

Earth Day



Working to preserve the planet's ecology

photo by Ian McAllister

layout / design: www.perubluesky.ca

Numerous environmental organizations in BC and throughout Canada are working to preserve the planet's ecology. On the following pages, we highlight some of their ongoing efforts. For a comprehensive list of environmental organizations in BC – and the issues they focus on – visit the BC Environmental Network (www.ecobc.org).

Individuals do make a difference. Get involved in any way you can.

Happy Earth Day, April 22!



photo by Ian McAllister

Ban the trophy hunt in the Great Bear Rainforest

On April 1, the BC government opened the trophy hunt of bears in the Great Bear Rainforest. The genetically distinct Haida black bear is being targeted, as is the monarch of the rainforest – the grizzly.

IRONICALLY, bears were recently celebrated at the 2010 winter Olympics in Vancouver. We saw pictures of grizzlies and black bears on posters and murals all over Vancouver and a huge, white Spirit bear was featured in the opening ceremonies. Bears are embedded in Canadian culture and society. They symbolize our natural world that we are so blessed with and they also remind us of the vast, wild areas that Canada is known for. Yet this spring, BC made another terrible decision in its controversial and checkered history of bear management.

On April 1, the BC government opened the trophy hunt of bears in the Great Bear Rainforest. The genetically distinct Haida black bear is being targeted as is the monarch of the rainforest – the grizzly. Even the coastal black bear that carries the recessive gene that produces the pure white bear, or Spirit bear, can legally be killed in 98 percent of its genetic range.

As bears just begin to wake up from their long, winter hibernation and move to lower elevation sedge meadows in search of the protein-rich plants, “sport” hunters will be waiting, hiding in blinds with high-powered rifles, ready to take home a lifeless trophy.

Approximately 300 grizzly bears are killed as trophies every year in BC. This sad statistic puts the lie to

the provincial government’s own description of grizzlies as “perhaps the greatest symbol of the wilderness” whose “survival will be the greatest testimony to our environmental commitment.”

While British Columbia supports one of the greatest diversity of bears in the world, our government, however, continues to treat bears as an expendable resource. The science behind the population estimates, upon which annual harvest rates are based, is flawed; arguments in support of bear hunting are based on false assumptions about the economic importance of the hunt. And clearly, a growing number of people believe it is time to end the trophy hunt before these animals are pushed to the brink of extinction or extirpated as they have been elsewhere in the continent.

Hunting for subsistence makes sense, but the trophy hunt is about something entirely different. It is about gratuitous greed and perverse pleasure – simply to put a trophy on the wall.

The trophy hunting of bears is culturally unacceptable – a practice we will look back on with shame. First Nations on this coast find killing animals for pleasure or sport culturally abhorrent and so do the vast majority of British Columbians.

Bears are sentient, intelligent animals and they should not be killed indiscriminately as trophies for hunters’ walls. This practice is an anachronism and when it is banned, it simply won’t be missed. It’s that simple.

***** Visit pacificwild.org to find out how to protect BC bears. Also visit the David Suzuki Foundation, davidsozuzuki.org

by Ian McAllister, executive director, Pacific Wild

Natural history

To understand why grizzlies are at the centre of a controversial wildlife management issues, it is at first necessary to examine their natural history.

The biology of grizzly bears makes them at once beautiful and intriguing, yet also particularly vulnerable to sport hunting and habitat loss. Their reproductive rate is one of the lowest of any land animal in North America. Females don’t produce their first litter until reaching sexual maturity at between five and eight years of age and their litters rarely exceed four cubs. Intervals between births can be as long as three years and cubs remain attached to the mother for between two and three years.

Male grizzlies have massive ranges, as large as 4,000 square kilometres, making them extremely susceptible to habitat fragmentation through resource extraction and road building. In this light, sport hunting can have a critically detrimental impact; because grizzlies reproduce slowly, they also recover slowly from human induced mortality.

Furthermore, the use of boats, trucks and blinds to stalk bears, as well as the practice of baiting of bears, has, in some cases, created a modern hunt that is too efficient, tipping the balance dangerously in favour of humans.

