

# **FIRE MANAGEMENT**

## **Protecting Communities and Facilities** from Wildfire

For several days in July, 1994, wildfire spread through the hills near Penticton B. C. Driven by hot dry winds, the flames raced up steep gullies, defying the efforts of 150 fire fighters, seven helicopters and numerous air tanker drops. By the time the smoke cleared, 18 homes were destroyed, 3,000 people had been evacuated and the final damage was estimated at five million dollars.

This fire was not an isolated event. Fires like it, and ones much worse, occur every year across North America. They are called wildland urban interface fires because they occur where structures are surrounded by forest or other flammable vegetation.

Many people are moving away from densely populated areas seeking a more relaxed lifestyle. As the number of

homes and recreational developments in forested areas rises, so does the risk of losses from wildfire. Fire is a natural element of these environments. In many cases, it is not a matter of if but when a fire will happen.

Similar situations exist inside national parks. Some parks contain townsites and most have valuable visitor facilities. Many of these buildings are located in fire-prone environments.

For many years, all fires in national parks were suppressed. Ironically, this has increased the chances of a catastrophic fire. Forests are getting



older, denser and full of dead material that burns easily. This is called a 'fuel buildup'.

Add hot weather and strong winds, and the stage is set for a major fire. Although park crews respond quickly to fires that threaten developed areas or adjacent lands, this may not be enough. When major fires occur, they easily jump from burning

vegetation to nearby homes. Such fires can overwhelm even the best efforts of firefighters.

Fortunately, we can take action, both inside and outside parks, to decrease the risk of a major fire and the damage it may cause.

#### **Protecting Communities**

We can protect communities from fire by taking some simple preventative measures. Parks Canada is working with provincial and municipal agencies as well as encouraging individual action to make communities more firesafe.



#### Creating Defensible Space

A crucial part of fire protection is providing 'defensible space' around towns, developments and individual homes. This includes measures that reduce the intensity of a fire, slow its spread and make the vegetation and buildings less likely to ignite. The goal is to provide a zone where firefighters can stage a successful attack. There are two basic approaches to creating defensible space:

#### 1. Vegetation Management

The goal of vegetation management is to decrease the amount of fuel available to a fire.

We can reduce forest fuels by removing underbrush, thinning overstory trees, limbing lower branches of overstory trees, and removing fuels lying on the forest floor. This work is done by hand, with equipment designed for logging operations, and with careful application of prescribed fire. Highly flammable species like spruce can be replaced with less flammable species like aspen or poplar. Fuel reduction programs are underway in national parks where dangerous fuels pose a risk.

#### 2. Fire Resistant Buildings

Structures and developments can be planned, constructed and maintained to protect them from fire. This approach relies on the active participation of residents and business owners. Here are some ways to reduce the fire hazard:

• Use fire-resistant roofing such as tile, asphalt or metal rather than wood, to reduce the chances of flying embers igniting the structure.

- Use fire-resistant materials for siding and decks. Enclose decks.
- Screen vents and chimneys so sparks don't fly in or out.
- Keep roof and gutters free of moss, leaves and needles.
- Ensure emergency vehicle access and water supply. Keep a shovel, bucket and garden hose handy.

These are just examples of the many preventative steps that can help ward off fire. Contact the warden office at your nearest national park for more information on how to protect your property from fire.

Inside our national parks experts are assessing the fire hazard in developed areas. They study factors such as terrain, weather, fuel types and fire history and recommend ways to protect facilities.

### Living with Fire

Fire can be a hazard to homes and facilities. However this hazard can be greatly reduced. By working together, government, fire protection agencies and individuals can make communities safer from fire.

Fire is also a natural and necessary part of nature. Many parks use prescribed fire to restore fire to ecosystems that need it. A program of prescribed fire also makes the park safer by reducing fuel build-ups. So the needs of humans and the needs of the environment don't have to be at odds. The challenge is to provide for both.

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