

The Looming Shipwreck of the Golf Industry.

" Golf courses are often also as unnaturally pumped-up as a steroid-addled East-German shot-putter. " — The official position of the rabid U.S. Sierra Club in 2007.

Despite its exception status in Ontario and Quebec, we will nevertheless repeat our warning to the golf industry. It should not feel too smug about its exception from either the Ontario or the Quebec prohibition. Government conditions will be attached to this exception. These conditions will soon grow exponentially and become unreasonable. The exception status will very likely be withdrawn within three to five years. The only long-term hope for the golf industry is a strong coalition with the rest of the green space industry that utterly opposes the Ontario Cosmetic Pesticides Ban Act.

The golf industry is vulnerable to attack from several fronts. Regardless of its exception status, the golf industry faces some huge challenges because of its high degree of vulnerability in several public affairs issues. Our extensive review of these issues has led us to conclude that, in order to successfully deter the malicious efforts of the environmental movement, the golf industry must immediately address the following fifteen critical issues. —

1. The golf industry must cease focusing on the ineffectual I.P.M. as the solution to its public affairs problems.
2. The golf industry must clearly provide scientific facts that explain why its chemicals are definitely minimum-risk.
3. The golf industry must denounce the green alternatives to pest control, the so-called biological-natural-organic methods, as almost ineffective and non-existent.
4. The golf industry must develop a fully transparent and publicly accessible data base for right-to-know information concerning its chemicals.
5. The golf industry must directly and actively support litigation launched against the Ontario prohibition of pest control products, and cease being a mere casual observer.
6. The golf industry must embark on a massive public relations campaign to stop the proposed scheme by environmental groups and National Democratic Party of Canada for a national prohibition of pest control products.
7. The golf industry must explain why some of its chemicals are prohibited by other nations, but not in Canada, and cease the "*Wag The Dog*" policies on irrelevant issues such as saving quintozene.

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8. The golf industry must review and justify its current and extensive array of chemicals.
9. The golf industry must plan for the inevitable loss of its exception status in Ontario and Quebec in three to five years.
10. The golf industry must provide the public with scientific information supporting the idea that its innovative management practices may reduce the use of pest control products.
11. The golf industry must publish golf maintenance protocols and the performance standards expected by its playing customers.
12. The golf industry must scientifically define and publically discredit the misleading term " *Organic Golf Course* ", and establish policies for expelling clubs using this term from its trade associations.
13. The golf industry must strongly address and discredit the misconceptions concerning imidacloprid, chlorothalonil, 2,4-D, and other chemicals.
14. The golf industry must terminate all relationships with environmental groups like Canadian Cancer Society, World Wildlife Fund, and others, and suspend all related charitable tournaments that provide financial donations and support to these groups.
15. The golf industry must openly and financially support all political candidates that oppose any prohibition legislation.

In this article, we will address public affairs issues numbers 5 and 7.

The golf industry is effective in public affairs ... sometimes ???

The golf industry has often proven to be remarkably effective in matters relating to public affairs. The industry boasted having strong and impressive public affairs leaders, such as those listed below. We thank them and many others for their hard work. —

- Jarrod Barakett. Ontario Golf Superintendents Association (OGSA).
- Bob Burrows. Canadian Golf Superintendents Association (CGSA).
- Teri Yamada. Royal Canadian Golf Association (RCGA).

One of the principal reasons why the golf industry was provided with an exception status from the Ontario Cosmetic Pesticides Ban Act is because of OGSA, that organized an impeccable public affairs effort. Golf course employees, owners, and golfers provided comments or signed petitions in support of an exception. They submitted a total of 1316 signatures. It worked !

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Unfortunately, every once in a while, some "???" from the golf industry makes some lamentably bad statements. For example. James T. Snow, who is National Director of United States Golf Association Green Section (USGA). Snow has made comments that can only be described as distorted untruths that do not help the image of the golf industry. He has made the golf industry look like a bunch of medieval spray jockeys that have been bent on polluting our planet with heavy metals and other poisons. Snow is also wrong about the history of the golf industry. How can this guy be even allowed to talk to the media ??? Take a look at what Snow issued as a statement in the magazine Golf Digest in May 2008. The underlined comments [in brackets] are our own, as always, from an independent perspective. —

" Oh my gosh, back in the '20s they literally cured dollar spot. [Untrue !] They eliminated dollar spot from golf courses. [Untrue !] But they used mercury, cadmium and lead arsenic to do it. [Mostly untrue !] How do you like that? All you had to do back in the 1960s was put chlordane on the greens and you wouldn't have an insect problem for 25 years. [Untrue !] "

Public affairs issue number 5.

