Large fires can destroy huge areas of forest and threaten people who live or work nearby. That is what happened in Yellowstone National Park during the very dry summer of 1988. How much of the park was saved from burning? What were the effects of the fires? In this informative article, Patricia Lauber relates the dramatic details.
Before You Read

Connect to Your Life

What do you know about wilderness fires? Use the chart below. Fill in the first and second columns before you read. Fill in the third column after you have finished reading.

<table>
<thead>
<tr>
<th>What I Know</th>
<th>What I Want to Learn</th>
<th>What I Learned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wilderness fires can spread quickly.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key to the Informative Article

WHAT YOU NEED TO KNOW

In wilderness areas, fires can be started by lightning as well as by humans. Park managers must decide whether to let fires burn or put them out.

WHY Fires are not entirely harmful. Burned plants and trees renew nutrients in the soil, and fires can clear away old branches. Many animals, from ants to bears, find a new source of food in the plants that grow in the rich after-fire soil.

HOW In the summer of 1988, Yellowstone rangers let small fires burn while they waited for the "summer rains" to come. But the fires raged out of control, and the rain held off all the way into September.
FOCUS
In this section you will find out how the "summer of fire" gets started.

MARK IT UP As you read, underline the details that tell you what the summer of 1988 was like. An example is shown.

The summer of 1988 was hot and dry in much of the United States. Above plains and prairies, the sun blazed out of an ever blue sky, baking fields and withering crops. Ponds and streams dried up. Rivers shrank. In places the very earth cracked open as underground water supplies dwindled away.

Farther west, forests were tinder dry. Sometimes skies grew dark with storm clouds. Thunder growled and lightning crackled, but little rain fell. Lightning strikes started forest fires that raged across the Rockies and other ranges with the roar of jumbo jets on take-off. Night skies turned red and yellow where flames soared 300 feet into the air. Smoke, carried on the winds, darkened skies as far away as Spokane and Minneapolis–St. Paul. Airline passengers, flying high above the fires, could smell the smoke. Before the rains and snows of autumn came, 2,600,000 acres had burned in the West and Alaska, an area twice the size of Delaware.

In Yellowstone the fire season started on May 24, when lightning struck a tree in the northeastern part of the park. The fire stayed small. Rain fell later in the day and put it out. That was what usually happened. In Yellowstone, winters are long and cold, summers short and often rainy. Many people thought you couldn’t set fire to the forest if you tried.

On June 23 lightning started a fire near Shoshone Lake in the southern part of the park. On June 25
another bolt of lightning started a fire in the northwest. These fires did not go out, and no one tried to put them out. Park policy was to let wildfires burn unless they threatened lives or property. Also, there seemed no reason to worry about the fires. Although winters in the 1980s had been dry, with little snow, summers had been unusually wet. The summer of 1988 was expected to be wet too.

**Pause & Reflect**

**FOCUS**

Read to find out what causes the fires in Yellowstone to spread.

But in 1988 the rains of summer did not come. The Shoshone and other fires blazed and spread. By mid-July, 8,600 acres had burned. Park officials decided that all fires should be put out, no matter whether they were wildfires or caused by human carelessness.

Fire fighters arrived by the hundreds to attack fires from the ground. Helicopters and airplanes attacked from above. But new fires started in the park. In 1988 Yellowstone had more than 50 lightning strikes, twice the normal number. Fires in neighboring national forests swept into the park. Old fires burned on. And still the rains did not come.

Cold fronts passed through, bringing winds of hurricane force with gusts of 60 to 80 miles an hour. Winds whipped and spread the fires and fed them oxygen, which fires must have to keep burning. Big fires met, merged, and became even bigger fires. In forests flames galloped through the tops, or crowns, of

**WORDS TO KNOW**

- **threaten** (thrē'tn) v. to be a danger to
- **oxygen** (ōk'sē-jen) n. one of the gases that make up air, needed for nearly all burning
- **merge** (mōrj) v. to combine or unite
trees, through the canopy. Snags—dead trees that are still standing—burned like Roman candles. Boulders exploded in the heat. Sheets of flame leaped forward. Gigantic clouds of smoke ringed the horizon, looking like thunderheads, only bigger. There were days when the sun was no brighter than a full moon.

Fires jumped rivers, roads, canyons, parking lots. Glowing embers, some the size of a man’s fist, shot a mile or more ahead, starting new fires. Flames were roaring through the park at a rate of four or five miles a day. One fire ran 14 miles in only four hours. On August 20, a day known as Black Saturday, more than 150,000 acres burned inside the park and in neighboring forests. The 2,000 fire fighters could no more put out these fires than they could have stopped a hurricane. But what they could do was defend the park communities—the information centers and the buildings where people slept, ate, and shopped.

By September 6 fire fighters were moving in to defend the area around the park’s most famous geyser, Old Faithful. The geyser itself could not be harmed by fire, but the buildings around it could. One of them, the Old Faithful Inn, was the world’s largest log building. Now one of the eight major fires in the park was bearing down on it.