Enbridge pipeline poses huge risks

by Nikki Skuce, senior energy campaigner, ForestEthics

Enbridge has a record of more than 65 spills annually... a permanent tanker ban is needed from our federal government in order to put an end to risky tar sands proposals that threaten our fragile coast.



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HOW DOES a major pipeline project, designed to carry dirty oil from Alberta's tar sands to a tanker port on BC's west coast, fit with the needed transition to a green energy economy? With plans to build this 1,170 km pipeline, Enbridge Inc. is asking British Columbians to accept a high-risk, high-carbon project in the face of global warming.

If approved, Enbridge's Northern Gateway pipeline will be built to carry dirty oil from the tar sands to Kitimat, BC, with more than 200 tankers plying the heart of the Great Bear Rainforest every year on their way to Asian markets. The twin pipelines would cross approximately 1,000 rivers and streams, including BC's salmon-rich Fraser and Skeena watersheds. Once built, they will also open the door to more pipelines and create impetus for other oil and gas development projects in the northwest.

While impacts during construction are inevitable, of greater risk are the oil spills that can and will happen despite reassurances from the company. It is more a question of where, when and how much. Enbridge has a record of more than 65 spills annually. The rich and

diverse wild salmon and steelhead populations are vital to the cultures, ecosystems and local economies of BC. Putting them at risk in order to become a throughput for dirty oil is unacceptable.

Despite political and industry pressure to build these pipelines in order to access new tar sands markets in Asia, opposition is growing across the pipeline route with several First Nations and residents speaking out. The Coastal First Nations have unanimously risen up against the project, declaring a moratorium on oil tanker traffic on the north and central coast. They have stated that they will do whatever it takes to stop Enbridge's high-risk project.

While the proposed pipelines have potential for great impact, they are part of a larger story – a story with two ends. On the eastern side of Enbridge's pipelines are the tar sands. Production in the tar sands alone, related to the Northern Gateway pipeline, would produce an estimated 6.5 megatonnes of greenhouse gas emissions each year and result in enough tailings leakage to fill 182 Olympic-size swimming pools. In order to fill the capacity of the proposed pipelines, tar

sands would need to expand by 30 percent.

On the western end of the proposed pipelines, a moratorium against tanker traffic would be lifted to introduce over 200 tankers into the waters of Douglas Channel, past Gil Island where BC Ferries' Queen of the North sank in 2006, and into the pristine Caamano Sound. Accidents happen; it is just a matter of time.

Fortunately, three out of four British Columbians support a ban on tankers in these coastal waters. However, a permanent tanker ban is needed from our federal government in order to put an end to risky tar sands proposals that threaten our fragile coast.

The Northern Gateway Pipeline proposal needs to be viewed in its entirety – from the expansion of the tar sands to the coastal tankers to the continued growth of fossil fuel use in light of the urgent need to address global warming. For most Northwest First Nations and residents, the risks from pipelines and tankers are too great. There is a better way forward.

***** *To support a permanent ban on tankers in our north and central coast, visit www.forestethics.ca*

Alberta tar sands

Greenpeace Canada Climate and Energy Campaign

photo by Ishi Dinim



Fish and game animals are so poisoned by the toxins, they smell like burning plastic when cooked in a frying pan.

The Alberta tar sands: an area of land roughly the size of England where the world's big oil companies create about one million barrels of synthetic crude oil every day, while destroying a vast area of the boreal forest. In this industrial zone, the smell alone burns the nostrils and brings tears to one's eyes.

The tar sands are the world's second largest fossil fuel resource, next to Saudi Arabia. With oil at \$80 a barrel, multinational oil companies all want a piece of the toxic pie. Unfortunately, the federal and Alberta governments are so happy to have them exploiting the tar sands that they ignore the health and environmental costs. The federal government also ignores the need for an effective policy to reduce greenhouse gas emissions.

It is telling that this addiction to oil has spurred companies like Shell, Syncrude and Suncor to find a way to make synthetic crude out of a raw material at the bottom of the barrel of petroleum resources. The favourable Alberta royalty rate, one of the lowest in the world, is certainly an added bonus for operating in the tar sands.