The golf industry must directly and actively support litigation launched against the Ontario pesticide prohibition, and cease being a mere casual observer. **Why ?** Because the pressure exerted on the Government of Ontario by the environmental movement to rescind this exception is enormous. Because the Government of Ontario itself is fully infested by the environmental movement. Because the current Premier of the Government of Ontario is both tainted as an environmentalist and a biologist. Consequently, we predict that the exception status now enjoyed by the golf industry will be lost within three to five years. In anticipation of this looming shipwreck, it is now time for the golf industry to support the legal challenge mounted by the professional lawn care industry.

Suzuki has set the tone against the golf industry.

Within mere hours of the adoption of the Ontario Cosmetic Pesticides Ban Act, on June 18, 2008, David Takayoshi Suzuki set the tone for the next stage of environmental terrorism, this time against the golf industry.

According to Suzuki, the golf industry should not be entitled to exceptions. The following is an excerpt from the web site of the troublesome David Suzuki Foundation. (The underlined emphasis of some words is our own.) —

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" On June 18, 2008, lawmakers in Ontario passed the Cosmetic Pesticides Ban Act, which prohibits the sale and use of pesticides on lawns and gardens throughout Canada's largest province. This is a major step towards reducing pesticide use, because not allowing pesticides on store shelves is simply the best way to make sure that they're not used. If you are one of the thousands of Ontario residents who contacted the government in support of a sales ban, THANK YOU ! You are a part of this important victory. But this good news has some rough edges. [...] [The new law] allows golf courses to continue using pesticides and gives power to the Ontario minister of the environment to allow other exceptions, a potentially dangerous loophole. "

What danger is this man talking about ? All of a sudden, Suzuki has become an expert on golf course maintenance and pest control products ? Not ! Suzuki's posturing and position is nothing new. He has been taking a strong position against the golf industry since 2004. Here are two examples. The first example is from Suzuki himself in 2004. —

" Cosmetic pesticides are bad news says broadcaster and scientist Doctor David Suzuki. ' Pesticides are everywhere today, and many of them contain ingredients known or suspected of causing cancer. We shouldn't be putting our health in danger because we like to garden or play golf. ' "

On October 15, 2008, David Suzuki Foundation expressed the following comments on the options under consideration for managing lawn care and landscape pesticide use in the Province of New Brunswick.. —

" If provincial prohibitions exempt golf courses, as proposed in the discussion paper, municipalities need clear authority to restrict pesticide use on golf courses within their boundaries to better protect public health and the environment. "

No golf industry exception.

Suzuki is not alone. Let's remember that Suzuki is considered as a leader of the environmental movement in Canada. He is essentially " *The Puppet Master* " of the environmental movement. Predictably, some of the leading fear-mongering organizations within the environmental movement are also complaining about the golf industry loophole

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The nine following organizations, including Suzuki, have publicly stated, and in one form or another, that they **do not want any prohibition exceptions for the golf industry**. They want the loophole closed. —

- Canadian Association of Physicians for the Environment (CAPE).
- Canadian Cancer Society (CCS).
- Canadian Environmental Law Association (CELA).
- David Suzuki Foundation.
- Green Party of Ontario.
- New Democratic Party of Ontario (NDP).
- Pesticide Free Ontario (PFO).
- Registered Nurses' Association of Ontario (RNAO).
- Sierra Club of Canada.

The golf industry loophole.

The next six paragraphs are excerpts from a " *Fact Sheet* " from the Ontario Ministry of the Environment issued on March 4, 2009. (The underlined emphasis is our own.) —

1. " **What the Golf Course Owners/Operators Need to Know.** *The ban contains exceptions for public health and safety (including the protection of public works structures), golf courses, specialty turf, specified sports fields, arboriculture and to protect natural resources, if certain conditions are met. There are also exceptions for agriculture, forestry, research and scientific purposes, and uses of pesticides for structural exterminations (e.g., in and around homes to control insects) and uses of pesticides required by other legislation. "*

2. " **Definition.** *Golf courses are defined as the areas used or intended to be used as playing surfaces including tees, fairways, greens and rough. Mini-golf or mini-putt courses are not considered golf courses. "*

