

Fire in Glacier



A Force of Nature.

Fire is a powerful force of nature. Ignited by lightning strikes when conditions are dry and windy, a fire can race through a forest, across meadows, and jump rivers or it can creep along in the undergrowth. In the aftermath, the ecological importance of fire is often overlooked. For many, a blackened landscape represents

death and destruction. While the loss of homes, property, and human life is a tragedy to be avoided, fire has been a force of change in western forests for thousands of years. Fire has played a major role in shaping the forests of Glacier National Park since the end of the last Ice Age, over 10,000 years ago.

Fire and the Forest

Fire causes rapid change in a forest. Openings are created allowing light to reach the forest floor where sun-loving plants grow. Many flowering plants such as fireweed and lupine flourish after a fire. Some wildlife benefit from the standing snags, open forest, and increased diversity of food plants. During a hot fire, some standing trees, downed logs, and accumulated litter on the forest floor are burned to ash, cycling nutrients into the soil. Fire creates a mosaic of ages and vegetation types. Not all vegetation is killed in a fire zone, in fact adaptations to cope with fire have evolved over time. Adult ponderosa pine, western larch, and Douglas fir have thick bark that insulates the inner, living tissue from heat damage. Western larch is so

fire resistant that some trees always escape fire injury and become seed trees for reforestation. Some species are dependent on fire for reproduction. Seeds from some cone-bearing evergreens sprout and grow best under conditions created by fire. Lodgepole pines take full advantage of fire created conditions to drop millions of seeds not long after the fire has passed. Species not adapted to fire or those requiring shade for germination, such as Engelmann spruce may eventually re-establish after fire adapted species provide sufficient shade. With time, the forest will return as part of a cycle of natural change.

Fire Management in Glacier

Following the highly publicized Yellowstone National Park Fires in 1988, the National Park Service's fire management policy was reevaluated. As a result, park fire plans were reviewed and rewritten. The Glacier National Park Fire Management Plan, approved in 1991, has three objectives:

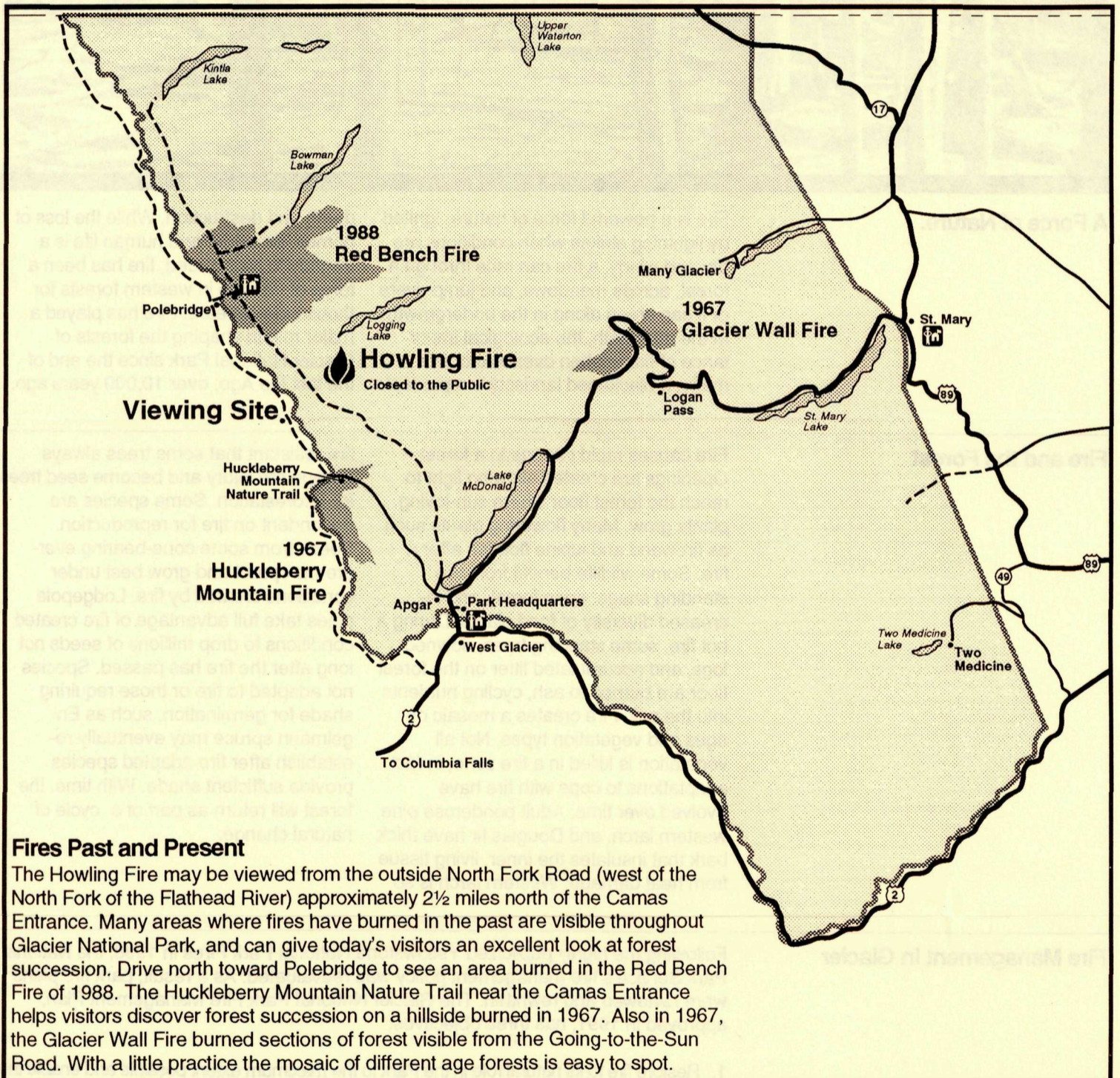
1. Restore fire to its natural role in the Park to the maximum extent possible and enable the natural processes to function essentially unimpacted by human influence.
2. Protect human life and property from wildfire.
3. Minimize adverse effects of fire suppression.