The evil alchemy that produces a single barrel of usable oil from the heavy, tar-like bitumen requires massive amounts of energy and water – about half a billion cubic feet of natural gas and three barrels of water. Every day, the tar sands use enough natural gas to heat six million Canadian homes and are licensed to divert more than twice as much water as the city of Calgary uses in a year. An independent study by world-renowned water expert Dr. David Schindler reported that toxic leaking from tar sands operations is equal to a major oil spill every year. The production of synthetic oil from the tar sands is part of the global crisis causing climate change. It is also poisoning First Nations communities downstream.

Despite committing to the world, through the Kyoto Protocol, that Canada would cut its climate change emissions by 2012, they are now about 30 percent higher, with more than two years to go. The profit-driven motive of the Alberta and federal governments in promoting the tar sands is a big reason for climate inaction.

There are more problems. A study by the US-based National Academy of Science suggests pollution from Alberta's oil sands is nearly five times greater than, and twice as widespread, as industry figures report.

Researchers say the open-pit mines, roads and other facilities in the tar sands area are destroying so much bird habitat that, within 50 years, 166 million songbirds will have disappeared from Canada's skies.

The lack of protection for migrating birds is a problem in Alberta. In April 2008, 1,600 ducks died after landing on a massive Syncrude tailings lake, a toxic stew made of by-products from its oil operations. Syncrude is now in court defending this as a mistake, but not a crime. Interestingly, the federal prosecutor in the case has said in court that under federal law, the very existence of these tailings ponds is illegal. Yet the Alberta and federal governments allow them to continue to grow without effective regulation. In fact, these tailings ponds now span more than 130 square kilometres.

Nowhere are the effects of leaking from the tailings ponds (11 million litres a day) felt more profoundly than in Fort Chipewyan, Alberta's oldest community, situated downstream from Fort McMurray, the centre of tar sands operations. This First Nations community has existed there for thousands of years, living off the land. But now the fish they pull from the Athabasca River and Lake are often poisoned and covered in cancerous sores. The children can no longer swim in the lake and the wildlife they once hunted is disappearing.

According to a study by Environmental Defence in 2008, fish and game animals are so poisoned by the toxins, they smell like burning plastic when cooked in a frying pan.

Canada is now the number one supplier of oil to the US, which uses 25 percent of the world's energy. The development of the tar sands to this level of dirty oil production happened without effective public dialogue or debate. Is this the Canada you want the world to see? One that violates First Nations treaty rights and ignores both its climate change commitments and its public that wants climate action? A country that favours catering to multinational corporations over the desires of its own citizens? We didn't think so.

✳ Get involved at greenpeace.ca. Also visit sierraclub.ca, stoptarsands.wordpress.com, ruckus.org, treehugger.com

Monsanto's genetically engineered menu for Canada

Lucy Sharratt, coordinator, Canadian Biotechnology Action Network



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In Canada, we face the immediate threat of Monsanto's GE alfalfa. Plantings may be allowed in the US this summer and will likely be followed by an attempt to commercialize in Canada.

It has been 15 years since genetically engineered (GE) crops were introduced in Canada and, thus far, the sum total of the Canadian GE experiment consists of GE corn, canola, soy and, as of 2009, sugar beet (white sugar beet for processing into sugar). These four crops are the only GE crops grown in Canada. Add GE cotton and the small amounts of GE papaya and squash grown in the US and you have the complete list of GE crops grown in the world.

Until now, the GE foods in our grocery stores have been processed food ingredients from corn, canola and soy. This year, however, we may see the first GE vegetable in the produce section since the GE potato and tomato disappeared from the shelves.

It seems Monsanto has incorporated its GE insect resistant (Bt) technology into some sweet corn varieties now on the market in Canada. Monsanto has been reluctant to introduce whole GE foods since its Bt potato was defeated through consumer protest in 2001. Monsanto's Bt technology creates toxic plants that kill the insects that try to eat them, a technology that has been difficult for the public to swallow. In fact, just this February, the Government of India halted Monsanto's Bt eggplant due to unrelenting protests by consumers and farmers.