3. " **Exception for Golf Courses.** *Golf courses require high performance standards for their playing surfaces and have to use some pesticides to achieve those standards. They will be able to use pesticides only on the actual playing surfaces and not on lawns, gardens, patios and other outdoor areas associated with the course. Biopesticides and lower risk pesticides can be used to manage weeds, insects and plant diseases on lawns and gardens and to maintain the health of trees. "*

4. " **IPM Accreditation.** *In order to continue using pesticides in their maintenance operations, golf courses must be fully accredited in integrated*

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pest management (IPM) within two years of the golf course being registered by an approved IPM accreditation body. IPM accreditation requires training of grounds-keeping staff, maintaining detailed records of pesticide use, employing alternative methods of controlling pests prior to pesticide use, and participating in an annual audit process. There is also an annual administrative fee associated with maintaining accreditation. "

5. " **Annual Report.** *Owner/operators will be required to prepare an annual report disclosing the locations and amounts of pesticides used on the golf course. This report must be made public on a website and a copy must be provided to the public on request. The report must contain the following information :*

- *The name and quantity of each active pesticide ingredient used.*
- *An explanation of any differences between the information regarding this year's pesticide use and the information provided in the previous annual report.*
- *A map or plan of the golf course showing all application areas.*
- *Once the golf course is fully accredited, it must provide an explanation of how maintaining accreditation by the IPM body minimized the use of the pesticide ingredients on the golf course and how it will minimize the use during the next year.*
- *The name, contact information, registration number and signature of the golf course's IPM agent.*
- *Confirmation by the owner or a representative of the owner of the golf course that the report is complete.*
- *Any other information that is asked for by a Ministry of the Environment Director. "*

6. " **Public Meetings.** *The owner or operator of a golf course of his or her representative must attend and present the report at a public meeting held before December 1st in each calendar year. "*

The official reason for the golf industry exception status.

The Government of Ontario believes that the maintenance standards used by the golf industry require that it be given an exception status. On the matter of maintenance standards, the Government of Ontario issued the following statement in June 2008. —

" The MOE [Ontario Ministry of the Environment] recognizes that golf courses require high performance standards for the playing surfaces and require some pesticide use to achieve such standards. The exception to the prohibition on the use of prescribed pesticides on golf courses is conditional upon complying with certain requirements. Prescribed conditions will be considered in the development of the regulations required to make the prohibition operable. "

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Politicians who disagree with the golf industry exception.

In September 2008, the Ontario New Democratic Party (NDP) has expressed its dissatisfaction with the golf exception. The following is a statement from Peter Tabuns, the NDP Environment Critic. —

" Spraying of pesticides on golf courses is dangerous to golf course workers and players alike — and it is simply unnecessary. The vast majority of Ontarians want the government to do the right thing and close the loophole in the Cosmetic Pesticides Ban Act which allows the continued application of pesticides to golf course greens. "

Tim Hudak is a Member of Provincial Parliament for Niagara West–Glanbrook in the Province of Ontario. In 2008, Hudak made the following statement. —

" If you take a closer look at the government's proposed legislation, it is clear that it is more about scoring political points rather than truly improving Ontario's environment. For starters, the so-called ban exempts pesticide use in agriculture, golf courses, managed forests and other areas that the Minister deems appropriate. In reality, the exemptions make up more than 90 per cent of total pesticide use in Ontario. "

How to avoid losing the golf industry exception status.

The success of a legal challenge against the Ontario Cosmetic Pesticides Ban Act rests in the hands of Jeffrey Lowes and M-REP Communications. This organization currently represents lawn and tree-care companies in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia. This has made M-REP one of the largest organizations in Canada as the voice of the lawn and tree-care industries in government circles. We encourage the golf industry to contact Lowes, and give him their financial support. The golf industry must directly and actively support litigation launched against the Ontario pesticide prohibition before the looming shipwreck of its lost exception status.

Public affairs issue number 7.

The golf industry must explain why some golf chemicals are prohibited by other nations, but not in Canada, and cease its policies of " *Wag the Dog* " on irrelevant issues such as saving quintozene. **Why ?** Because critics will point out that that if certain chemicals can be prohibited elsewhere, then why not in Canada. Because defending

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products such as quintozone is a waste of time, and doing so actually damages the political credibility of the golf industry. The looming shipwreck of the golf industry is fast approaching, and it is time for the golf industry to address this critical public affairs issue.