Called the North Fork fire, it had started in the Targhee National Forest on July 22, when a careless woodcutter threw away a lighted cigarette. Driven by shifting winds, the fire raced into Yellowstone, turned

---

1. Roman candles; fireworks that shoot out showers of sparks and balls of fire.
2. thunderheads: the spreading upper parts of thunderclouds.

**WORDS TO KNOW**

- **canopy** (kā’nə-pā) n. a rooflike cover; the covering formed by the branches and leaves of trees in a forest
- **ember** (ëm’bar) n. a small glowing bit of burning wood or coal
- **geyser** (gī’zər) n. a natural hot spring that at times spouts water and steam into the air
- **bear** (bār) v. to move forcefully; push
back into Targhee, neared the town of West Yellowstone, then veered back into the park. There it jumped roads and rivers, snarling its way through the crossroads at Madison on August 15. By the afternoon of September 7 it was approaching Old Faithful. Long before they could see the flames, fire fighters heard the fire's deep rumble and saw a churning wall of dark smoke towering skyward.

**Pause & Reflect**

**FOCUS**

Read to find out how the changes in the weather affected the fires.

**MARK IT UP >** As you read, circle details that tell you about the changes in the weather.

Planes dropped chemicals to damp down fires. On the ground weary fire fighters were wetting down buildings. The fire came on, a mass of red flames whipped by winds gusting up to 50 miles an hour. Sparks and embers were everywhere, flying over the inn, parking lots, and geyser, and setting fire to the woods beyond. At the last moment the wind shifted and the fire turned to the northeast, away from Old Faithful.

Saturday, September 10, began as another bad day. One arm of the North Fork fire was threatening park headquarters at Mammoth Hot Springs, and another arm was a quarter of a mile from Tower Junction. The forecast was for winds of up to 60 miles an hour. But the sky was thick with clouds, and the temperature was falling.

By early afternoon, September 10 had turned into a day of hope. Rain was drenching the area around Old Faithful. The next morning snow blew along the streets of West Yellowstone. It sifted through

**WORDS TO KNOW**

veer (vtr) v. to turn aside; swerve
blackened forests and dusted herds of bison and elk. Scattered islands of fire would burn until November blanketed them in snow. But the worst was over.

At long last the summer of fire had ended. During it, eight major fires and many smaller ones had burned in Yellowstone. To people who had watched the fires on television news, it seemed the park must lie in ruins. But this was not so. The geysers, steam vents, and hot springs were unharmed. Park communities had been saved. Nearly two-thirds of the park had not even been touched by fire.

It was true that many once-green areas were now black and gray. Yet it was also true that they were not ruined. Instead, they were beginning again, starting over, as they had many times in the past. Fire has always been part of the Yellowstone region. Wildfire has shaped the landscape and renewed it. ♦

Pause & Reflect

1. What changes in the weather helped to put out the fires? (Summarize)

2. Read aloud the boxed passage. Then restate the main idea in your own words. (Paraphrase)

What, if anything, might be done to prevent such fires in the future? Mark passages in the selection to support your views. (Cause and Effect)
Active Reading SkillBuilder

**Chronological Order**

**Chronological order** refers to the time sequence in which events occur. Transition words such as next, then, after, before, during, or until help show chronological order. Words showing numerical order such as first or second, and the use of dates or times also help. Write important events from the selection in the chart below. Arrange them in the order in which they occurred, and write the word or phrase that shows the time order at the top of the box.

```
summer of 1968
before the rains and snows of autumn
```

---

*Summer of Fire* 37
Informative Nonfiction

Informative nonfiction is writing that provides factual information about real people, places, and events. It can be organized in various ways. Writers may choose chronological, spatial, cause-and-effect, or compare-and-contrast organization.

"Summer of Fire" is organized chronologically. Fill out the time line below with events and dates to trace the progress of the fires.

- late spring
  - Lightning starts a fire, but rain falls and puts it out.

- November

Follow Up: With a partner, discuss the impression of the fires that the writer produces by the use of chronological order. How would using spatial or cause-and-effect organization affect the text?
FOR USE WITH Summer of Fire

Words to Know SkillBuilder

Words to Know
bear
canopy
ember
geyser
merge
oxygen
threaten
thinner
veer
withering

A. Write the letter of the word or phrase that is most nearly opposite in meaning to the underlined word as it is used in each sentence below.

1. The fires merged, doubling their area of destruction.
   a. combined b. divided c. blurred
2. The canopy of trees was quickly demolished.
   a. undergrowth b. roof c. collection
3. The officials did not want the fire close enough to threaten the buildings.
   a. save b. warp c. endanger
4. The road veers slightly to avoid the geyser.
   a. narrows b. swerves c. straightens
5. We watched the fire bear down on our position.
   a. move toward b. retreat from c. lean

B. Complete each analogy with one of the Words to Know. In an analogy, the last two words must be related in the same way that the first two are related.

1. GROWING : DYING :: thriving : ______________________
2. CAR : KEY :: fire : ______________________
3. ICE : GLACIER :: hot water : ______________________
4. CAKE : FLOUR :: air : ______________________

C. On a separate sheet of paper, write a brief news report for August 20, 1988, about the fire in Yellowstone National Park. Use at least four of the Words to Know in your report.