courses.

Temporary Pesticide Application Permit: *A Temporary Pesticide Application Permit for treatment of an infestation may be requested by the owner and/or occupant. The Competent*

Authority appointed by the City of Ottawa must confirm the Infestation and health hazard, and be satisfied that good Environmental Management practices are not sufficient to protect health with regard to the Infestation. The Competent Authority shall have regard to heightened concerns close to Protected Properties. The application of pesticides pursuant to the Permit may be made by a licensed pesticide applicator, in compliance with all requirements indicated on the Permit, such as safety and notice provisions. The Temporary Pesticide Application Permit will be valid for 10 days, and must be displayed prominently and in view on the property from the day of receipt until 72 hours after the pesticide application. A minimum of 14 days must separate successive pesticide applications for the same infestation.

Requirements for Pesticide Applicators in Ottawa: Applications of any registered pesticide not described on the lists of Low Toxicity Pesticides or Specific Use Pest Control Strategies may only be made by a Pesticide Applicator licensed by the Ontario Ministry of Environment and Energy.

Golf courses and Pesticide Applicators (for non-agricultural and non-forestry uses) must register with the City of Ottawa by March 1 of each year. A log of pesticide use including identity, quantity, dates and areas of application must be kept and be available for inspection upon the premises, and be supplied to the City of Ottawa in November of each year.

All owners and occupants of abutting properties, and Protected Properties within 100 m of the property line shall be given 48 hours notice of pesticide applications.

Enforcement: *A by-law officer shall investigate each complaint under this by-law. Where there is evidence of a pesticide application contrary to this by-law, the officer shall inform and provide to the offender an information package on the health risks associated with pesticides and an information package on safer alternatives to pesticides. Only upon repeat offences, and beginning one year after the passing of the bylaw, shall the penalties under this by-law apply.*

Nuisance: The use of pesticides contrary to this by-law constitutes a "nuisance".

Limitations: This by-law does not diminish responsibilities or provisions under any other statute of Ontario or Canada to protect health or to preserve the environment.

Application of pesticides includes, but is not limited to, spraying, atomising, gaseous applications, and spreading of pesticides in granular, powder or liquid form.

Competent Authority ***is a person appointed by the City of Ottawa who has expertise in horticulture, pest control and environmental management.***

Environmental Management Landscaping practices (plant selection, design, maintenance, agricultural practices, etc.) to maintain a landscape using only low toxicity pesticides.

Infestation Plants, insects, fungus or other organisms that pose a hazard to human health, such as noxious weeds as defined by legislation, that cannot be controlled by good Environmental Management.

Low Toxicity Pesticides are pesticides that have a minimal impact on the environment and human health. They may be used without restriction. Low toxicity pesticides share the following characteristics:

- they represent the lowest risk, in both the short and long term, for human health;
- they have little impact on non-target organisms;
- they are specific for the target organism;
- they degrade rapidly to non-toxic products;
- they represent lowest risk for the environment during their use and their degradation.

A list of pesticides of low toxicity will be maintained by the City. It may include:

- materials that are generally regarded as safe (for example food or animal feed grade substances, such as vinegar and corn gluten for weed control, or milk or baking soda for mildew)
- soaps, dormant oil, lime/sulphur preparations, borax;
- Diatomaceous earth for crawling insect control in sheltered areas and adjacent to buildings; and
- bio-pesticides i.e. organisms that specifically attack certain kinds of insects, such as nematodes to control grubs.

Occupant A person other than the owner who occupies a building or, in the case of a commercial establishment, the person who conducts the commercial activity.

Owner The person who holds the deed of the property.

Pesticide Applicators **are persons licensed by the Ontario Ministry of Environment and Energy to apply pesticides.**

Pesticides are substances, including micro-organisms, that interfere with the normal biological processes of living organisms deemed to be pests, such as noxious plants or weeds, plant diseases, insects, fungi, or other unwanted living things. "Pesticides" includes but is not limited to insecticides, herbicides, fungicides and rodenticides. "Pesticides" includes all products that contain active ingredients of pesticides, such as fertiliser with herbicide.

Protected Properties Children's day-care establishments, schools, nursing homes, hospitals, health clinics, places of worship, public lands, old age residences, day camps and playgrounds are protected properties. As well, a residence where the owner and/or one of its occupants exhibits hypersensitivity to pesticides and/or to chemical products will be protected when the hypersensitive individual presents to the City of Ottawa a signed letter by a medical doctor licensed to practice in Ontario, attesting to their health condition.

