FIREWORKS, THE ENVIRONMENT, AND ANIMALS









WWW.NATIONALFIREWORKS.CA

THE ENVIRONMENT

Fireworks have long been associated with family fun, cultural and religious events, and the marking of national celebrations. As the public and governments become more keenly aware of what impacts human behaviour is having on our environment, fireworks too have been questioned on their environmental impacts. This section will answer questions regarding fireworks and the environment.

What's in Fireworks?

Along with a small explosive compound, likely black power, and as demonstrated by **this visual** provided by the U.S. Geological Survey and the U.S. Department of the Interior (United State Geological Survey, 2020), the fireworks are composed of a combination of varying minerals to create different colours and effects, sealed by a paper structure.

Fireworks are mainly comprised of minerals which produce the varying colours and affects that we see and hear.







Do they have a lasting impact?

Firework displays on an infrequent basis do not have a lasting negative impact on the environment. According to Gary Wheeler, spokesperson for Ministry of Environment and Climate Change, the only documented impact of fireworks was from daily, large-scale displays. (Sobanski, 2017)

"While there is some data suggesting that concentrations of metals may exceed water quality [thresholds] after large or frequent fireworks displays, [for example] those put on at theme parks, typical fireworks, [for example] those used by private individuals a few times per year, are unlikely to result in concentrations of metals that would be harmful to aquatic life or affect drinking water," (Sobanski, 2017).

He continues in saying, "The risk to drinking water from infrequent, small-scale fireworks displays is low, as there is rapid dilution of any chemicals not destroyed through combustion or degraded in the environment." (Sobanski, 2017).

Notably, Mr. Wheeler also commented on the use of consumer fireworks by the public and said they had no notable impact to the environment, "We expect that fireworks available for public use would be smaller and contain less material that those used in professional displays, thus representing less impacts on the environment. Most studies did not detect significant increase in metals associated with fireworks in surface waters or groundwater after a fireworks display." (Farmer, 2019).

Due to most Municipalities having by-laws in place to restrict when fireworks can be used by consumers, firework displays are transient in nature and therefore do not cause lasting impacts to the environment.



PREPARE



BE A GOOD NEIGHBOUR

CLEAN UP



What do the regulations say?

Fireworks in Canada are heavily regulated. Manufacturers must follow strict rules on the production, storage, and sale of fireworks to consumers. What goes into making fireworks, with environmental concerns in mind, are amongst the many rules manufacturers must abide by in the production process. This is to ensure that when used, the environment is protected for the public to continue to enjoy. These regulations can be found here. Over 4,000 individual fireworks products are approved for consumer sale and use by the Government of Canada.

What you can do:

The CNFA's 'Be a Good Neighbour program outlines how you can enjoy fireworks and respecting those around you.

Be sure that when you enjoy fireworks, you:

- Prepare
- Inform
- Respect
- Be Safe
- Celebrate
- Clean Up

This will ensure that you do your part to keep the everyone informed, and environment clean. You can read more about the 'Be a Good Neighbour Program' **here**.

Further, be sure to abide by your local by-laws on the use of fireworks, and only use legally produced and sold fireworks from licenced manufacturers and sellers. More can be read here on how to spot illegal fireworks

FIREWORKS AND PETS

We all want to be able to enjoy fireworks and ensure that our pets and wildlife stay comfortable and safe.



Picture: (The Savvy Sitter, 2023)

The Ontario SPCA and Humane Society recommend the following to keep your pets calm during fireworks displays:

- Keep animals indoors during firework displays, making sure to close windows and doors.
 Startled animals may seek a place to hide and if they manage to get outside, it can be easy to lose them. If you need to take your dog outside, keep them leashed at all times to prevent them from bolting and becoming lost.
- Ensure your pet wears a properly fitted collar and ID tags. Microchipping is also encouraged to help increase the chances of being reunited with your pets if they become lost.
- Walk your dog before it gets dark to avoid going outside once the fireworks start.
- Have a safe place for your fur baby to feel at ease, like a crate or other den-like enclosure in a quiet area of your home.
- Block out flashing lights by keeping curtains and blinds closed or by placing a blanket over your animal's crate.
- Turn on the TV or play quiet music to help drown out the noise.
- Stay calm! Animals may pace around, make noise, or search for a place to hide. Let them be remaining calm will help reassure that there's no danger.
- Even if your dog doesn't show signs of distress, resist the urge to bring them with you to watch
 a fireworks display. Dogs are far more sensitive to the sounds and smells produced by fireworks
 than we are and would be happier in the quiet of their home." (Ontario SPCA and Humane
 Society, 2022)

For further information on keeping your pets and other animals calm, please visit the Humane Society's website **here**, and the RSPCA's website **here**.

