



# GREENWORKS



## MESSAGE FROM THE EXECUTIVE DIRECTOR

### MY WHITE ROOF IS REALLY COOL

Temperatures in the arctic are rising at almost twice the rate of the rest of world. As polar ice caps melt, more sunlight is being absorbed by the open water with less of it reflected back into the atmosphere, contributing to climate change.

There is a worldwide movement afoot to paint dark, heat absorbent roof colours heat reflective white. It has been said that this is one of the top three measures that can be taken to mitigate global warming.

Although white membrane roofing material did cost me 15% more than black, I expect to get a longer roof life and am more comfortable in summer. Energy savings are typically 10%-30% for those with air conditioning. U.S. Energy Secretary Steven Chu maintains that if we were to paint 30 billion square feet of roof space white, it would be the equivalent of taking 75 million cars off the road for a year.

The mayor of the borough of Rosemont in Montreal is proposing a bylaw making white the mandatory colour for new roofs and roof repairs, as white roofs can stay up to 30% cooler in the summer. I think the cold climate argument that dark roofs lower heating costs is unfounded as my roof is covered in snow all winter.

The Cool Roof Rating Council lists benefits which include:

- Urban Heat Island Mitigation - By reflecting solar radiation back into the atmosphere, white roofs help to maintain cooler air temperatures in the urban environment.
- Reduced Smog – Reducing urban heat and ambient air temperatures in turn improves air quality. White roofs help decrease the rate of smog formation which increases at higher temperatures.
- Health Benefits – Lower temperatures and improved air quality result in a reduction of heat and smog related health issues.
- Peak Energy Savings – As cool roofs reduce AC use, the energy savings occur when demand for electricity is at peak, reducing grid demand and risk of brownouts.
- Secondary Energy Benefits – A cooler urban environment means vehicles need less AC. There are less CO2 emissions from both cars and electricity generating power plants.

My 900 sq.ft. white roof may not do much to replace the melting polar ice caps, but if we all had white roofs ...

Gloria Marsh

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## YREA TO LAUNCH INDUSTRIAL HEMP PROJECT – BE A PART OF IT!

We are very excited about our ambitious 3 year plans to kick start industrial hemp growing, processing and end product manufacturing. At the end of our hemp awareness campaign our goal is to see an initial 1000 acres of hemp farming established throughout the northern 6 municipalities of York Region with a YREA joint venture social enterprise demonstration hemp farm open to the public.

We need to build for a sound future by tackling unsustainability head on. Growth in oil production peaked in 2005. To prepare for a new era of energy contraction it is imperative that we develop a locally strong, green economy, resilient to rising energy costs. Peak oil, climate change and a sustainable green economy would be addressed through a local hemp industry.

**BECOME A PART OF OUR GREEN SOLUTION BY SUPPORTING US WITH A GENEROUS DONATION**

### BECOME A YREA MEMBER/SUPPORTER

An annual membership to the York Region Environmental Alliance is \$20. By contributing to YREA with a membership or a larger donation you will enable us to help keep you informed.



If you prefer, enclose this form with your donation and mail to: YREA, 225 Lakeland Crescent, Richmond Hill, ON L4E 3A5

Name \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_

City/Town \_\_\_\_\_ Postal Code \_\_\_\_\_

Phone \_\_\_\_\_ email \_\_\_\_\_

Please note the amount of your donation enclosed:

Guardian \$2000 & up	<input type="checkbox"/>	Protector \$1000-\$1999	<input type="checkbox"/>
Custodian \$500-\$999	<input type="checkbox"/>	Steward \$200-\$499	<input type="checkbox"/>
Keeper \$100-\$199	<input type="checkbox"/>	Friend \$ _____	<input type="checkbox"/>

Please note: YREA does not exchange the personal information of our members/supporters with other organizations or groups.  
Registered charity - #84559 0553 RR0001

### YREA THANKS THESE KIND DONORS FOR THEIR SUPPORT

Custodian – Patty Ella, Anita Komorowski  
Friend – Ron Alfrey, Mary Dubé,  
– Anne & Pete Wilson

WE ARE ALSO EXTREMELY GRATEFUL FOR GENEROUS CORPORATE SUPPORT FROM



YREA extends a big thank you to these committed volunteers who have contributed so enthusiastically to our recent activities:

Jim Bradley, Carolyn Brown, Liz Couture, Patty Ella, Andrew Frolkin, Laurin Fulton, Dora Hu, Anita Komorowski, Vanessa Pickett, Joan Seto, Susan Sheard, Amie Tsang, Constance Tsang, Amy Weinburg, Rhianna Wood



