

Sustainability Newsletter

Spring 2018

Climate Change on a Local Scale: Spruce Beetle

Climate Change is threatening forests around the world, particularly here in British Columbia. Recent weather patterns, including warm springs, dry summers, warm winters and windstorms (resulting in more tree blowdowns) have contributed to the current increase in spruce beetle populations, while also enhancing the beetles' killing power. Not only are the insects expanding into new territory, they're also hatching earlier and reproducing more frequently. New infestations become full blown with astonishing speed and the sheer numbers of beetles exceeds anything forest experts have seen before. These beetles kill spruce trees by attacking the inner bark. The adult female bores through the tree's bark and creates an egg gallery where she lays her fertilized eggs. When the larvae hatch, they feed on the inner bark and continue to burrow laterally in the tree. The insect's extended larval galleries and associated blue stain fungi eventually kill the tree.



More than 8,100 hectares of forest in the Lakes Timber Supply Area (501,873 hectares in the province) are currently infested by spruce beetles. This number is considerably higher than normally would be expected and represents the biggest spruce beetle outbreak in B.C. since the 1980s.

In addition to the annual aerial overview survey, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development plans to carry out detailed aerial surveys to do a refined aerial detection of infestations for follow-up treatment. Spruce beetle outbreaks have historically lasted up to seven or eight years.

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1. Be energy efficient — Switch off lights. Unplug computers, TVs and other electronics when not in use. Wash clothes in cold or warm (not hot) water. Dryers are energy hogs, so hang dry when you can.
2. Choose renewable power — Ask your utility to switch your account to clean, renewable power, such as from wind farms. If they don't offer this option yet, ask them to.
3. Eat wisely — Buy organic and locally grown foods. Avoid processed items. Grow some of your own food. And eat low on the food chain if you can— meat-free meals are a great idea .
4. Trim your waste — Garbage buried in landfills produces methane, a potent greenhouse gas. Keep stuff out of landfills by composting kitchen scraps and garden trimmings and recycling paper, plastic, metal and glass. Let store managers and manufacturers know you want products with minimal or recyclable packaging.

Though you might feel like your lifestyle is insignificant compared to things like oil extraction or vehicle emissions, the choices we make in our day to day life — how we get around, what we eat, how we live—play a major role in slowing climate change.

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www.rdbn.bc.ca/environmentalservices/recycling/sustainability-newsletter



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Cutting back on idling

Emission impacts resulting from vehicle idling

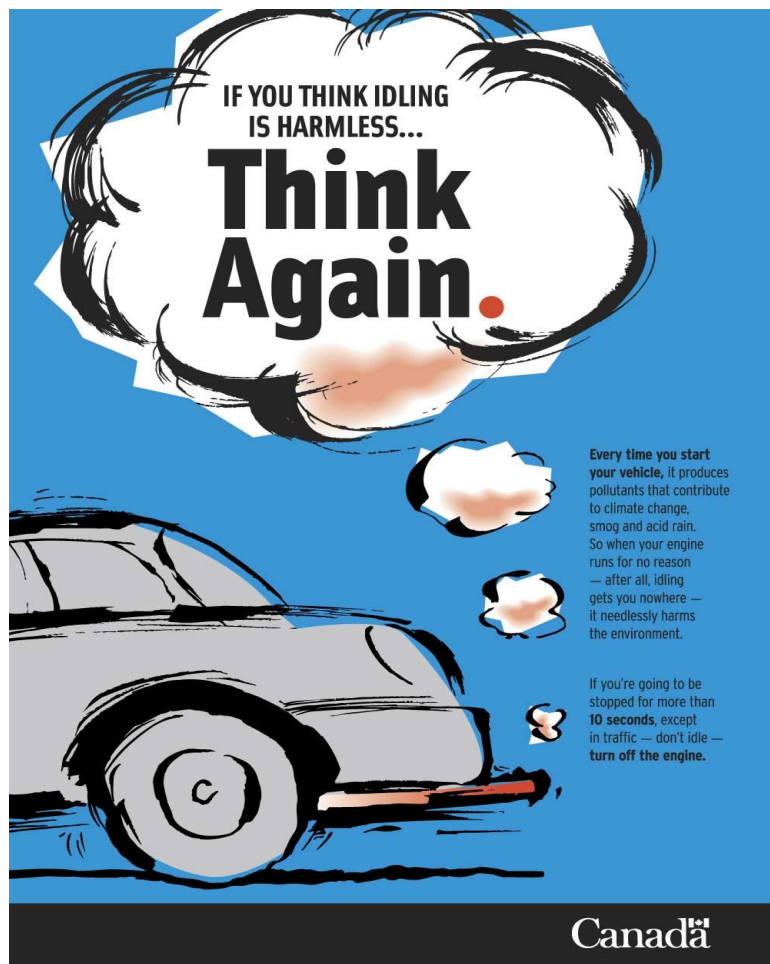
An operating vehicle emits a range of gases from its tailpipe into the atmosphere, one of which is carbon dioxide CO₂ – the principal greenhouse gas that contributes to climate change.

