

Pay Attention to How Much You “Smoke” This Spring

When Deer Reappear, Spring is Near.

~unknown

With spring burning, one needs to be aware of the potential health concerns with smoke. During periods when the wind is still, the hazardous particles and gases in smoke can accumulate to harmful levels. Backyard burning often occurs during calm weather, when the smoke can't be dispersed — and on the weekend, when many people are out for a “breath of fresh air.” Burning wet materials starves the fire of oxygen, producing a very smoky fire. Burning materials like painted wood, plastics and rubber release toxic substances.

Fine particulates, the non-visible components of smoke, are small enough to be breathed into the deepest reaches of our lungs. They are associated with all sorts of health problems. Senior citizens, infants and people who already have lung or heart problems are most at risk, but healthy younger

adults and children can also be affected.

The Smoke Control Forecast (Environment Canada website, http://www.weatheroffice.pyr.ec.gc.ca/wxhealth/smoke/default_e.html) is designed to predict the capability of the atmosphere to effectively disperse pollutants such as small particulate matter (smoke). A Ventilation Index (VI) is calculated from these two factors and expressed as a value from 0 to 100: 0 – 33 (poor), 34 – 54 (fair) and 55 – 100 (good). Environment Canada provides the Ventilation Index (VI) to assist in determining if weather conditions



Photo: Brent Langlois, FNESS

are such that the smoke generated from fires will contribute significantly to air pollution. The VI is a measure of the atmosphere's ability to disperse smoke. The higher the number, the less the risk of air pollution.

Tips for effective smoke management during spring burns:

- Don't burn when the smoke will be trapped in the area — make sure the VI for your region is “good.”
- Ensure effective communications with community members, with special attention for those that are potentially more vulnerable.
- Burn efficiently. Light a quick-burning,

hot fire that produces a minimum of smoke. To do this, don't starve the fire of oxygen and don't burn wet material. Make sure the material has been dried for some time beforehand.

- Don't burn any garbage, such as plastics, paper and cardboard. Recycle everything you can!

- Never burn toxic materials (e.g. tires, plastics, construction and demolition waste, treated and painted wood, and rubber).
- Instead of burning, reuse and recycle as much organic material as possible.

Further smoke management information can be found at <http://www.env.gov.bc.ca/air/particulates/bbsgjyeya.html>

by Brent Langlois

Responsible Burning Decisions

Local First Nations can have a Band Council Resolution (BCR) in place that governs the safe use of prescribed fire on reserve. Crown land adjacent to reserve land is governed by the *BC Wildfire Act*, which applies on both public (Crown) and private land throughout B.C. and can be used as a reference for outlining responsible burning decisions on all lands.

In British Columbia, the *Wildfire Act and Regulation* specifies your legal obligations when using fire in, or within, one kilometer of forest land or grassland. Under the *Wildfire Regulation*, a Category 1 open fire means an open fire that burns piled material no larger than 1 meter in height and 1 meter in diameter, and it includes campfires.

A Category 2 open fire is a fire that burns material in one pile not exceeding 2 meters in height and 3 meters in width; or, burns material concurrently in 2 piles each not exceeding 2 meters in height and 3 meters in width; or burns stubble or grass over an area that does not exceed 0.2 hectares.

A Category 3 open fire is defined as a fire that burns material concurrently in three or more piles each not exceeding 2 meters in height and 3 meters in width; or material in one



Ensuring safety when using burn barrels

Photo: FNESS Archives

or more piles each exceeding 2 meters in height or 3 meters in width; or one or more windrows; or stubble or grass over an area exceeding 0.2 hectares (more than 2,000 square meters).

As Category 2 burns are common in the spring, let's look at some points that are safe and responsible for applying fire. Persons may light, fuel or make use of a Category 2 open fire safely within one kilometer of forest or grassland when there are no bans or other restrictions in place for doing so. A fuel break is established around the burn area, and while the fire is burning and there is risk of escape, a person maintains the fuel break. The ignition person needs to have an adequate fire suppression system available at the burn area, and ensures

the fire is watched and patrolled by a person equipped with at least one fire fighting hand tool in order to prevent the fire from escaping.



Photo: T. Lacey

Larger piles set for burning

This person also ensures that the fire does not exceed the capacity of the people. Fire fighting tools and heavy equipment are on-site in order to take timely action to prevent a fire from escaping. The fire is completely extinguished before leaving the area.

If the fire spreads beyond the burn area it must be reported. A person carrying out fire control for a Category 2 Open Fire must make available resources to fight the fire.

Further information can be found through the Protection Program website at <http://bcwildfire.ca/>

by Thomas Blank

Spring Burning

Many fires occur in spring and early summer when human activity increases. Grass burning and spring cleanup fires occasionally escape control and result in wildfires. When summer arrives, the number of people in the woods increases, and as they travel, recreationalists can accidentally cause fires.

The number of escaped fires that result from backyard burning can be reduced by adhering to safe burning practices. People doing backyard burning must have hand tools, water and enough people on hand to keep the fire in check. Fires must not be lit or be allowed to continue to burn when the wind is strong enough to cause sparks to be carried to other

combustible material, or when a notice banning or restricting the use of open fire is in effect.

Grass fires are a major concern for fire fighters. Grass fires that get out of control can cause serious damage. People must remember to place a firebreak around the perimeter of the fire area. Fires can escape easily if a wind picks up. Fires that get away can quickly engulf fences, power poles and buildings, and they can also spread to neighbouring property or forested areas.

Careless use of campfires is one of the leading causes of forest fires. When building a campfire, select your campsite carefully. Prepare your campfire by removing all leaves, twigs and other flammable material from the area. Choose a proper fire pit or make a ring of rocks at least three meters from trees, shrubs, structures and debris. Do not leave a campfire unattended, and do keep a pail of water close by at all times. Be certain your campfire is completely extinguished before you go to bed or leave the area. Pour water on the fire and douse the site thoroughly. Stir the campfire until there are no embers and the ashes are cold to the touch.

Another cause of wildfires does not arise from accidents or carelessness, but from arson. Every year, arsonists throughout the province start fires that result in a high financial loss, as well as risk to property, homes, wildlife and people. Arson is a crime and any knowledge of this activity should be reported.

A person may have permission to burn, but it could be the start of a forest fire. If a fire

does get out of control, and the Forest Service is called in, the persons doing the burning may be responsible for fire fighting and other costs.

Other prevention considerations include:

- Do not burn in windy conditions.
- Do not discard smoking materials from vehicles; use interior ashtrays.



Photo: Brent Langlois, FNESS

Awareness of burning conditions essential

- Lawn and farm equipment should have properly working spark arresters to prevent sparks from exiting through the exhaust pipes.
- All Terrain Vehicles (ATVs) produce an enormous amount of heat and can ignite brush from their exhaust systems.

Wildfire prevention is about keeping fires from starting. When using fire in or near woods, be extremely careful. Further information can be found through the Protection Program website at <http://bcwildfire.ca/>

by Thomas Blank



Photo: FNESS Archives

Backyard burning