## *MUNICIPALITIES NEED TO RETHINK WATER FLUORIDATION IN LIGHT OF NEW FINDINGS*

By Liz Benneian, Manager, Education & Communication,  
Oakvillegreen Conservation Association

When dental health practitioners began urging the fluoridation of water many decades ago they believed it would protect our teeth from cavities. Since then it's become clear that fluoride works when applied topically, directly to the teeth, through the use of dental treatments or brushing with fluoride. Swallowing fluoride doesn't strengthen teeth but it does expose the body to a chemical linked in scientific studies to lower IQs in children, increased chance of bone cancer, thyroid disease, hip fractures and many other harmful effects. The cautions on your toothpaste read "do not swallow" and "don't use on children under 3". Why then, are we adding it to our drinking water? By allowing fluoride to be added to our drinking water we are giving more power to our politicians than we give to our doctors who are not authorized, by law, to medicate us without our consent.



Fluoride is also toxic to aquatic life. 99% of all municipally fluoridated water ends up in the environment. When putting fluoride in drinking water was first proposed, most people did not have access to good dental care and fluoridated toothpastes or exposure to fluoride-laden pesticides. Now we are being overexposed to fluoride and the damage is showing in our children's teeth. Fluorosis, which can be seen in white spots, brown streaks and in severe cases, pitting of the tooth enamel, is caused by over exposure to fluoride and is a symptom of the damage fluoride is causing elsewhere in the body. 21-35% of Halton teenagers have fluorosis. The disfigurement caused by fluorosis can cost thousands of dollars in dental bills to fix. The American Pediatric Society, the American Dental Association, and the Centre For Disease Control all recommend making infant formula without fluoridated water.

Most Canadians do not have fluoridated tap water and studies have shown there is no statistical difference in cavities in people living in fluoridated and non-fluoridated areas. Reassurances from Health Canada that fluoride is safe do not give us comfort. Health Canada has said many products/chemicals were safe until it was proven they weren't. It wasn't that long ago they thought putting flame retardant chemicals in children's pajamas was a good idea. There was a time when having Bisphenol-A in plastic water bottles was of no concern either. It is time for our regional politicians to take a hard look at the chemicals, not only fluoride, added to our water and reevaluate whether it is doing us more harm than good. If you are a Halton resident and your children have fluorosis we'd like to hear from you. Email [president@oakvillegreen.org](mailto:president@oakvillegreen.org)

Editor's note – There are naturally occurring trace amounts of fluoride in water of jurisdictions that source their supply from groundwater. Municipalities that rely on water from Lake Ontario have much higher levels of added fluoride which is completely different, being derived from hydrofluorosilicic acid, a toxic, hazardous waste byproduct from chimney scrubbers of phosphate fertilizer plants. Rumor has it that Toronto is considering a halt on water fluoridation. GTA residents who want to learn more can visit <http://www.voteoutfluoride.com/> and <http://www.fluoridealert.org/>.



## PowerStream offers more conservation opportunities this fall!



Managing energy costs by making small lifestyle changes, such as using the microwave oven to prepare meals, reducing phantom loads or doing laundry in the evenings and on the weekend, will be some of the topics covered at PowerStream's new series of **Learn to Conserve** Workshops. Residents are invited to attend these free seminars focused on learning about sensible energy consumption habits and how to take advantage of the **saveONenergy<sup>OM</sup>** conservation programs.

"We hope that our customers will take advantage of these free workshops, which have been designed to help them learn how to save money through the adoption of simple energy-conservation practices," said John Sherin, PowerStream's Director, Conservation and Demand Management. "They will also be introduced to new

incentives that are available, how they can help them better manage their electricity costs and understand Time-of-Use (TOU) rates."

Workshop participants will be presented with information on energy-saving programs, home conservation strategies, how to reduce electricity consumption in the kitchen through a live cooking demonstration and new incentives available through the **saveONenergy** conservation programs for residential customers, some of which are absolutely FREE!