By taking these measures, fireworks can be enjoyed with the reassurance that there are mitigating measures in place to keep your pets calm and safe.

FIREWORKS AND WILDLIFE

Understandably, there is concern for wildlife during fireworks displays. An animal's natural instinct is to flee from perceived dangers causing them to scatter during a fireworks display. This behaviour is common through natural occurrence too, such as a thunderstorm, and is normal. Although wildlife may disperse, it is only temporarily.



As Maimoona Dinani, spokesperson for the Ministry of Natural Resources and Forestry said, wildlife may disperse for "a short period of time due to loud noises, such as fireworks." (Farmer, 2019), and that there is "likely no long-term negative effects associated with occasional fireworks throughout the year." (Farmer, 2019).

Further, as noted by the Royal Society for the Protection of Birds (RSPB), a UK-based bird conservation charity, "there is little evidence to suggest that fireworks harm wild birds or affect their conservation status." (Royal Society for the Protection of Birds, N.D.)

Be Mindful of your Surroundings

Good practice for keeping wildlife in mind before using consumer fireworks means:

- Removing birdfeeders and bird baths prior to any fireworks use to discourage wildlife from coming to the area.
- · Waiting until it is dark to use fireworks.
- Do not use fireworks near nesting areas or known areas where animal hide.
- Clean up after use!

(Davidson, 2016)

The CNFA recommends you follow the 'Be a Good Neighbour' guidelines referenced earlier on how to best prepare for a planned fireworks display.



If you have further questions on how to best keep your pets and wildlife safe during a fireworks display, consult with your veterinarian for specific guidance. With proper preparation, consumer fireworks can be enjoyed while ensuring that pets and wildlife remain safe.

About the CNFA

The Canadian National Fireworks Association (CNFA) is a national association that represents fireworks manufacturers, distributors, and retailers. The CNFA's mission is to promote fair access and safety in the sale and use of all fireworks through public education, advocacy with regulators, and member compliance. The CNFA is committed to working with federal, provincial, and local municipalities to educate consumers, vendors and regulators about the safe sale and use of family fireworks, along with fair and reasonable regulation. www.nationalfireworks.ca

Mission Statement:

The CNFA's mission is to promote fair access and safety in the sale and use of fireworks through public education, advocacy with regulators, and member compliance. Working with all three levels of government, the CNFA advocates on behalf of the fireworks industry to guarantee that our voice is heard. We work for fair and easy access to fireworks and provide education and training opportunities for our members.

MEDIA CONTACT Aleem Kanji, Chief Advocacy Officer aleem@c-nfa.org

Works Cited

Davidson, A. (2016, 06 30). Fireworks may be legal, but are they ethical for riparian use? Retrieved from Riparian Magazine: https://mymlsa.org/fireworks-may-be-legal-but-are-they-ethical-for-riparian use/#:~:text=Remove%20bird%20feeders%20and%20bird,in%20birdseed%20or%20drinking%20water.

Farmer, A. (2019, 07 22). 2 Ontario ministries say fireworks have small environmental footprint. Retrieved from Huntsville Forester: https://www.muskokaregion.com/community-story/9513735-2-ontario-ministries-say fireworks-have-small-environmental-footprint/

Ontario SPCA and Humane Society. (2022, 07 27). Long weekend fireworks can spook your pet! Top tips to keep animals calm and safe. Retrieved from Ontario SPCA and Humane Society: https://ontariospca.ca/blog/long-weekend fireworks-can-spook-your-pet-top-tips-to-keep-animals-calm-and-safe/

Royal Society for the Protection of Birds. (N.D.). Sick and injured birds FAQs. Retrieved from Royal Society for the Protection of Birds: <a href="https://www.rspb.org.uk/birds-and-wildlife/advice/how-you-can-help-birds/injured-and-baby-birds/sick-and-injured-birds faqs/#:~:text=Can%20fireworks%20be%20harmful%20to,or%20affect%20their%20conservation%

Sobanski, S. (2017, 10 07). Environment ministry weighs in on fireworks. Retrieved from Bancroft Today: https://www.bancroftthisweek.com/environment-ministry-weighs-in-on-fireworks/

The Savvy Sitter. (2023). Fireworks and Your Pet. Retrieved from The Savvy Sitter: https://thesavvysitter.org/blog/fireworks-and-your-pet

United State Geological Survey. (2020, July 1). What minerals produce the colors in fireworks? Retrieved from U.S. Geological Survey: https://www.usgs.gov/media/images/what-minerals-produce-colors-fireworks



WWW.NATIONALFIREWORKS.CA