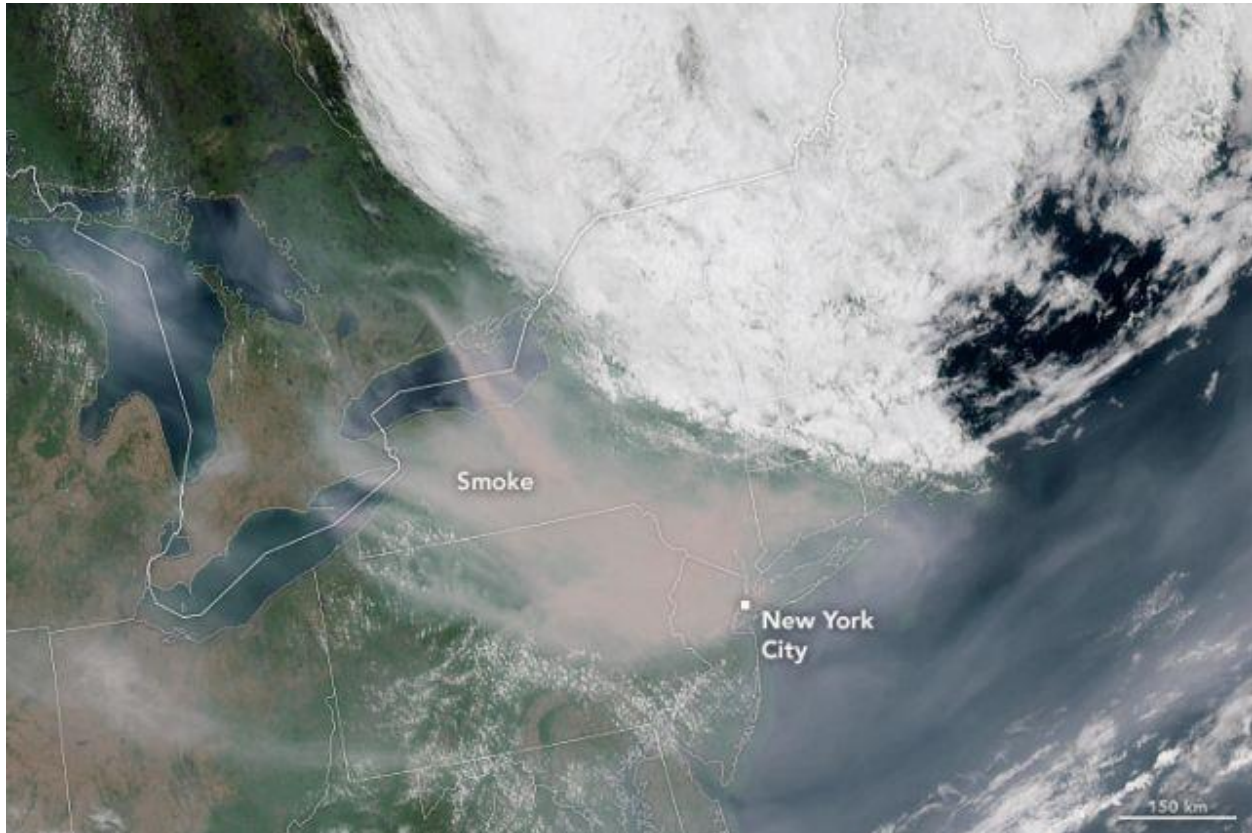


More on the recent Smoky Days

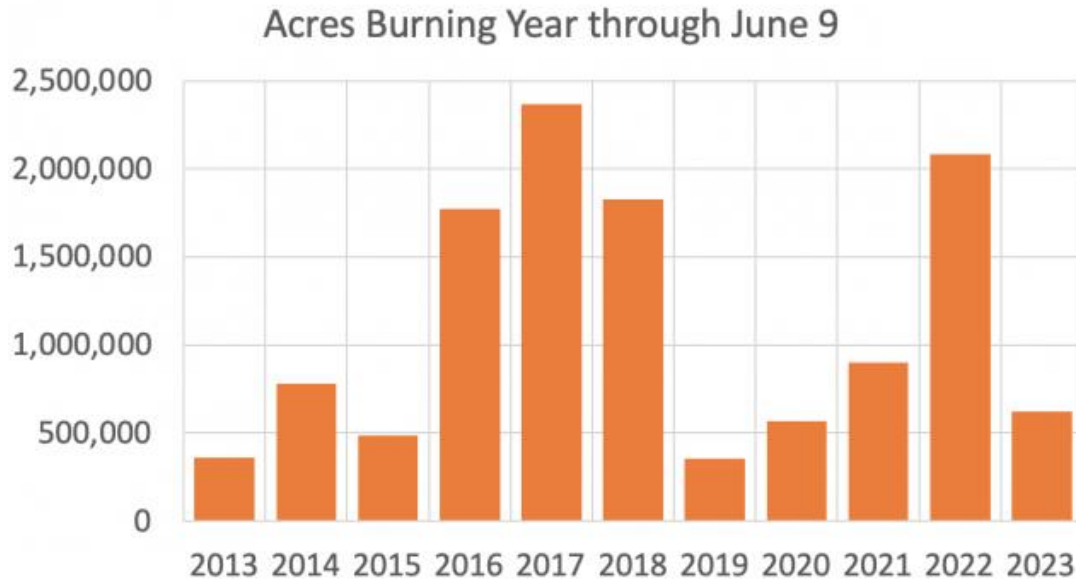
Joseph D'Aleo, CCM

NASA imagery showed how an unusually strong and cold upper trough advected smoke from Canadian wildfires into the northeast.



The NIFC (National Interagency Fire Center) in Boise this week reported for US fires:

Nationally, five large fires have burned 52,323 acres in six states. Since January 1, 19,693 wildfires have burned 620,986 acres across the United States. These numbers are below the 10-year average of 22,946 wildfires and the 1,125,626 acres burned.