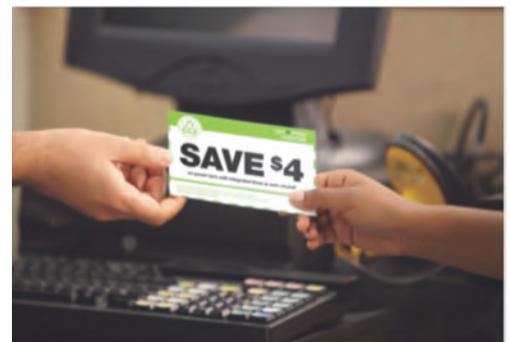
## The fall Learn to Conserve Workshop schedule is as follows:

September 15th @ 7:00 p.m. Multi-purpose Room, Vaughan Civic Centre 2141 Major Mackenzie Drive	October 5th @ 7:00 p.m. Bradford Library 425 Holland St. West	October 19th @ 7:00 p.m. Rehearsal Hall, Markham Theatre 171 Town Centre Blvd
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Registration is required in advance, please call 1-877-963-6900 ext. 25068 or email [learntoconserve@powerstream.ca](mailto:learntoconserve@powerstream.ca).

Keep an eye on our website, [www.powerstream.ca/conservation](http://www.powerstream.ca/conservation) for information on where we will be during the upcoming Fall Retailer Events!

We will have representatives on-site at local Canadian Tire, Home Depot, and Lowes locations to answer questions about energy use and assisting customers with signing up for any of our **saveONenergy<sup>OM</sup>** conservation programs. Discount coupons, similar to the one shown here, will be on hand for distribution to shoppers who visit our booth.





## CLEAN RIVERS - CLEAN LAKES = CLEAN DRINKING WATER

The single most detrimental factor that impacts the health of our groundwater, headwaters, marshes, rivers, lakes and watersheds is human activity. Whether intentional or not, our day to day actions are a major contributor to polluted runoff which infiltrates the ground, water table, storm and sanitary sewers, and rivers, streams and lakes, which we depend on for drinking, fishing and swimming. Everyday household activities are a major contributor to contaminated runoff, which is among the most serious sources of water degradation. When we allow rain to wash pet waste, fertilizers and pesticides from lawns and oil from driveways into our ground water and storm sewers or when we flush paint, solvent and toxic household chemicals down the sink, we are contaminating one of our most precious resources – our fresh water. Our actions can harm or help maintain the quality of our water resources.

### PLEASE MAKE A COMMITMENT TO FOLLOW THE GUIDELINES BELOW SO WE CAN KEEP OUR WATER CLEAN AT HOME

- Pick up pet waste and dispose appropriately.
- Never dump used motor oil, paint or household chemicals on the ground or into storm drains.
- Don't pour household chemicals down the sink or down the toilet. Take to a hazardous waste depot.
- Read and follow directions regarding the use and disposal of household chemicals and their containers.
- Use non-toxic alternatives to conventional home cleaning products.
- Choose not to use fabric softeners when washing clothes and you will prevent more than 10 toxic chemicals from entering our water system.
- Sweep driveways and patios clean instead of hosing down with water.
- Do not dispose of medication or prescription pharmaceuticals through our plumbing system or into our landfills. Medications directly impact wildlife and water treatment plants do not have the technology to properly neutralize these substances. Unused medications should be returned to the pharmacy.

### IN YOUR YARD

- Plant trees, shrubs and ground covers that can filter pollutants and reduce storm water runoff.
- Protect and care for established trees in your yard and neighbourhood.
- Install a rain barrel or French drain which helps direct water into your garden and water table and away from storm sewers. Better yet, consider retrofitting your home with a rain harvesting system which catches rain from roof and gutters, transports the water through piping and cleans water for future intended use.
- Avoid all chemical pesticides and herbicides.
- Use natural fertilizers such as blood and bone meal, compost and manure in limited quantities.
- Don't cut your grass too short. Adjust your lawnmower to 3" to reduce runoff from lawns and keep your grass healthier.
- Plant native vegetation and choose species that require little fertilizer and watering.
- If you do water your garden, make sure water doesn't wash over streets and sidewalks.
- Set out yard debris for municipal yard waste collection, or use it to make compost and mulch to hold moisture in the soil and control weeds.
- Decrease impervious surfaces around your home by adding more landscaping or by replacing asphalt with porous pavers such as interlocking bricks.
- Maintain septic systems on an annual basis.
- Do not bury garbage on your property. What you bury can negatively impact groundwater and will eventually make its way into streams, rivers, ponds or lakes.
- Consider using sand or less harmful de-icers in place of salt for traction in winter.
- It is unlawful to drain salt water from pools into a storm sewer. It must be drained to a sanitary sewer. Chlorine pools must be dechlorinated before draining. Abide by your municipal bylaws.