Chemicals prohibited in other nations.

On April 26, 2008, as part of a coalition to prohibit pest control products in Ontario, the troublesome David Suzuki Foundation and its allies released the following statement ...

" At least 50 pesticide active ingredients registered for use in Canada have been prohibited in other OECD [Organization for Economic Cooperation and Development] countries. "

Of the fifty mentioned by Suzuki, five are specifically used by the golf industry. The following ingredients are reportedly prohibited in other " *more advanced* " countries. —

- chlorothalonil (Daconil).
- iprodione (Rovral).
- quintozone (PCNB).
- thiophanate-methyl (Senator).
- 2,4-D.

2,4-D prohibited by four other nations.

2,4-D is not approved for lawns and gardens in Denmark, Kuwait, Norway, and Sweden. 2,4-D use is severely restricted in Belize, but it is approved in the European Union (EU), of which both Sweden and Denmark are members. The situation concerning 2,4-D will be addressed as Issue Number 13. (To be published at a later date.)

Chlorothalonil (Daconil) prohibited by one single nation.

Chlorothalonil has been prohibited, or is no longer registered, in Sweden as of 1991; however, the European Union (EU) has approved its use in 2006. Sweden is a member of the EU. In North America, one of the major issues concerning chlorothalonil is the death of Lieutenant George Prior. The situation concerning chlorothalonil will be addressed as Issue Number 13. (To be published at a later date.)

Iprodione (Rovral) prohibited by one single nation.

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Iprodione has been prohibited in Denmark since 1998, but approved by the European Union (EU) since 2003. Denmark is a member of the EU

Thiophanate-methyl (Senator) prohibited by one single nation.

It has been prohibited in Denmark (1990). This ingredient is no longer a major part of fungicide programs in the golf industry.

Quintozene (PCNB) prohibited by other nations.

Quintozene has been voluntarily withdrawn in Austria (1988) and Finland (1996), and prohibited in Germany (1988) and the European Union (EU) (2000). It may soon be withdrawn from the Canadian market. Quintozenes has been very recently withdrawn from the United States (US) market.

Quintozene is a fungicide that is also known as PCNB. This active ingredient has been used in the golf industry in very affordable products like Terraclor and FF II. It is classified as a Group 14 fungicide, an organochlorine, and controls diseases like the snow molds, which are located in the thatch and soil, as well as on the foliage. Quintozenes is a product that was brought to market fifty years ago, in the mid-Twentieth Century. The first Canadian registration date for " *Quintozene 75% Wettable Powder Fungicide* " was 1959.

Best results are obtained when quintozene is used in a preventive application program. It is sometimes recommended that quintozene be watered lightly as a soil drench to wash the chemical down into the soil.

The effects of climate on quintozene.

The effect of rain and melting snow severely affects the performance of quintozene. A single application of this, or any other fungicide product, will not always provide sufficient always provide a sufficient level of control of the snow mold diseases of turf.

In Eastern Canada, fungicide applications may need to be repeated several times for the control of snow mold, in at least four distinct periods of time. —

- During winter, after a mid-winter thaw.

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- Early in the spring, immediately after snow melt.
- Early winter, just prior to the first permanent snow fall.
- Late in the fall, during periods of high rain fall.

The problems associated with quintozene.

Turf managers have claimed to have experienced several problems when using quintozene, especially when maximum rates are used. Here are some examples. —

- Chemical root pruning of desirable grasses, especially after continuous and repeated use for several years.
- Death of turfgrasses in areas of application overlap.
- Increased injury from specific diseases, such as Take All.
- Phyto-toxic tip burn of turfgrass leaves.
- Sensitivity to rain and melting snow, leading to a poor duration of control and the need for an increased frequency of application.

The duration of fungicide control will be reduced when humid conditions are caused by unceasing rain and melting snow, or when turf leaves do not stop growing. In both situations, the amount of fungicide remaining on the foliage may be insufficient to provide adequate control against the snow mold diseases.

The amount of fungicide applied late in the fall, **just prior to the first permanent snow fall**, must persist until snow melt, and preferably until early spring. Some fungicides will persist longer than others. For example, more conventional Twenty-First Century fungicides, like iprodione (Rovral Green) and especially Instrata, will tend to remain longer on the leaves than older chemicals like quintozene.

In general, practical field experience has indicated that iprodione, and many other modern ingredients, have a low sensitivity to rain or melting snow, tolerating up to five-inches of accumulated rain. On the other hand, quintozene may have a higher sensitivity to rain or melting snow, tolerating no more than three-inches of accumulated rain.

