

# Causes of Wildfire in Marin



## Vehicles

**17% of wildfires in 2002.**

Automobiles and other vehicles can start fires when sparks come off the engine or brakes. Rocks hitting the metal under a vehicle is another ignition source. Engine fires can also spread to vegetation.



## Debris Burning

**13% of wildfires in 2002.**

Burning trash and vegetation debris causes many fires. Often the wind will carry fragments of burning debris to other areas where burning was not intended.

Debris burning requires a permit from the local fire department and is only allowed when weather conditions of high humidity and calm winds minimize the risk of wildfire.



## Powerlines

**10% of wildfires in 2002.**

Powerlines carry a constant electrical charge which can ignite a fire if the line breaks. Several recent wildfires have started this way. In June,

strong winds toppled two trees in Tomales Bay State Park which broke powerlines and started a wildfire when they fell. The fire was suppressed at 2 acres. In July, a red tailed hawk became entangled in powerlines in Marinwood, causing a charge to ignite the bird which fell to the ground and ignited the vegetation. This fire spread to 30 acres.



## Campfires

**8% of wildfires in 2002.**

With lots of open space and campsites in Marin, campfires are a major cause of wildfire. Typically this occurs by accident when a

campfire is not fully extinguished. An illegal campfire in Tomales Bay State Park was the cause of the Vision Fire in 1995. The teenagers who made the campfire had poured water on the ashes, and thought it was out, but apparently, enough heat had radiated downward, that the deep duff, on the forest floor smoldered underground and eventually ignited a bishop pine tree through its root system. The fire burned 12,356 acres.



## Mechanical Equipment

**3% of wildfires in 2002.**

Chain saws, weed wackers, lawn mowers, welding equipment.

Power tools of all kinds are another source of ignitions. Sparks from metal blades hitting rocks is one of the most common causes.



## Playing with Fire

**3% of wildfires in 2002.**

Children start many fires accidentally when experimenting with matches, candles, or lighters. Fire is a fascinating physical process to

observe, but should never be treated as a game or entertainment. Parents and teachers should demonstrate caution and respect for fire and emphasize that fire should never be lit without adult supervision.



## Arson

**2% of wildfires in 2002.**

Arson is the malicious setting of fire to provoke a response or cause damage. A common motive is to collect insurance. More uncon-

scious may be the need to experience feelings of power and control. Arson is a serious crime which does occur in Marin.



## Fireworks

**1% of wildfires in 2002.**

Fireworks for private use are prohibited throughout Marin. Last year, a wildfire near Bolinas in Point Reyes National Seashore

was started with fireworks 2 miles into the wilderness near Bass Lake. Luckily the individuals had a cell phone, and phoned 9-1-1 when they saw the fire had begun. A quick response by air tankers and ground firefighters suppressed the fire at 2.2 acres.



## Lightning

**0% of wildfires in 2002.**

Lightning is a very rare cause of wildfire in Marin. Weather patterns here do not often involve colliding air fronts which produce electrical

storms. However, lightning ignitions do sometimes occur, usually in the fall when the vegetation is dry. For instance, a single September storm in 1969 produced 4 wildland fire ignitions on Inverness Ridge.



## Miscellaneous

**43% of wildfires in 2002.**

These fires included 25 fires in which the cause was undetermined and a wide variety of determined causes such as improper disposal of woodstoveashes.

## Arson is NOT a Victimless Crime

Marin County Fire Investigation Task Force

Every 18 seconds, a fire department responds to a fire somewhere in the nation. There are billions of dollars in property losses resulting from fire each year. How much of this loss can be prevented?

In the year 2000 alone, \$1.3 billion in property damage was intentionally set. If you add in the dollars lost from the 46,500 intentionally set vehicle fires, and include brush fires, rubbish fires and other fires that are started by people, the total lost each year is approximately \$2 billion dollars.

Who pays for this? We all do! We pay for it in higher property insurance premiums; and in higher taxes to make up for the taxes lost from businesses that close down after a fire; and in the reduced market value of the surrounding properties.

But that's not all. We pay for it in costs that can't be measured in dollars. We pay in lives lost; in thousands of arson survivors who end up physically or emotionally scarred; in insurance claims for law enforcement, fire service and emergency medical service personnel injured while responding to these events; in the gutted buildings that were once thriving businesses and are now vacant. Many costs are never recovered.

### What can we do to prevent arson?

- Report suspicious activity near a house or other building to the local police or fire agencies.
- Join and support Neighborhood Watch or similar programs.

The existence of these organizations may reduce the incidence of all sorts of crime, including arson.

- Stop treating kids that play with matches as though it is just a phase that every child goes through.

We must look at children playing with fire the same way we look at children playing with guns. If you suspect a child is playing with fire, don't wait for it to get out of hand. Talk to them. Find out what they're doing. If it's because they don't know about fire, get them some education. If it's more than that, get them some help from your local juvenile fire setter intervention program. (All Marin Fire Agencies have such programs and resources.) Local fire departments, police departments, school districts, and mental health facilities can often provide guidance to a parent in need of direction.

# Last year, there were more than 200 wildfires in Marin County