Specific Use Pest Control Strategies are to deal with specific situations putting human health at risk. A list of least-toxic pest control strategies for health risk situations will be maintained by the Health Department of the City of Ottawa.

Appendix 5

Meg Sears (M.Eng., Ph.D.); May 5th, 2005; **2004 YEAR-END REPORT ON CITY OF OTTAWA PESTICIDE REDUCTION STRATEGY FOR PRIVATE PROPERTY**; prepared for the Coalition for a Healthy Ottawa **www.healthyottawa.ca**

The CHO recommends that the City of Ottawa

- Enact a pesticide bylaw soon, to come into force in 2006.
- Continue a public education campaign regarding pesticides and sustainable landscaping practices.
- Ask the Province of Ontario to pass a Pesticide Code similar to Québec's, to restrict sales and non-essential use of toxic chemicals.

Introduction

The Coalition for a Healthy Ottawa (CHO) is a coalition of individuals, health care professionals, scientists, and health and environmental organisations working to reduce the cosmetic use of pesticides in Ottawa. The CHO supports healthy, sustainable landscapes by encouraging non-toxic pest management strategies, and seeking a bylaw restricting the cosmetic use of pesticides.

The 2004 Year End Report demonstrates that City staff have been working hard to educate people regarding pesticides, but are not making desired progress. Measuring pesticide use is difficult, time-consuming, and inaccurate and/or meaningless if there is no legal requirement for reporting pesticide sales or use. However, it is abundantly clear that most Council-required targets are far from being met.

The goals of pesticide reductions for a healthier City can only be achieved with the support of a bylaw.

First, the Cheers

- Kudos to staff for managing to get some numbers from the pesticide industry. Working with nothing but good will, with no law requiring disclosure, the lawn care industry released hard data about the pesticides they spread. The fact that the lawn care companies spread 5 tonnes a year of purified poisons a year on lawns is reason for alarm, particularly since the industry is apparently not at all interested in reducing this.
- Kudos to staff for organising many seminars, and making a lot of relevant, interesting information available.
- Kudos to staff for surface water monitoring, although severe constraints meant that this monitoring is very limited. A major pesticide, imidacloprid, and an important breakdown product, couldn't be monitored because analysis is too expensive.

Targets

Council set targets for pesticide reduction. This means that a baseline and an endpoint have to be measured. Without reliable data at both ends, this exercise is meaningless.

However, even if the targets were to be met (they won't be), the result is Council would still sanction tonnes of toxic chemicals continuing to be spread on Ottawa turf every year. There would be no reason to believe pesticide reductions would be sustained even though safer alternatives exist. This would be unwise, because medical literature tells us that there is no safe level of exposure to pesticides, and you can't predict the toxic consequences of the myriad chemicals in the environment.

Residences - 2002 was the first year of the City's education campaign, but when City staff polled residents to determine how many people used pesticides during 2002 and 2003, use had gone up after two years of "education". At that point the baseline year was switched from 2002 to 2003. Of course, a higher baseline means a higher "acceptable" pesticide use. Given the doubtful reliability of this measurement, it is troubling that no polling was done in 2004, to verify methodology and previous results. However, counting users is quite meaningless, because it does not differentiate between someone using a tiny amount of pesticide to get rid of a patch of poison ivy, and someone dumping half a bag of left-over "weed and feed" on their lawn, regardless of whether or not weeds are there, just to "green it up". In summary, ***both the baseline and the final measurements are highly questionable and not quantitative. This polling is of little value*****.**

Hospitals and schools were mostly pesticide-free in 2002, so this 100% reduction target was relatively easy to meet, and is the only one to be met. Nevertheless, it is worrisome that although only 2% of the daycares that responded to the questionnaire used pesticides, barely half of the questionnaires were returned. It is highly likely that those concerned about the issue and not

using pesticides would be much more inclined to return the form, so possibly up to half of the daycares may be using pesticides.

Commercial properties – there is no baseline measurement, and the staff report that they will not be able to measure usage on these properties.

Lawn care companies service some homes and some commercial properties, but certainly not all. They have provided data about pesticide use.

The only audited numbers indicate that 5 metric tons of pesticide active ingredients were applied to Ottawa lawns in 2003. The industry then concocted a scenario of maximum possible pesticide applications for the land area they are contracted to care for, even if there was no indication of a pest problem. This is also flawed because there are no regulated maximum numbers of applications for many pesticides, so the pesticide postulations are arbitrary. As well, more potent and persistent pesticides are replacing ones that require higher application rates, so a measurement of total weight of active ingredients is not an indication of potential toxicity.

