

# Forest Fire Prevention Is You.

## Quick response by firefighters has saved hundreds of forests

All forest fires are affected by the combination of fuel or tree species in the area, the condition of the wood, the weather and the topography.

It's important for firefighters to be aware of these conditions. It's also important that they know the type of fire they are dealing with.

There are three types of forest fires — surface, sub-surface and crown fires — each one requiring a different approach.

Sub-surface fires burn or smoulder beneath the forest floor. They are the most difficult to detect and the hardest to suppress. This type of fire can smoulder for extended periods of time, burning peat, roots and decaying vegetation before breaking through to the surface, often far from the source of the fire.

The surface fire is the most common type of forest fire. It burns through brush, trees, leaves, grass and forest debris. When it burns on the forest floor, it can damage the bark of the trees and can lead to torching. When a tree torches, it almost explodes in a ball of flame.

The crown fire is the most dangerous and destructive of all the fire types fought by Ontario's forest firefighters. A crown fire burns first in the tops of the trees — the forest canopy. Flames from a crown fire, fanned by high winds, can race across the tree tops faster than a human can run. As the fire quickly spreads over a large area, it ignites the canopy of the forest while the forest floor remains relatively untouched, only to burn later.

The crown fire is the most spectacular type of forest fire. It is the most difficult to manage and is often

impossible to stop. Any forest fire can include all three types of burning during the lifespan of the blaze.

In order to make forest users aware of the potential for forest fire occurrence, the Ministry of Natural Resources provides a forest fire hazard rating.

The rating system provides a general indication of forest conditions — how dry the forest fuels are, the spread potential of a fire, and the anticipated control problems should a fire break out. A number of factors, including weather conditions, are also considered.

Under a low hazard rating, ignition of forest fuels will be difficult, with a spread potential limited to the immediate area. Generally, there would not be any control problems.

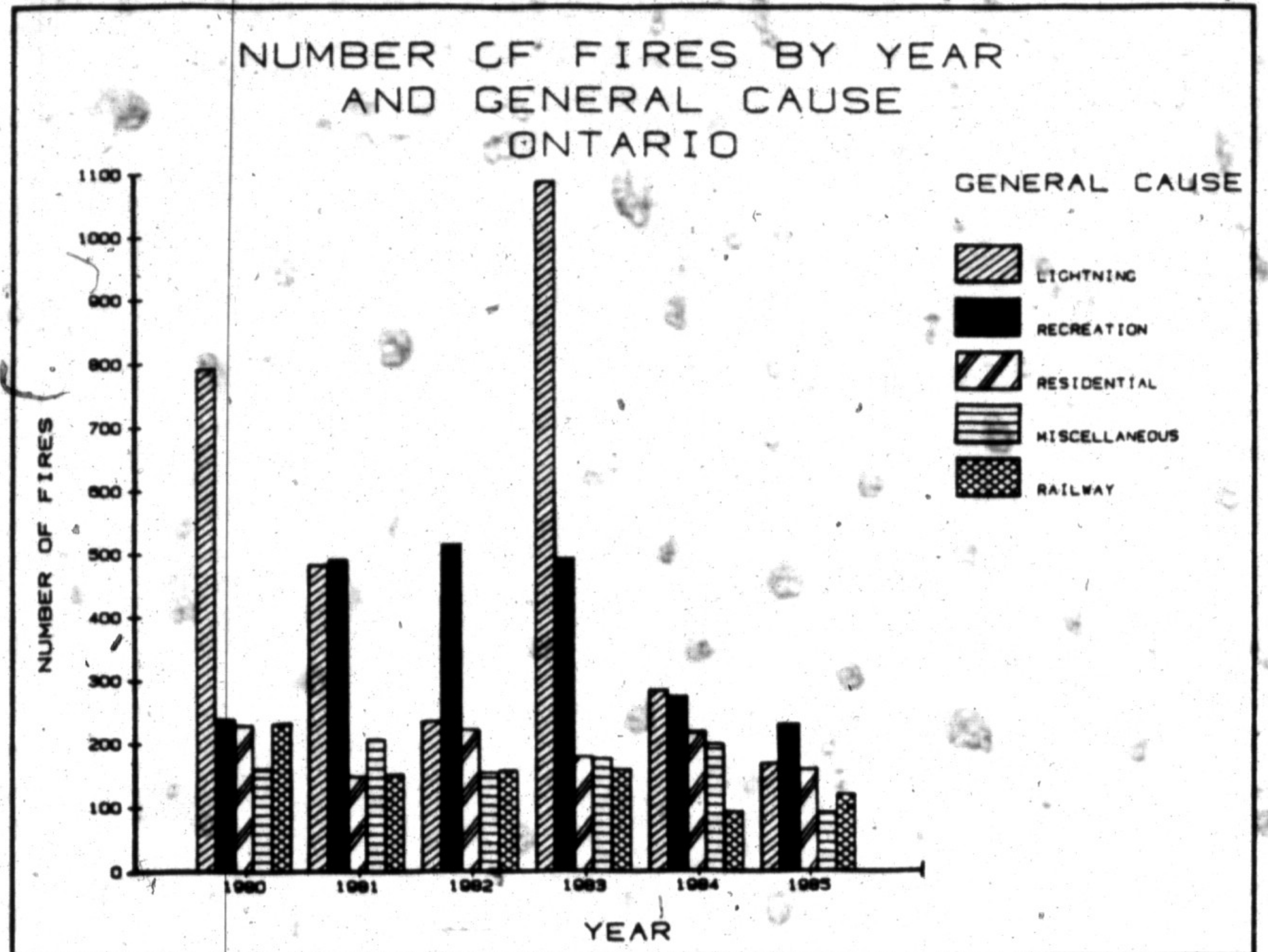
A moderate hazard rating means that grasses, dry branches and logging slash, which is the debris left on the ground after forest harvesting operations, will easily ignite. Fire spread to adjacent fuels would be slow and control of the fire would be relatively easy. Normal precautions are advised.