Remarkably, a new GE potato has just been approved in Europe, to the horror and protest of many EU countries. It's engineered to have higher starch content for industrial processing, with leftovers to be fed to livestock. For the moment though, this potato will remain in Europe. In Canada, we face the immediate threat of Monsanto's GE alfalfa. Plantings may be allowed in the US this summer and will likely be followed by an attempt to commercialize in Canada. Contamination from GE alfalfa in the US is inevitable and a very serious threat to our entire organic food and farming system. We may not realize it, but alfalfa is the third largest crop grown in Canada, by area, and is used by many different types of farmers. Alfalfa is fed to livestock and dairy cows as well as appearing as little, green sprouts in our sandwiches. It's irreplaceable for organic farmers because of its many unique benefits, including its role in building soil. Though GE alfalfa is actually already approved for human and environmental safety in Canada, it is not yet legal to sell the seeds here.

GE alfalfa might not yet inspire outrage, but its consequences will be outrageous and we must work urgently to stop it. More obviously unpalatable is the University of Guelph's GE "Enviropig™," which is not quite ready for the market – and will never get there if consumers mobilize this year.

Resistance to GE is increasing in North America, as the food movement grows. Organic farming prohibits the use of GE and promotes the development of a strong alternative to Monsanto's corporate menu. Eating certified organic food is one way to avoid GE and to support the farmers who reject corporate seeds. This year, let's support these farmers by working to stop GE alfalfa and committing to a better food system.

* For updates, please check cban.ca/GEfoods For a guide to GE-free food, visit gmoguide.greenpeace.ca Also check out gefreesbc.org and spec.bc.ca/gardens/gmo.php

Bee Colony Collapse and GE crops

by Peter Olson B.A., Dip Ed

GENETICALLY modified (GM) crops often contain a bacterium called *Bacillus thuringiensis* (Bt). Most of the research on Bt has looked at the directly lethal effects of Bt and little research has looked for indirectly lethal effects of Bt. Some insects have been shown to survive the Bt poison by having a strong immune response to the Bt poison. Insects generally, and bees specifically, have been shown to experience learning impairment and memory disorder if they have an immune response. A learning impairment or memory disorder would mean that bees could not navigate back to their beehive. Thus a learning impairment or memory disorder is lethal to a foraging bee.

Colony Collapse Disorder (CCD) of bees was originally called Fall Dwindle Disease, meaning the disease occurred in the cold months of the year. Bees use protein to construct a memory and their protein

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Since learning and memory are impaired in bees that have an immune response, bees with an immune response get lost, run out of honey fuel, fall to the ground and are then carried away by ants.
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comes from pollen, but in winter there is no pollen. Bees also use protein to achieve an immune response so an immune response in winter means all protein reserves are rapidly used up and none are left for memory formation. Have you ever noticed that when you are sick you can't think quickly and clearly? If a bee gets sick and can't think properly, it will not be able to return to its beehive.

Studies below [read the entire article at www.commonground.ca] show that learning in bumblebees is impaired if the bumblebee has an immune response. The insecticide Bt is incorporated into many genetically modified crops and Bt causes an immune response to a wide range of creatures in nature even if it does not kill those creatures. It is a virtual certainty that the bumblebee does have an immune response to the Bt present in the pollen of genetically modified plants.

Bees only carry enough honey with them to fly directly to the target flowers and straight back to the beehive. The navigation to and from those flowers is extremely complex and requires the bee to have a very good memory. Since learning and memory are impaired in bees that have an immune response, bees with an immune response get lost, run out of honey fuel, fall to the ground and are then carried away by ants. Thus, if a bee gets lost, for even a few minutes, it is dead.

The *Encyclopedia Britannica* states of CCD that "it appears that the disorder affects the adult bees' ability to navigate." Thus suggesting that worker bees fly out from the hive to collect food, but get lost and never return. In the case of the viruses and pathogens that have been suggested as causes of CCD, those viruses and pathogens result in large numbers of dead bees either inside or outside of the beehive. Dead bees are found outside the hive because worker bees carry dead bees outside.

In CCD, the symptoms are that no dead bees are found inside or outside the beehive, rather all the "worker bees from a beehive or European honey bee colony abruptly disappear." One of the most common traits inserted into man-made genetically modified crops is resistance to caterpillars, which is given by inserting a gene for a

naturally occurring insecticidal bacterium called *Bacillus thuringiensis* (Bt).