The industry reached the extraordinary conclusion that they could *increase* pesticide applications from 5 to 73 tonnes of purified poison per year, and still attain Ottawa's pesticide *reduction* targets. Clearly this sector is not committed to meaningful reductions. The reduction observed between 2003 and 2004 can be explained by switching to imidacloprid, an insecticide that is more persistent and potent, so smaller quantities are effective.

Education

Education is key to changing landscaping practices. Ottawa staff have initiated excellent programs, and good information is available on the website. Staff would like to increase the number of homeowners, condominiums and commercial properties switching to safer landscaping methods.

After decades of citizens' efforts, and three years of the City's pesticide education program, the only way to catch the attention of those not already committed is to pass a bylaw, to take effect in 2006. Without a bylaw, the education campaign amounts to "preaching to the choir".

Timing

What are we waiting for? *Nothing of meaning or value*

- A poll of residents, with no data regarding quantities of pesticides, and
- More data from the lawn care companies that have demonstrated little intention to reduce pesticide use.

What will we gain by passing a bylaw now rather than later?

An international study demonstrated that an education campaign will be much more effective in the context of a bylaw.

Eliminating non-essential pesticides and sustainable landscaping is important for:

- protection of public health;
- environmental protection and pollution prevention; and
- sustainability of Ottawa with respect to water, energy use and greenhouse gases.

These issues are associated with substantial costs, both short and long-term, and are national and international responsibilities.

An effective pesticide-reduction initiative is cost-effective for the population because it prevents health care costs and lost productivity. Importantly, it forestalls untold misery of victims of the ill effects of pesticides.

Effective pesticide reduction involves altered landscaping practices that will improve water quality, increase storage of carbon dioxide in soils and biomass, and increase biodiversity. Increased biodiversity has a myriad of benefits from aesthetic such as increased song-birds, to practical such as increased mosquito predators that will protect us from vector-borne diseases.

Urgency **- People are being harmed**.

Many CHO members identify pesticides as being harmful to their personal or family's health. Health care professionals and CHEO are supporting the CHO because in their professional opinion it is both plausible and probable that pesticides are contributing to health problems, including respiratory problems, allergic reactions, autoimmune diseases such as type 1 diabetes, neurological problems such as Parkinson's Disease, autism and attention deficits, reproductive difficulties and birth defects, and multiple chemical sensitivities.

Pesticides polluting our environment harm society and put us at increased risk of diseases.

Pollution is ongoing, pervasive, and serious. The Surface Water Pesticide Monitoring Program revealed that pesticides from Ottawa turf are contaminating surface water at levels harmful to aquatic species. Pesticides move from the point of application into our homes as well as our waterways.

The impairment and "dumbing down" of society as a result of chronic exposure to the "chemical soup", and particularly to neurotoxic insecticides, may be a serious threat to our future. The ecological ramifications put people at increased risk of vector borne diseases such as West Nile virus. Prevalence of organophosphates in the environment could render the pesticide malathion ineffective against adult mosquitoes. Impaired immunity across society puts us at increased risk of a pandemic.

Appendix 6 References

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2. Pesticide companies ordered to change ads; CBC News Online staff; 16 Jan 2004; http://www.cbc.ca/stories/2004/01/16/Consumers/pesticide040116

3. Oracle Poll, November 2001. “Pesticide Use Survey Results Prepared for the Toronto Environmental Alliance”. 44 pgs.

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5. The Pest Control Products (Saskatchewan) Act; P-7 and P-8 of Statutes of Saskatchewan

6. The Pest Control Products Act (Canada)

7. The Pest Control Products Regulations, 1995;

8. J. Struger, et al, 1994. “Chapter 6: Environmental Concentrations Of Urban Pesticides” in *Current Practices in Modeling the Management of Stormwater Impacts;.* CRC Press, Boca Raton, FL. Pgs.85-98

9. Canadian Environmental Law Association. 2002. “Pesticide Applicators Failed 70 % of Inspections in 2001” *The Intervenor* (27):1. http://www.cela.ca/newsletter/detail_art.shtml?x=1261

10. Ontario Ministry of the Environment, March 14, 2002. “Inspections: Pesticide Applicators”. http://www.ene.gov.on.ca/envision/swat/work/pesticide.htm#inspections

Appendix 7 IPM definitions

Industry: no mention of reduced-risk pesticides
No list of prohibited and acceptable materials list.
written policy guide : ???