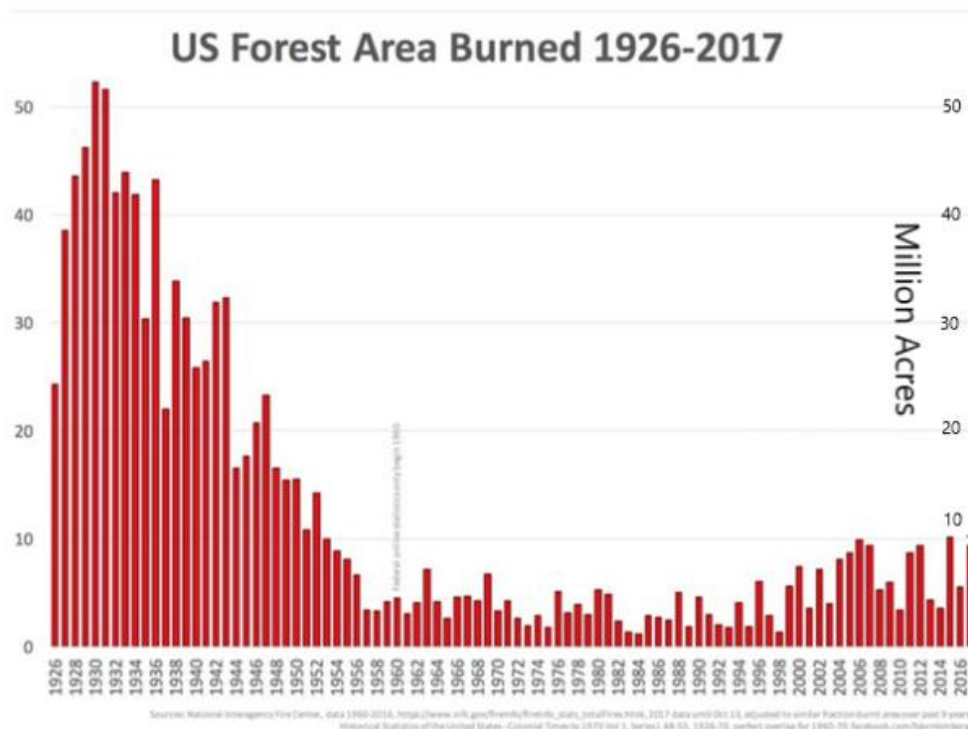
The US number is down now because of the record snowy and wet weather in the forested west and southwest. Dryness to the north in Canada has enhanced the recent Canadian wildfires. The National Interagency Coordination Center (NICC), located at NIFC continues to mobilize wildfire suppression resources to Canada. The National Multi-Agency Coordinating Group (NMAC), at NIFC, is working with federal wildland fire agencies to fill requests as they are received at the NICC from the Canadian Interagency Forest Fire Centre (CIFFC) located in Winnipeg, Manitoba.