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# GREENWORKS



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## YOUR CAR

- Drive your car less so that less tire dust enters our waterways.
- Keep your vehicle well tuned and repaired to reduce automotive fluid leaks on roadways. If spills occur, clean up with sand, kitty litter, microbes or other eco friendly ways and dispose of clean up materials appropriately. Do your research!
- Take used motor oil to appropriate facilities.
- Don't wash your car at home and allow suds and cleaning chemicals to run into the ground, street or storm drain.
- Use a car wash that recycles wash water.
- Keep your tires properly inflated to minimize abrasion that contributes to air and water contamination by tire dust.

## YOUR BOAT

- Don't dump garbage or sewage from your boat into the water. This is illegal.
- Bring all garbage and recyclables to land-based collection depots.
- Watch for fuel spills when you fill your tank. Take eco friendly remedial action to clean up spills and bilge water.
- Use oil absorbent materials to catch drips from the fuel intake and the vent overflow.
- Reduce your wake near the shoreline to minimize erosion.
- Use phosphate free cleaners bearing the EcoLogo to wash your boat.
- Use steel sinkers or washers instead of lead sinkers, which are harmful to waterfowl, when you go fishing.
- Keep your engine well tuned and make sure seals, gaskets and hoses don't leak.
- Don't dump bait or fish entrails into the water or on land.
- Wash your boat hull and equipment before moving to another water body to remove invasive species.

## LET'S DO ALL WE CAN TO KEEP OUR WATERS CLEAN

When our water bubbles up from our marshes and wetlands that are the headwaters of our streams on the Oak Ridges Moraine it is relatively clean. It has been filtered by moraine sand and gravel and wetland vegetation. It is not so clean when it reaches the intake pipes for our drinking water supply, requiring extensive treatment. It takes little effort to do our part to keep our water clean and our ecosystems healthy.



*We thank the RBC Blue Water Project for funding towards the Humber Headwaters Enhancement project in the works for Yonge St and King Road in Oak Ridges.*

*The information above, available as a brochure is a component of this endeavour.*



## HOW ECO-FRIENDLY IS BAMBOO?

By Joan Seto, YREA volunteer

### THE GOOD NEWS

Bamboo is one of the most eco-friendly plants on earth. Some of the major green points going for it are:

- Compared to an equivalent stand of trees, bamboo produces 35% more oxygen while absorbing 4 times the amount of carbon dioxide in the atmosphere.
- It rarely needs replanting. The more it is cut down, the faster it grows back and it can be harvested in 3-5 years.
- It can grow on marginal land, not suitable for agriculture without the use of pesticides, chemical fertilizers or irrigation.
- It is an excellent soil erosion inhibitor, making it perfect for growing on steep hillsides.
- Because the stems are hollow, it is relatively light weight and unlike wood can be easily harvested and transported without specialized equipment or vehicles.

### THE BAD NEWS

Bamboo's many products, often involve the heavy use of chemicals in industries such as flooring and textiles. Bamboo textiles are made either by mechanical or chemical processing, with chemical processing creating the highest negative impact on the environment.

To process bamboo mechanically, the raw bamboo is first cut into strips, steamed, crushed then natural enzymes are added to break down the bamboo into a soft mass so the natural fibres can be mechanically combed out and spun into yarn. This is essentially the same process used to produce linen from flax. Bamboo fabric made from this process is sometimes called bamboo linen or natural bamboo. At present, very little natural bamboo is manufactured for clothing because of the high labour costs.

The chemical process to make bamboo fibre essentially follows the same practice as for manufacturing rayon or viscose. While a variety of plants, including bamboo, can be used as a source material to create rayon, there is no trace of the original plant in the finished rayon product. Fibres made this way are classified as man-made fibres. The three main chemicals/solvents used in the chemical processing method are sodium hydroxide, carbon disulfide and sulfuric acid.

Sodium hydroxide, also known as caustic soda or lye, is one of the most widely used chemicals in the world. It is used in the production of food, soap, cleaning agents, paper and on nearly all cotton fabrics, including organic cotton. While caustic soda is

a strong chemical it poses no health hazard if used and disposed of properly and is approved for use on textiles under the Global Organic Textile Standard (GOTS).

The largest users of carbon disulfide are chemical companies that make rayon. Carbon disulfide can contribute to the formation of photochemical smog when it reacts with other volatile organic substance in air. Because it is a liquid that does not bind well to soils, carbon disulfide that makes its way into the ground can move through the ground and into groundwater.

Sulfuric acid is very corrosive and would badly burn any plants, birds or land animals exposed to it. Although sulfuric acid will be neutralised by the natural alkalinity in aquatic systems, larger quantities may lower the pH for extended periods of time.