Some turf managers claim that quintozene provides a major advantage over other more conventional fungicides, since its mode of action is multi-site. In comparison, many modern fungicides have been classified as single-site, and hence, have been deemed as higher in risk for problems of resistance. It should be noted that resistance of fungicides to snow mold diseases is a rare threat, and it is unlikely that any turf manager will ever

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encounter resistance to any pest control product at any time throughout his/her careers.

The CGSA attempt to "save" quitozene.

Incredibly, Canadian Golf Superintendents Association (CGSA) has petitioned the Pest Management Regulatory Agency of Health Canada (PMRA) concerning the future of quitozene in the market place. The next three paragraphs are excerpts from the CGSA request on March 23, 2009.

1. " [...] *the snow mould [sic] application is the most costly of all applications made during the season. Therefore, it is imperative that golf course superintendents have reliable and cost effective options available. The quitozene-based products provide consistent disease control at prices that are significantly more cost effective than alternative chemistries currently registered for snow mould [sic]. The loss of quitozene will significantly limit the ability of some golf courses to adequately protect their courses from this disease. "*

2. " *Although there are alternative fungicides available to golf superintendents for snow mould [sic] control, quitozene is a major tool in a resistance management program. Quitozene is one of only a few contact fungicides and has a multi-site mode of action. Most of the newer fungicides have a single site mode of action. If quitozene is no longer available, these single site products will have to be used more often. This will cause a significant increase in the risk of resistance occurring. "*

3. " *The loss of quitozene would have dramatic financial and agronomic impacts on golf courses across Canada. The CGSA respectfully requests that, as part of the re-evaluation process, the PMRA give consideration to the value of quitozene within the turf industry and to the continuation of its availability to the golf course sector. "*

Putting fungicide use into perspective.

Critics of quitozene may have failed to take into account the affordability issue, which is of great concern to the Golf Industry, with ever-tightening budgets and flat or decreasing revenues. However, it must be noted that fungicide usage represents **less than ten per cent** of a golf course maintenance budget, whereas employee remuneration and fertilizers may be as high as **eighty per cent of the budget**. It can be argued that

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efforts to tighten the golf course budget can be more effectively focused on manpower and nutrients.

It should also be noted that in those Canadian regions that are severely prone to the development of Fusarium Patch disease (a form of snow mold), particularly in the Pacific Northwest, quintozone is the product of choice — **in granular form**. The dependence of the golf industry on this formulation is a direct result of the refusal of many turf managers to purchase and operate modern spray application equipment. Virtually all fungicides available for the control of Fusarium Patch must be applied with a sprayer. Granular quintozone is applied with mere rotary or drop spreaders. The loss of quintozone will likely represent an opportunity for many turf managers to now use modern Twenty-First Century application equipment with modern Twenty-First Century products.

The U.S. decision concerning quintozone.

In the United States, the Environmental Protection Agency (EPA) concluded that the risks when using quintozone were substantial from an environmental standpoint. The Pest Management Regulatory Agency of Health Canada (PMRA) has also expressed concerns about quintozone. The major concerns cited are (the underlined emphasis is our own) ...

- quintozone is persistent in the environment, with aerobic and an anaerobic soil metabolism half-life of 189 and 30 days, respectively.
- quintozone bioaccumulates in the aquatic food chain. It persists in the environment (half-life in soil of greater than 60 days), accumulates in human and other species (bioconcentration factor greater than 1000 days), and is toxic to fish and invertebrates on acute exposure basis.
- quintozone is highly volatile and can be carried by long-range atmospheric transport. Residues have been detected in regions where the product was never used, such as Saskatchewan.
- quintozone is immobile in most soils, but potentially able to partition to organic matter in the soils and move to surface water through erosion. Therefore, the surface water was found more likely to be contaminated.

The EPA concluded recently that the re-registration of quintozone was acceptable provided that **all turf uses were terminated**. It is very likely that the Pest Management Regulatory Agency of Health Canada (PMRA) will follow with the same decision, by prohibiting the sale of quintozone beyond

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2010, and prohibiting the use of quintozene beyond 2011. However, Canadian Golf Superintendents Association (CGSA) has expressed a strong desire to change this outcome.

The CGSA should do something else with its time.