In crops that are genetically modified to contain this Bt gene, the Bt will be present not only in the plant's leaves and fruit, but also in the pollen of the flowers. Thus bees that take pollen from genetically modified crops are ingesting significant quantities of Bt insecticide. Many scientists have assured the public that Bt is safe because Bt is not directly lethal to bees. However, alcohol is also not directly lethal to a car driver, yet many car drivers have died from alcohol even though alcohol is not directly lethal to a car driver. Scientists looking for a cause for CCD have generally looked for a direct cause, something such as virus or parasite that is directly killing the bees. Discovering an indirect cause of mortality in bees would be much more difficult and would only occur after scientists had first exhausted examining the most probable direct causes of mortality in bees.

The Jenna University study showed that mortality in bees exposed to a parasite was far greater in bees that had previously been fed BT, compared to bees that were not previously fed BT. Meaning that BT increased the susceptibility of bees to the pathogen and thus Bt multiplied the mortality caused by the pathogen. In regard to that increased mortality from a pathogen combined with Bt ingestion, the authors concluded, "The significant differences indicate an interaction of toxin and pathogen on the epithelial cells of the honeybee intestine. The underlying mechanism which causes this effect is unknown."

This is a highly significant finding because when GM crops containing BT were being approved the universal assumption was that GM crops containing Bt would be totally safe because Bt has no effect on bees. Thus, government scientists who approved GM Bt crops, would clearly have objected to those crops if they thought that GM crops containing Bt would adversely affect bees.

The results of a growing number of studies now show clear and substantial, non-lethal effects and cofactor effects of Bt on bees; a dramatic change from the previous scientific view that Bt has no effect on bees. Even so, the non-lethal effects and cofactor effects of Bt on bees still remain scantily studied and more research on these subtle kinds of effects is urgently required.

In order to understand CCD, or the disappearance of bees, one needs to understand something about the specialized lifestyle of the bee. In order to save weight and increase performance, bees only carry enough fuel (honey) to fly directly to the target flowers and then straight back to the beehive. If a bee gets lost, or encounters unexpected headwinds, it will not have enough fuel reserves to make it back to the beehive. Instead, it will fall to the ground and die. Ants will then carry the dead bee down into the ant nest.

Memory is also crucial to bees because a bee has to learn from other bees in the beehive where the target flowers are located. The bee must memorize the directions from the hive to the target flower and back again so a perfect memory is essential for the survival of bees. Other insects like mosquitoes are less reliant on a good memory and simply "follow their nose" to the food, whereas bees rely on memorizing complex navigation tasks and memorizing specific aromas to find specific food and then to find their way back to the beehive.

Bees are insects and an "immune response inhibits associative learning in insects." Bees are now eating GM Bt pollen and Bt is toxin known to cause a non-lethal immune response in a wide variety of creatures.

Adapted from an article originally published in the Northern Star, NSW, Australia.

BC needs endangered species legislation



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Did you know BC has no endangered species legislation? Most people are unaware that, although BC has the greatest biodiversity in the country, we are one of only two provinces in Canada – the other being Alberta – that has no stand-alone law to protect endangered wildlife.

Today, more than 1,600 species and subspecies are at risk of disappearing from our province. From peregrine falcons to monarch butterflies endangered species in BC are left to fend for themselves against climate change, toxic contamination, urban sprawl, logging and industrial development. Polls show well over 85 percent of British Columbians want strong legislation that will protect our wildlife. The Wilderness Committee is calling on

the provincial government to enact a law that will ensure we have spotted owls, mountain caribou and Vancouver Island marmots now and in our future. An effective endangered species law will:

- Protect the habitat of endangered species.
- Be based on sound science.
- Identify, protect and recover endangered species across BC.

Introducing an endangered species law in BC is a smart investment in the future and the right thing to do. Ensuring a healthy environment for blue birds and badgers helps to ensure a healthy environment for us as well.

* *From wildernesscommittee.org*

BC's rivers at risk

Join the Wilderness Committee in calling for a moratorium on river power projects

Joe Foy, national campaign director

There has been a 1,040 percent increase in waterpower licence applications, with mining companies, stock promoters and even US giant General Electric looking to develop BC streams and rivers for power.