Why would an industry considering 2,4-D as “safe” (1, 2 and many more) reduce its use in any IPM program?
“Those in the industry, however, say that when used right, 2,4D is a safe and effective product.” (Huebl, Stephen; Tue 08 Mar 2005; *Activist leery*; The Observer (Sarnia))

IPM accreditation helps arm superintendents in their battle against chemical pesticide bashers; Jan/Feb 2004 Pages 58-61; TURF & Recreation; http://www.turfandrec.com/

Support the principles of Integrated Pest Management as defined by Health Canada.

- Integrated Pest Management or "IPM is a decision-making process **that uses all necessary techniques to suppress pest effectively, economically and in an environmentally sound manner to sustain healthy landscapes**."

The elements of IPM include:

- Identifying potential pest organisms.

- Monitoring pest and beneficial organism populations, pest damage and environmental conditions.

- Managing ecosystems to prevent organisms from becoming pests.

- Managing pest populations using strategies that combine biological, cultural, mechanical, behavioural and, when necessary, chemical control.

6. Support mandatory IPM re-certification for all licensed employees.

7. Document pesticide reduction and pesticide alternative strategies through IPM and agree to monitor and keep records of pesticide use (active ingredient per square metre) for audit purposes.

8. **Offer a pesticide-free alternative to customers who choose not to use pesticides.**

9. Not apply pesticides unnecessarily.

10. **Not sell programs that are based on numerous pesticide applications, but rather encourage programs and services based on PHC/IPM.**

11. Use pesticides only after examination (monitoring) and

diagnosing, and in combination with additional horticultural measures.

12. **Will prepare all sites for proper application, i.e. remove items from the lawn, etc.**

13. Will apply treatments that are properly timed to maximize effectiveness. (Preventive treatments are discouraged and will only be used based on pest history as locally monitored. A province-wide monitoring system will also be utilized.)

14. Utilize spot treatments for the control of weeds and insects. Blanket applications are only used if warranted.

15. Implement an effective staff training and safety procedure.

16. **Apply pesticides only to target areas**.

17. Implement buffer zones (where necessary) when making applications adjacent to sensitive sites.

STATE SCHOOL PESTICIDE LAW

http://www.beyondpesticides.org/schools/schoolpolicies/state%20laws/tx.htm

VI. Integrated Pest Management

Overview

A good integrated pest management (IPM) program can eliminate the unnecessary application of synthetic, volatile pesticides in schools. The main elements of a good IPM program include: 1) monitoring to establish whether there is a pest problem, 2) identifying the causes of the pest problem, 3) addressing the cause by changing conditions to prevent problems, 4) utilizing pest suppression techniques, if necessary, that are based on mechanical and biological controls and 5) **only after non-toxic alternatives have been tried and exhausted, use the least toxic pesticide**. **An IPM policy should include a written policy guide and a prohibited and acceptable materials list**. Material that could be considered after using other methods include boric acid and disodium octoborate tetrahydrate, silica gels, diatomaceous earth, insect growth regulators, insect and rodent baits in tamper resistant containers or for crack and crevice placement only, microbe-based insecticides, botanical insecticides (not including synthetic pyrethriods) without toxic synergists, and biological (living) control agents.

(NOTE: This list is written for pest control inside buildings. A different list of products needs to be considered for weeds)

Steve Tvedten ; Mon Apr 4, 2005; *Why integrated pest management cannot take off*
EDITORIAL: Defining moment;
http://www.pestcontrolmag.com/pestcontrol/article/articleDetail.jsp?id=154162

…I nodded my head in agreement when the group announced its top three priorities, which centered on IPM education in various constituencies - consumers, builders and educators. Unfortunately, the discussion ignored the **biggest handicap** facing IPM in our industry: Right now,

there's no clear, concise and universal definition of just what IPM is.

When **I asked the group how they would deal with the fact that most consumers hear "integrated pest management" and think "no pesticides," a few attendees dismissed my question as unnecessary. "Everyone understands what IPM is," one attendee told me tartly**.

I couldn't disagree more. For most consumers, IPM means the absence of pesticides, a misunderstanding encouraged by less honest members of the environmental community. This **misperception is an imposing obstacle to making IPM a standard practice in the pest management industry because judicious, targeted pesticide use is crucial to any successful IPM program. The problems start when educators and environmentalists muddy that message because they're not on the same page.**

Until there's a universal definition of IPM that includes pesticides as a component, no amount of research will convince many PMPs that the practice is worth the trouble. The development of such a definition should be King's - and the rest of the industry's - top IPM priority.

The pesticide "industry" still wants to make IPM an acronym that means " include pesticides monthly" even if they can not spell pesticides. Compare with http://www.learnipm.com . **My top priority is to safely and far more effectively and economically actually control pest problems without any dangerous pesticide POISONS**!