A high hazard rating is an indication that most forest fuels will readily ignite and burn easily, spreading rapidly with some crowning in the tree tops. Control and suppression efforts would be difficult with spot fires appearing ahead of the main fire as a result of winds carrying burning embers.

Restrictions to the public may be put in place. A high fire hazard rating means that forests are dry and explosive. Sparks will ignite forest fuels easily and the fire spread would be rapid with sustained crowning through the tree tops that would be virtually impossible to control. In cases such as this, the firefighting effort may rely on assistance from nature in the form of heavy rains.

During extreme hazard periods, fire and travel restrictions would certainly be put in place by the Minister of Natural Resources.

These restrictions ensure the safety of the public by keeping them away from a very dangerous situation. They also minimize the chances of additional fires by keeping forest users out of the area until the hazard drops.



# Drown it!

## What causes forest fires?

- Lightning is the only natural cause of wildfire and is responsible annually for about 30 per cent of all forest fires in Ontario.

- The remaining 70 per cent of forest fires that occur in Ontario each year are caused by people — the majority a direct result of human carelessness.

- Because 70 per cent of all forest fires are human-caused, 70 per cent of all forest fires are preventable.

- The careless smoker is responsible for more wildfires than any other forest user. Nearly one-quarter of all fires caused by people are ignited through the careless use of smoking materials.

- Carelessly attended campfires rank second as a fire cause and ignite about one out of five fires caused by people. While the number of campers and outdoor enthusiasts using the forests has increased, the number of blazes caused by this group has dropped slightly.

- Residents burning grass, brush or rubbish trigger about 13 per cent of wild fires. An additional 13 per cent of fires in recent years have been railway related, caused by exhaust carbon, work crews or pieces of hot metal from brake shoes.

- A number of forest fires are also traced to children playing with matches, a dangerous practice that can result in needless tragedy.

- Tossing a cigarette butt from a moving vehicle instead of using the ashtray can result in a fire starting up. In remote areas, the fire might not be stopped until it is too large to easily control.

- Failing to completely douse the campfire before heading off can result in the fire starting up again and, unattended, turn into a raging wildfire.

- Cleaning up around the cottage often entails burning off litter and rubbish. If not closely watched, burning embers from a trash fire can easily be carried into adjacent trees, igniting them.

## Making the difference

A quick response to a forest fire by Ontario's trained fire personnel means the difference between containing a minor blaze and an all-out confrontation with a major forest fire.

In 1984 for example, an impressive 97 per cent of all forest fires in Ontario were suppressed successfully on the first attack by Ministry of Natural Resources firefighters and water bombers. A forest fire is considered when it is contained within 40 hectares and extinguished by noon of the second day.

A lot of credit for this success rate goes to members of the public who acted quickly in reporting fires. In fact, the majority of fires reported to the Ministry were called in by members of the general public. Not everybody will have the occasion to report a forest fire. But if you find yourself in that position, call the police or the nearest MNR or municipal office as quickly as possible and report the following:

- location of the fire
- approximate size
- time of discovery
- persons or property that may be in danger
- any suppression action being carried out on the fire
- nearby lakes, rivers, streams
- known access by road or waterway
- the type of fuels, such as grass, brush or timber



# Then drown it again!

Before you leave your campsite, drown your campfire with water. Wait a few minutes, stir the embers with a stick, and drown it again. Don't leave it steaming, or still warm. Drown it with water until it's dead out and cold.

That's the law in Ontario — and it's common sense, too.

Don't risk starting a forest fire. Build your campfire safely, on sand or gravel, away from bush and sheltered from the wind. And don't leave unattended — even for a few minutes. When you leave — drown your fire!

Other ways you can prevent forest fires:

- Don't smoke while you're working or walking in the bush. Sit down to smoke and then douse your butt in water, or grind it out against a rock. Watch for sparks.
- Use the ash tray in your vehicle. Don't throw butts or matches out the window.
- If you're burning brush or debris, use a proper, enclosed incinerator. And stay with your fire until it's out.

Practice forest fire prevention every week.



Ministry of Natural Resources

Hon. Vincent G. Kerrio  
Minister  
Mary Mogford  
Deputy Minister

Forest fire prevention week, April 20-26