In the U.S., wildfires are in the news almost every summer and fall. The National Interagency Fire Center has recorded the number of fires and acreage affected since 1985. These data show that the trend in the number of fires is actually down while the trend in the acreage burned has increased.

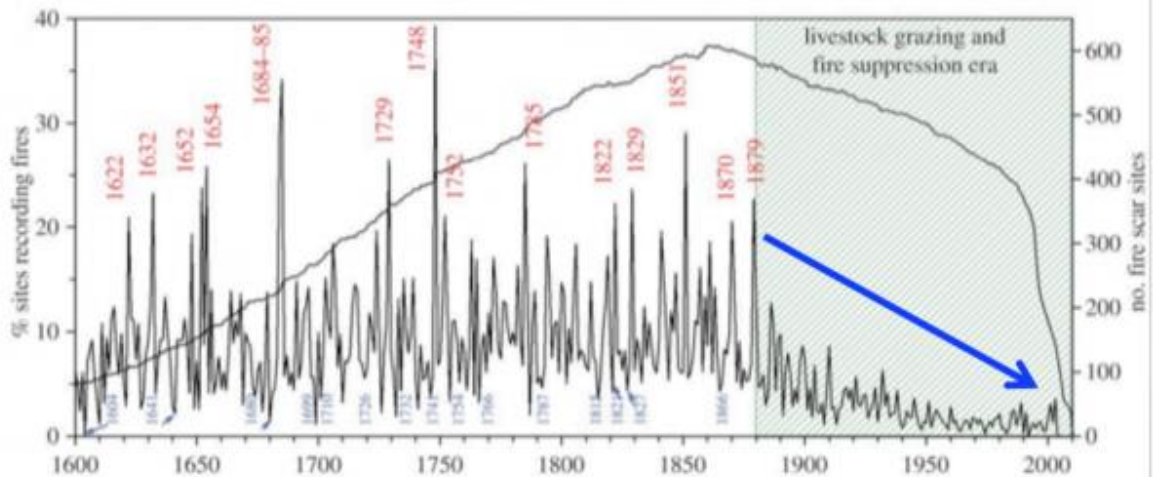
90% of the fires are caused by humans though natural seasonal weather variations create conditions that are conducive to fires and the rapid spread of these fires west to increasingly populated areas. Human-caused fires result from campfires left unattended, the burning of debris, downed power lines, negligently discarded cigarettes and intentional acts of arson. In the past, lightning and campfires caused most forest fires; today most are the result of power lines igniting trees. The power

lines have increased proportionately with the population, so it can be reasoned that most of the damage from large wildfires in California is partially a result of increased population not Global Warming.

The increased danger is also greatly aggravated by poor government forest management choices. *"In the United States, wildfires are also due in part to a failure to thin forests or remove dead and diseased trees"*. In 2014, forestry professor David B. South of Auburn University testified to the U.S. Senate Environment and Public Works Committee that *"data suggest that extremely large megafires were four-times more common before 1940,"* adding that *"we cannot reasonably say that anthropogenic global warming causes extremely large wildfires."* As he explained, *"To attribute this human-caused increase in fire risk to carbon dioxide emissions is simply unscientific."* Bjorn Lomborg overlapped National Interagency Fire Center (NIFC) annual US fire data with the Historical Statistics of the United States – Colonial Times to 1970. There we have statistics for area burnt since 1926 and up to 1970. Reassuringly, the data for 1960-1970 ‘completely overlap.’ This is the same data series.” Professor Lomborg said. It shows recent forest fire activity is one-fifth the record since 1926 even with the recent increases in acreage burnt.



We can see prior to 1880, wildfires were much more common. Sweetnam looked at long-term incidence of wildfires in North America and found they have declined the last century.