Rainbow, Burnt Bridge, Chipmunk, Tzoonie, Volcano and Statlu are not just colourful names; they are some of the many wild creeks and rivers found throughout British Columbia. They are also just a few of the 600 water bodies that have been staked by private power corporations over the last seven years in BC.

The rush to stake our streams and rivers was triggered by the 2002 Energy Plan when the provincial government forbade BC Hydro, our very profitable crown corporation, from producing new sources of hydroelectricity as part of a government shift to deregulate the electricity sector in BC. Since that time, there has been a 1,040 percent increase in waterpower licence applications, with mining companies, stock promoters and even US giant General Electric looking to develop BC streams and rivers for power.

The proliferation of private hydro projects, also known as Independent Power Projects (IPPs), appears green and sustainable at the outset, but it is fraught with problems:

- There is no provincial planning, and local governments, through the enactment of the infamous Bill 30, have had their zoning authority removed.

- Most projects do not undergo an environmental assessment and even if they do the cumulative impacts of the transmission lines, logging, road networks and river diversions which accompany these projects are not evaluated by the provincial government.

Not surprisingly, there is growing public concern regarding the wisdom of turning over our rivers and the production of hydroelectricity to the private sector. The Wilderness Committee recognizes that we have something unique in BC: a public utility which produces low-carbon energy, provides for BC's energy security, promotes conservation initiatives, can engage in low-term planning and is answerable and accountable to the people of our province.

In an era of climate change, it is essential that we think ahead and make wise decisions. There is a right way and a wrong way to produce green power – let's make sure we do it the right way. Join the Wilderness Committee in calling for a moratorium on river power projects until they are regionally planned, environmentally appropriate, acceptable to First Nations and publicly owned.

***** *Get involved at wildernesscommittee.org*



photo by Joy Foy, Courtesy Wilderness Committee

Bute Inlet update good news

The last time we emailed our members and supporters about the fight to save the wild rivers of Bute Inlet, we had one simple request. We asked you to write a letter to Premier Campbell to tell him how strongly you wanted those wild rivers in the Bute Inlet area protected from plans to dam and divert them to produce hydro-power for General Electric and Plutonic Power Inc. Well, the people on our email action list continue to amaze and delight us. Turns out that you folks write some mighty powerful letters. We promised to post some of them on our website and we have. These heartfelt letters are amazing testimonials as to how much we all love our wild rivers and want them protected. [Read the letters at http://wildernesscommittee.org/joe/bute_inlet_update_good_news]

I have some really good news. Actually I have freakin' fantastic news! General Electric and its partners Plutonic Power have decided to postpone their bid to gain control of 17 rivers in the Bute Inlet area. This puts the Environmental Assessment Process into a holding pattern for at least 12 months. We have a saying here at the Wilderness Committee: "To stop a train, you first have to slow it down." Well, this train has been slowed, a lot, thanks in large part to the wave of letters sent in by the folks on this 10,000 Voices e-mail list. You all deserve a great big pat on the back.



photo by Gwen Barlee, Courtesy Wilderness Committee

This just goes to show you that when enough folks get to know about a threat to our environment and then take action, even a giant company like General Electric can be knocked back on its heels. Today, the wild rivers of Bute Inlet teem with fish that support grizzly bears and other wildlife. Let's keep it that way. Now that the project to dam and divert Bute's rivers is on the ropes, let's get rid of it once and for all. Time to write another letter to the Premier telling him how much you want him to declare the Bute Inlet hydro power scheme dead so that the wild rivers there can continue to flow free.

***** *More than 50 grassroots organizations reject energy privatization policy. Visit saveourrivers.ca*

“Natural” bodycare products

They may not be as kind to nature as you think



© Danabeth55... | Dreamstime.com

How many times have you seen the ingredient decyl glucoside in your “natural organic” body wash or cleanser? Decyl glucoside is the new, sexy, “natural” cleanser in the cosmetic industry. It is the ingredient of choice for a number of “natural” cosmetic body washes and/or cleansers.

Decyl glucoside is a surfactant. Natural soaps – a mixture of oils and an alkali – are also surfactants. Surfactants reduce the surface tension of water allowing dirt to be easily lifted from a surface. Decyl glucoside is considered one of the new generations of surfactants produced by the oleo-chemical conglomerates to replace sodium laurel sulfates, which were derived from coconut oil.