In view of the many questions concerning the safety of quintozene, to both the environment and desirable turfgrasses, it would seem preferable that Canadian Golf Superintendents Association (CGSA) withdraw its petition in support of quintozene. Critics of this defence of quintozene have pointed out that the CGSA should devote its energies to more serious issues concerning pest control products, such as the imminent threat of a nation-wide prohibition and the predictable loss of its exception status. Moreover, by defending a product associated with serious health, environmental, and turf phyto-toxicity issues, the CGSA has weakened its credibility as a public affairs spokesman for the golf industry.

So. Why has CGSA implemented a doomed operation to save quintozene ? Perhaps it is trying to " *Wag the Dog* ".

Wag the dog with quintozene.

The interest of Canadian Golf Superintendents Association (CGSA) in saving quintozene may be seen as an example of a trade association performing what is called " *Wag the Dog* ".

" *Wag the Dog* " is best known as a 1997 film starring Robert De Niro and Dustin Hoffman. It is based upon the novel " *American Hero* ". It is the story of a group of people who attempt to distract the U.S. electorate from a presidential sex scandal by hiring a Hollywood producer to fabricate a fake war with Albania. An event was created in order to take political pressure away from a scandal.

Real life recent political situations of " *Wag the Dog* " include the four following examples. —

- Premiers of Quebec and Referendums for Separation, which were used to distract the electorate from problems with the economy.
- President Bill Clinton and the N.A.T.O. bombing of Kosovo, which was used to distract the electorate from his sex scandal with Monica Lewinski.
- President George H. W. Bush and Operation Desert Storm.

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- President Jimmy Carter and Operation Eagle Claw, which was used to distract the electorate from his weaknesses as President.

To implement a doomed operation to save quintozene is a means of diverting negative attention away from the more serious and complex issues surrounding the prohibition of pest control products across Canada. We will let the reader decide if this is true, or not.

Who are the people responsible for Wag the Dog ?

We do not necessarily hold the elected leadership responsible for the weak actions of CGSA. We blame the administrative staff of CGSA. As is the case within many trade associations, the administrators frequently dictate public policy for the elected officials. Unfortunately, our extensive review of the CGSA handling of public affairs issues has led us to conclude that its administrative staff is perhaps not suited for this task. In fact, we strongly recommend that it be entirely removed from the functions of public affairs.

Concluding thoughts regarding prohibitions in other nations.

If a chemical can be prohibited in Kuwait and Belize, why can't it be prohibited in Canada ? The environmental movement will argue that these nations are " *innovative world leaders* ". If they can do it, why can't Canada ?

The golf industry can argue back that, under the provisions of the 2004 Pest Control Products Act, a special review of a particular chemical can also be ordered if all of its uses have been prohibited in other countries.

If a chemical can be prohibited in Kuwait and Belize, why can't members of the environmental movement simply move to these wonderful countries ? No comment. The reader can figure out our answer. (Deport them all !)

Authors' Note.

Information presented here has been developed for the education and entertainment of turf managers. The events, characters, companies, and organizations, depicted in this article are not always fictitious. Any similarity to actual persons, living or dead, may not be coincidental.

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About The Principal Author.

William H. Gathercole has been following the evolution of environmental terrorism for over a quarter-century. He holds a degree in Horticulture from the University of Guelph, and another pure and applied science degree from McGill University. He has worked in virtually all aspects of the green space industry, including public relations and environmental safety. Mr. Gathercole has been a consultant and instructor for decades. He is a contributing columnist for TURF & Recreation Magazine.

Personal Note and Disclaimer.

In sickness or in health, with the help of his entourage, we still hope to keep all of our readers entertained and informed. Bill continues to recover from his serious motor vehicle accident. In order to complete this particular article, it has been co-authored with Norah G. Well-wishers may send a personal note to Bill by way of this magazine, or by whg007@gmail.com. By the way, the opinions expressed in this article, even though from an **independent perspective**, may not reflect those of TURF & Recreation Magazine.

References for readers that are curious-at-heart.

Although every item found within this article has been carefully researched, there is no exhaustive list of references since this is not a scientific journal. Besides, the sheer number of references and documents that were used to support this article are far too numerous to list within the confines of this magazine. However, the authors will provide references to any reader that requests them. Please send your request to whg007@gmail.com

In the next exciting issue of TURF & Recreation Magazine ...

More on the looming shipwreck of the golf industry. See you in sixty days. Excelsior. © W.H.G. & N.G.