CO₂ is a colourless, odourless, gas that is a normal part of Earth's atmosphere.

However, when the amount of CO₂ in the atmosphere increases, more heat is trapped. This “enhanced greenhouse effect” causes Earth's surface temperature to rise, which in turn is altering the world's climate.

CO₂ is also an unavoidable by-product of burning gasoline. Each litre of gasoline that is used produces about 2.3 kg of CO₂. Therefore, every time you start the engine, you're contributing to climate change.

Vehicles produce other emissions, such as volatile organic compounds (VOCs), carbon monoxide (CO) and oxides of nitrogen (NO_x), are criteria air contaminants (CACs) and these emissions are known to contribute towards air pollution and smog.



Greenhouse gas emissions

For every litre of gasoline used, a vehicle produces about 2.3 kilograms of CO₂, the principle GHG linked to climate change. With internal combustion engines, no technology exists for eliminating CO₂ emissions, an unavoidable by-product of burning fossil fuels. One simple and effective way to reduce the production of CO₂ emissions from light-duty vehicles is by choosing to eliminate unnecessary vehicle idling. This is an action that you – as a driver – can take.

In fact, if Canadian motorists avoided idling for just three minutes every day of the year, CO₂ emissions could be reduced by 1.4 million tonnes annually. This would be equal to saving 630 million litres of fuel and equivalent to taking 320,000 cars off of the road for the entire year. Eliminating unnecessary idling is one easy action that Canadians can take to reduce their GHG emissions that are contributing to climate change.



What are the benefits?

The 2003 study supports NRCan's position that “idling for over 10 seconds uses more fuel and produces more CO₂ emissions than restarting your engine.” This clearly confirms that there are direct benefits – in the form of fuel savings and reduced GHG emissions – that are obtained by turning the engine off instead of idling. As such, when considering all of the factors, the study showed it is better to turn the engine off rather than to let it idle unnecessarily.

Backyard Composter Rebate

We're happy to announce that the Regional District of Bulkley-Nechako's composting program is back! Visit your local participating retailer and receive a \$40 rebate off your purchase right there. Various styles are available, check with your local store! There are a limited amount of rebates, so don't delay. Go buy a composter today!!!!

Composters must be purchased in-store at participating retailers. Rebate forms must be filled out prior to purchase. There is a limit of one rebate per household.



If you have any questions or comments, please feel free to contact the RDBN! You can call us at 1-800-320-3339 or 250-692-3195 and ask for Elaine. Or email: elaine.wiebe@rdbn.bc.ca. And last but not least, check out our webpage <http://www.rdbn.bc.ca> or find us on Facebook at "Sustainable RDBN".

Participating Retailers near you:

- In Burns Lake — Burns Lake Home Hardware
- In Fort St. James — Ouelette Bros. Building Supplies
- In Fraser Lake — Fraser Lake Building Supplies
- In Houston — Reitsma's Home Hardware
- In Smithers — Smithers Home Hardware
- In Vanderhoof — Taylor Bros. Home Hardware



Freezer leftover recipes

The memories of last summer's harvest may be getting kind of hazy. But chances are, if you had a bumper crop of a vegetable or fruit, there are still some packages of it in your freezer. Here is a recipe for using that up!!

Spicy Turkey and Zucchini Burger

Ingredients

- 1 lb. ground turkey meat
- Just under 2 cups, lightly packed, coarsely grated zucchini
- 3 green onions, thinly sliced
- 2 Tbsp. chopped fresh mint
- 2 Tbsp. chopped fresh cilantro
- 1 clove garlic, crushed and minced
- 1 teaspoon ground cumin
- 1 teaspoon Kosher salt
- 1/2 teaspoon freshly ground black pepper
- 1/2 teaspoon cayenne
- 3 Tablespoons vegetable oil

Sour cream sauce:

- 1/4 cup sour cream
- 1/3 cup plain Greek yogurt
- 1 teaspoon grated lemon zest
- 1 Tablespoon lemon juice
- 1/2 teaspoon minced garlic
- 2 teaspoons olive oil
- 1/4 teaspoon salt
- Pinch of freshly ground black pepper

Directions

Make the sour cream sauce by placing all of the sauce ingredients in a bowl and stirring until combined. Chill until ready to use.

Mix the turkey zucchini mixture. In a large bowl, place the grated zucchini, sliced green onions, chopped mint, cilantro and garlic, ground cumin, salt, pepper and cayenne. Stir to combine.

Form patties. Use your hands to form 3 to 4 inch wide patties, placing them on a baking sheet. Note that the patties will be rather wet, so they may be a little tricky to handle.

Fry gently. Heat 3 Tablespoons of vegetable oil in a large frying pan on medium high heat. Once the oil is hot, lower the heat to medium.

Working in batches, place the patties in the pan. Let cook for about 5 minutes, then flip the patties over and cook for another 5 to 6 minutes.

You want them to brown and to gently cook all the way through. If the temperature is too high, they'll get browned on the outside but the inside will be raw. So, cook them gently.

