

Fireworks: Amazing but are they worth it?

There's something about fireworks that people love. Generally, I'm not a fan of loud noises, but when it's accompanied by flashes of light and dazzling displays of colour, it's hard not to get sucked in.

But have you ever noticed all that smoke during the brief flashes of light? This year during the Canada Day festivities I noticed it, hovering right there, over the lake. It set me to wondering, how bad are fireworks for the environment?

Well, it's good news and bad news. I'll give you the bad news first.

Without sugar-coating it, fireworks are hands down terrible for the environment. Basically, the burning chemicals that make all the colours – red from strontium or lithium, yellow from sodium, green from barium + chlorine, white from magnesium or aluminium, etc... - never completely combust and rain down in the firework 'fallout zone'. What does burn, leaves large amounts of particulate in the air, which can cause respiratory problems for some people.

The propellant, perchlorate, which carries these chemicals into the air and is also apparently used in the world's nuclear arsenal, is known to interfere with normal thyroid function if ingested by humans, oh... and fish too. The concentration of all these things in the water and air, in the hours and even days after a large firework display, is really quite alarming.

Fearmongering aside, the good news is that consumer fireworks are at least regulated. The inspection of firework safety, in terms of operation and composition, is the responsibility of Canada's Chief Inspector of Explosives under Natural Resources Canada. Comforting.

Also, Haliburton County on Civic Holiday weekend isn't exactly the firework equivalent of New York City at New Year or Delhi during Diwali. Our population and thus firework densities are relatively low. However, no pollution is better than some pollution.

If you must celebrate with fireworks, here are some important guidelines:

- buy only legal fireworks from authorized dealers to be sure they meet basic safety and (to some extent) environmental standards;
- the chemical fallout of fireworks is real, so think carefully about where you are setting them off. Best keep people and the lake upwind;
- fireworks produce a lot of waste including plastic. Clean it up as best as you can.
- remember that fireworks really spook a lot of dog (and people). Keeping them to long weekends when people expect it is a nice thing to do.

Finally, my advice regarding those mini hot air balloons called sky or Chinese lanterns is this: don't just avoid them. Get in touch with your local municipality and demand they be banned. Releasing a wireframe paper airship containing an open flame into the wilderness is littering and it's also dangerous. Cut it out.

More information about Canadian guidelines for the safe operation of consumer fireworks can be found here:

<http://www.nrcan.gc.ca/explosives/fireworks/9905>

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