Incidence in wildfires in North America 1600-2000

Sweetnam et al. 2016 Phil Trans B

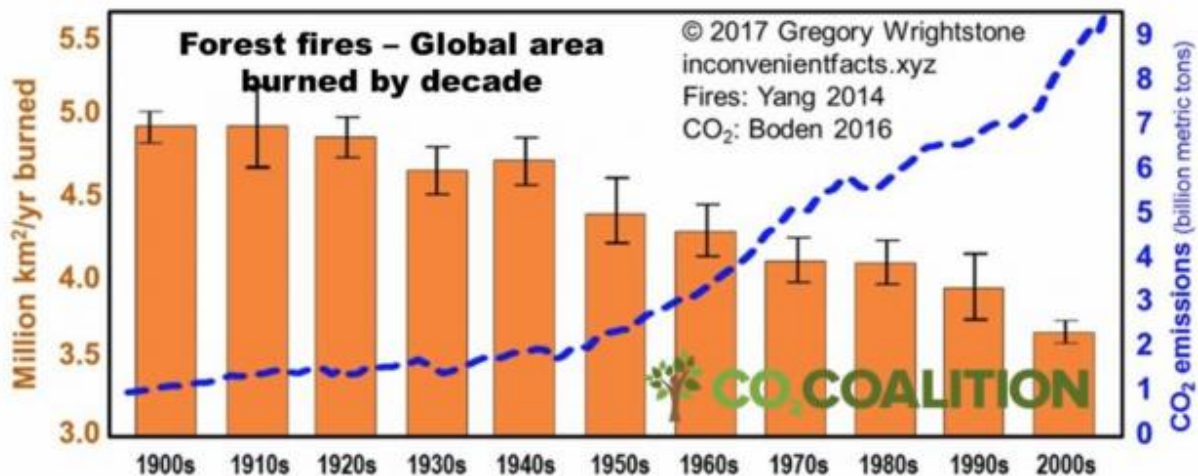
DARK DAYS

Dark days from smoke are rare but not new. In 1871, during the week of Oct. 8-14, it must have seemed like the whole world was ablaze for residents of the Upper Midwest. Four of the worst fires in U.S. history all broke out in the same week across the region. The Great Chicago Fire, which destroyed about a third of the city's valuation at the time and left more than 100,000 residents homeless, stole the headlines. But at the same time, three other fires also scorched the region. Blazes leveled the Michigan cities of Holland and Manistee in what has been referred to as the Great Michigan Fire, while across the state another fire destroyed the city of Port Huron.

The worst fire of them all, however, might have been the Great Peshtigo Fire, a firestorm that ravaged the Wisconsin countryside, leaving more than 1,500 dead – the most fatalities by fire in U.S. history.”

To summarize, any increase in the frequency and/or severity of the impacts of annual end of dry season forest fires are a forest management and environmental and governmental policy induced issue, not a Global Warming induced one.

A [study by scientists with the Canadian Forest Service](#) compared temperatures and CO₂ concentration versus frequency of forest fires over the last 150 years in North America and northern Europe. The authors demonstrated a link between more CO₂ in the air and fewer fires worldwide. They attributed the decline in forest fires to the combined effect of CO₂ fertilization and rising temperature, leading to greater soil moisture. Higher levels of atmospheric CO₂ means that plants lose less water via the process of transpiration, which results in less moisture being drawn from soil.



Source area burned: Yang, J, Tian H, Tao B, Ren W, Kush J, Liu Y, and Wang Y (2014) Spatial and temporal patterns of global burned area in response to anthropogenic and environmental factors: Reconstructing global fire history for the 20th and early 21st centuries, J Geophys Res Biogeosci, 119, 249-263

Source CO₂: T.A. Boden, G. Marland and R.J. Andres. 2016. Global, Regional and National Fossil-Fuel CO₂ Emissions. Carbon Dioxide Information Analysis Center

ROLE OF DEVELOPMENT AND GOVERNMENT POLICIES

California's catastrophic wildfire season last year and again this November illuminated the years' long stalemate between those who want to cut back the overgrown, beetle-infested national forests and environmentalists who have axed efforts to fell more trees, blaming the destructive fires on climate change. See more in the Washington Times.

In December, 2017, the U.S. Forest Service announced that California had set a record with 129 million dead trees on 8.9 million acres, the result of a five-year drought and beetle-kill, but that its tree mortality task force had removed only about 1 million. Meanwhile, the logging industry has continued its free fall, with timber harvesting dropping by 80 percent in the past 40 years, as projects in the national forests are killed or delayed by “frivolous litigation from radical environmentalists who would rather see forests and communities burn than see a logger in the woods,” according to our prior Interior Secretary Ryan Zinke. When a bipartisan bill was passed in 2017 in California to help fund PGE tree cutting near power lines to lessen fire danger, it was vetoed by Governor Brown.