The fact is, almost all bamboo textile produced today, is really rayon. In this regard, the Competition Bureau of Canada has taken steps to ensure that textile dealers comply with the Textile Labelling Act (TLA) and its regulations. While many products are labelled bamboo, this is not an acceptable generic name for a textile fibre unless natural bamboo has been mechanically processed in a manner similar to the process for making flax into linen. An increase in claims of textiles being 'bamboo', 'made from bamboo' or containing 'bamboo fibres' prompted the Competition Bureau to reaffirm its position that, whenever an article is made of man-made rayon fibres derived from bamboo, the labelling must read 'rayon, made from bamboo'.

Aside from the chemicals and high water use in producing textile from bamboo, consumers must also consider the fact that fibres derived from bamboo are mostly made in China, adding to the carbon cost of long distance transportation and shipping.

There is hope that industries can make improvements through closed-loop (recycle & re-use) manufacturing strategies, more efficient equipment, production closer to market and the use of more eco-friendly compounds to extract fibres. Despite all the negative environmental issues associated with textiles made from bamboo, consumers must also take into consideration that the two most commonly used textiles - polyester, made from petroleum, a non-renewable resource, and cotton, even organic cotton, may have a worse environmental track record. For fascinating, related nanotechnology information visit <http://yrea.org/?p=2614>.



## SUSTAINABLE SEAFOOD

By Vanessa Pickett, YREA Volunteer

Seafood from our grocery stores and restaurants may come from anywhere in the world, and is largely harvested in unsustainable ways. Unsustainable harvesting depletes fish stocks, damages coral reefs and other critical fish habitat, and increases the need for fish farming. Fifty-two percent of fish stocks have been fully exploited, 16 percent have been over-exploited, and seven percent have been depleted.

Unsustainable fishing involves heavy trawl nets which are dragged over the seabed, capturing tens of thousands of fish and other organisms at one time. Catching non-targeted fish is known as bycatch. Although bycatch is thrown back in the ocean, the fish often do not survive.

One-third of our seafood comes from aquaculture, or fish farming. Unless it is certified organic, much of aquaculture is unsustainable because it harms wild stocks through

escapes of genetically engineered fish from nets, causing interactions among wild and cultured stocks. Aquaculture also destroys habitats such as wetlands and mangroves in order to create ponds.

Choose shellfish grown on farms using racks, lines or nets in water. This minimizes the damage to the bottom habitat during harvesting. Farmed shellfish are more sustainable than wild shellfish and some producers are actively involved in reforestation and the preservation of mangroves. Other sustainable farmed fish are rainbow trout, tilapia, channel catfish, sturgeon, and Arctic char.

Keep updated on the best choices by visiting [http://www.seachoice.org/files/asset/file/37/SeaChoice\\_Alert\\_card.pdf](http://www.seachoice.org/files/asset/file/37/SeaChoice_Alert_card.pdf). Canada's Seafood guide is a handy way to stay informed about seafood purchases at grocery stores and orders at restaurants.

## CUCUMBERS - HEALTH AND HOME USES

Cucumbers contain most of your daily vitamins and minerals, including vitamins B1, B2, vita B3, B5, B6, and folic acid, vitamin C, calcium, iron, magnesium, phosphorus, potassium and zinc.

- Feeling tired in the afternoon - put down the coffee and pick up a cucumber. Cucumbers provide a quick pick-me-up that can last for hours.
- Want to avoid a terrible headache? Eat a few cucumber slices before going to bed and wake up refreshed and headache free. Cucumbers contain essential nutrients and electrolytes to replenish your body, keeping it in equilibrium.
- Stressed out? Cut up an entire cucumber and place it in a boiling pot of water, the chemicals and nutrients from the cucumber will be released in the steam, creating a soothing, relaxing aroma that has been shown to reduce stress.
- Just finished eating and can't brush your teeth? Take a slice of cucumber and press it to the roof of your mouth with your tongue for 30 seconds, the phytochemicals will kill the bacteria in your mouth responsible for causing bad breath.
- Get rid of grubs, slugs and other insects in your garden by placing slices of cucumber in a pie tin to free yourself of pests. The chemicals in the cucumber react with the aluminum which gives off a scent that drive garden pests away.
- Looking for a green cleaner for faucets, sinks or stainless steel? Take a slice of cucumber and rub it on the surface to be cleaned. It will bring back the shine without harming you or the environment.
- Need to fix a squeaky hinge? Take a cucumber slice and rub it along the problematic hinge to get rid of the squeak.
- Markers, crayon and pen writing can be removed by using the outside of the cucumber as an eraser.