The production of alkyl glucosides requires alcohols and corn for a base, which are then exposed to strong acid catalysts and high heat to break apart the original molecules. The catalyst used may include the following acids: sulfuric, para toluene sulfonic, sulfosuccinic, dodecylbenzenesulfonic or dinonylnaphthalenesulfonic. This method of breaking down a natural product into isolated ingredients creates a large waste problem for our waterways, as components of the process, such as the toxic catalysts, must be disposed of. The degree of processing and use of intermediate reagents like sulfates negates the claim that decyl glucoside is a natural body product.

So why do cosmetic companies want to sell deconstructed products (cleansers and body washes) instead of the real thing, such as castile soap? Well, for the same reasons many people prefer white bread to a whole wheat artisan handmade loaf.

Deconstructed and chemically re-engineered products such as decyl glucosides are created to fulfill the consumer demand for a high-foaming product that can be pumped from a bottle. In one word, it is convenience. Authentic castile soaps are not thickened with corn sugars and may appear more liquefied, but the concentration of surfactant ability is greater in a castile soap.

High-foaming has been engineered into the properties of corn sugar soaps like the fluffy quality of a typical, commercially prepared white bread.

Corn is highly subsidized by the US government and by petrochemical companies. Corn relies on heavy petroleum inputs and growing corn is part of the vicious cycle of petrochemical dependency for agricultural products. Because corn is such a cheap commodity, a whole array of deconstructed foods and cosmetics are now produced from it.

* From mountainskysoap.com. For a list of authentic, natural bodycare and cosmetic products, visit cosmeticsdatabase.com



Your personal **eco-audit**

Alexandra Henriques

In 1950 we used 1,000 times more stuff than in 1750; in 1990, 4,000 times more, and now we're at 10,000 times more.

Here we are at another Earth Day. Another birthday for our planet although I suspect that our Earth measures its age in thousands of years instead of by one year at a time. This makes all the more poignant the damage that our little species has inflicted on the planet in its short existence, but especially in the last century. If we look at *stuff* alone, the numbers are staggering: in the last 20 years we've used more stuff than throughout human history. According to Rex Weyler, in 1950 we used 1,000 times more stuff than in 1750; in 1990, 4,000 times more and right now we're at 10,000 times more.

What's the big deal about stuff? It gets a bit dusty; there's less room in the house and some of us are prone to clutter, but what's the big deal? Well, for the Earth it is a big deal, at both ends of the short life of all typical stuff. The resources for manufacturing all this stuff have to be extracted from the Earth through mining, digging, cutting, etc., causing great environmental destruction. Then, when we are tired of all this stuff, the Earth has to deal with our garbage. We are not allowing the planet to recuperate or even breathe before each new injury.

We all have products at home that are slowly poisoning us. We all follow certain practices that are highly injurious to the Earth. We all want to protect our children. We are also overwhelmed by contradictory information, have little time and may not know where to find answers. Having an eco-audit done is advantageous because an eco-audit identifies the problematic products

and materials in your home that may be affecting your indoor air quality and, therefore, your family's health. It also identifies where you can save water, gas, fuels and other natural resources, and, therefore, money. It identifies where you can reduce your waste and how to dispose appropriately of certain materials. It helps you adopt sustainable, cost-effective, healthy materials, products and practices.

How can an eco-audit help with stuff? Well, as an example, most people have far too many conventional cleaning products in their homes. These products take up space, cost money, pollute when they are poured down the drain and affect indoor air quality – therefore, affecting human health. These are significant repercussions, easily avoided by cleaning with a few healthy products instead. Products that won't contribute to anyone's asthma.

An eco-audit provides you with a blueprint to green your footprint and your life. It gives you knowledge that you and your family will benefit from for years to come. It gives you the peace of mind of knowing that, for now, you are doing all you can. It helps you make every day an Earth day.

* *Alexandra Henriques is the founder of ECO-audit, a unique, green service in the Lower Mainland. She is a lifelong environmentalist and educator, with over 25 years of expertise in healthy living in healthy homes. Visit www.eco-audit.ca*