The LA Times in October, 2017 reported The explosive failure of power lines and other electrical equipment has regularly ranked among the top three singular sources of California wildfires for the last several years. In 2015, the last year of reported data, electrical power problems sparked the burning of 149,241 acres – more than twice the amount from any other cause. Tree cuttings near power lines, burying the power lines where possible would help though it would not prevent fires from careless campers or arsonists. Smokey Bear PSAs need to be revived.

These same radical environmentalists hold growers, farmers and ranchers in the same level of contempt they have for foresters. Their actions have led to the diversion of water to rivers and the Pacific Ocean, threatening agriculture in the #1 agricultural state for produce.

University of Washington Professor of Atmospheric Sciences Cliff Mass pointed out in a recent interview with the Daily Caller: Wildfire area could well be increasing because of previous fire suppression, mismanagement of our forests, and a huge influx of people into the west, lightning fires and providing lots of fuel for them.

University of Alabama-Huntsville’s Distinguished Professor of Atmospheric Science John Christy says human mismanagement is the more important cause of the huge fires: If you don’t let the low-intensity fires burn, that fuel builds up year after year. Now once a fire gets going and it gets going enough, it has so much fuel that we can’t put it out. In that sense, you could say that fires today are more intense, but it’s

because of human management practices, not because mother-nature has done something.

In this Wall Street Journal opinion piece *Only Good Management Can Prevent Forest Fires* - There's nothing new about catastrophic blazes. It's how nature has always dealt with overgrowth. The author, Tom McClintock writes: "There's nothing new about catastrophic blazes. It's how nature has always dealt with overgrowth." "Excess timber comes out of a forest in two ways—it gets carried out or burned out.

For much of the 20th century, harvesting excess timber produced thriving forests by matching tree density to the ability of the land to support it. Foresters designated surplus trees, and loggers bid for the right to remove them at auction, with the proceeds going to the U.S. Treasury. These revenues were then put back into forest management and shared with local communities.

What went wrong? In the 1970s, Congress passed a series of laws subjecting federal land management to time-consuming and cost prohibitive environmental regulations. Instead of generating revenues, forest management now costs the government money. As a result, timber harvested from federal lands has declined 80%, while acreage destroyed by fire has increased proportionally."

In his most recent analysis, California Policy Center's (CPC) contributor Edward Ring brings much-needed balance to the discussion. He explained how the environmental movement fiercely prevented – and continues to prevent – basic forest management. Ed is an expert in this field. Before cofounding CPC, he founded EcoWorld.com and the popular "GoingGreen" investor conferences. His piece is required reading for anyone looking for a more nuanced view of why the state is on fire. He writes: In 1999, the Associated Press reported that forestry experts had long agreed that "clearing undergrowth would save trees," and that "years of aggressive firefighting have allowed brush to flourish that would have been cleared away by wildfires." But very little was done. And now fires of unprecedented size are raging across the Western United States.

“Sen. Feinstein blames Sierra Club for blocking wildfire bill,” reads the provocative headline on a 2002 story in California’s Napa Valley Register. Feinstein had brokered a congressional consensus on legislation to thin “overstocked” forests close to homes and communities, but could not overcome the environmental lobby’s disagreement over expediting the permit process to thin forests everywhere else. Fire suppression along with too many environmentalist-inspired bureaucratic barriers to controlled burns and undergrowth removal turned the hillsides and canyons of Southern California into tinderboxes.

Climate change spares private forests: Katy Grimes, editor of the California Globe, points out that the disparate impact of climate change on public and private forests suggests another factor is at play, namely the lack of proper forest management in government-run forests: For decades, traditional forest management was scientific and successful, until ideological, preservationist zealots wormed their way into government and began the 40-year overhaul of sound federal forest management through abuse of the Endangered Species Act and the house movement... Rep. Tom McClintock (R-CA) ... has warned, “Our forests are now catastrophically overgrown, often carrying four times the number of trees the land can support. In this stressed and weakened condition, our forests are easy prey for drought, disease, pestilence and fire.... Forest fires, fueled by decades of pent up overgrowth are now increasing in their frequency and intensity and destruction... Excess timber will come out of the forest in one of only two ways. It is either carried out or it burns out....”

The same climate change impacts private lands as public lands, but private forests are not burning down because they are properly managed. Or if a fire does break out on privately managed forest land, it is often extinguished more quickly and easily because the trees aren’t so close together and the underbrush has been cleared away.

See more on wildfires [here](#).