The Glacier National Park Fire Management Plan recognizes both the value and danger of fire and provides a variety of actions to be taken when dealing with it. In some cases fire will be totally suppressed when people, property, and irreplaceable resources are in danger. Human caused fires are always suppressed. If certain conditions are met, a natural fire will not be suppressed but will be designated a prescribed natural fire. Prescribed natural fires are monitored by park staff and are evaluated on a daily basis.

The Howling Prescribed Natural Fire

The Howling Fire, located just off the inside North Fork road, was started by a lightning strike on June 23 of this year. Fire personnel moving in to investigate heard wolves howling in the distance, giving the fire its name. They found a small fire burning in the understory of a spruce/fir forest with scattered ponderosa pine. The Howling Fire met the criteria of the Glacier National Park Fire Management Plan for designation as a prescribed natural fire. The Howling Fire is in a remote area and does not threaten structures, people, or unique resources. It also fits other necessary prescribed fire conditions including: time of the year, weather, natural ignition source, and sufficient staff available to monitor and suppress if necessary. The Howling Fire has a potential to grow considerably.

Park fire managers estimate that up to several thousand acres of forest could eventually be affected. The odds of fire growth to this size are low. Historically, most fires in this area have been less than 1,000 acres in size. An incident command team has been established and the fire is monitored daily. Data being collected include fire mapping, wind and temperature measurements, fuel and vegetation moisture, and fire behavior. Each day after being briefed by the fire incident commander, a decision is made by Glacier's Superintendent as to whether the Howling Fire will continue as a prescribed natural fire or be suppressed. The management of the Howling Fire will serve as a model for future prescribed natural fires in the western U.S.



Fires Past and Present

The Howling Fire may be viewed from the outside North Fork Road (west of the North Fork of the Flathead River) approximately 2½ miles north of the Camas Entrance. Many areas where fires have burned in the past are visible throughout Glacier National Park, and can give today's visitors an excellent look at forest succession. Drive north toward Polebridge to see an area burned in the Red Bench Fire of 1988. The Huckleberry Mountain Nature Trail near the Camas Entrance helps visitors discover forest succession on a hillside burned in 1967. Also in 1967, the Glacier Wall Fire burned sections of forest visible from the Going-to-the-Sun Road. With a little practice the mosaic of different age forests is easy to spot.

A Final Thought

Glacier National Park has been described as one of the most intact natural ecosystems in the lower 48 states. Fire has played a major role in creating the biological diversity for which Glacier is noted. Without fire, Glacier's character would be forever altered.

For more information on fire in Glacier please write the Park Superintendent, Glacier National Park, West Glacier, Montana 59936. If you wish, you may also request a copy of the Glacier National Park Fire Management Plan.