Is the climate changing our view of fire?

1 Historically, the deliberate use of fire has long helped civilizations to advance. It allowed the development of farming and technology, which in turn led to the creation of towns and cities. The deliberate use of fire has long helped nature too. By burning away decaying plants and other vegetation, farmers can help healthy plants to grow and renew the land. However, in the latter half of the 20th century, it was clear that as civilizations advanced, they burned through natural resources and caused climate change. Now, due to climate change, our view of fire may need to change also.

2 One example of how climate change has changed opinions toward fire is the Australian wildfires. 2019 was one of the hottest and driest years ever recorded in Australia. Many believe that the lack of rain, the dry lands, and the increasing heat were some of the main reasons for the wildfires of 2019–2020, otherwise known as Australia's Black Summer. Those terrifying fires destroyed approximately 60 million acres of land and showed the risk of wildfires for people and animals.

3 Some of the other biggest wildfires ever seen were the Siberian Taiga wildfires in 2003, which destroyed over 55 million acres of land. Again, climate change was a factor, but perhaps a cause just as significant was poor communication from officials about local fires. Burning vegetation on farms or in gardens is so common in Siberia that authorities view fire as a normal part of life and only stop fires that are near populations. One of the reasons the Siberian Taiga fires spread so far might have been because different communities across Siberia were not informed by officials of the number and size of local fires.

4 The clearest need to change our attitude to fire is with the use of "controlled burns." This practice is often employed by authorities to try and reduce the unpredictable nature of wildfires. The technique involves deliberately starting a fire in an area chosen and monitored by firefighters. Once the fire has burned all the dead trees and fallen plants, the fire will be extinguished. This creates what is called a "fire break": a line of burnt ground that a wildfire can't cross. Controlled burns have been used for centuries but the recent changes to the environment might mean this old technique needs to change. Especially as some of the biggest wildfires in the US have been caused by controlled burns.

5 One such fire was the Calf Canyon and Hermits Peak Fire of 2022 in New Mexico, which burned an area double the size of New York City, around 350,000 acres. As the name suggests, this wildfire was the combination of two separate fires, both of which were caused by controlled burns by federal authorities. The fire in Calf Canyon was a controlled burn in January of piles of wood that were afterwards covered by snow. Mistakenly, the people in charge believed that the snow would put out the fire. However, that was not the outcome. Instead, the wood stayed hot under the snow and in April, when the snow melted and strong winds blew, the fire started again and quickly spread. The fire in Hermits Peak was a controlled burn in April that was forced beyond the fire breaks by the same strong winds.

6 Fortunately, no lives were lost in the 2022 fire, but hundreds of buildings were destroyed and thousands of others were threatened. The authorities have acknowledged that mistakes were made and want new regulations for controlled burns. Despite this, many people in New Mexico never want controlled burns to be used again. Understandably, they feel that the cost of the possible errors is too high. So without the use of controlled burns, how else can wildfires be prevented?

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7 When it comes to fighting these fires, information is key. As the wildfires in Siberia demonstrated, it is vital that information about wildfires is shared between different regions so they can work together to deal with them. Also, by conducting studies of wildfires, rating how potentially dangerous they are, and by analyzing wildfire data, authorities can develop their understanding of what causes wildfires. This information also helps authorities to think of how they prevent and respond to fires.

8 Other wildfire prevention techniques include cutting down and removing decaying vegetation by machine. Dead plants can also be destroyed using chemicals and chemicals can also be used to prevent plants from growing. Admittedly, these other techniques also have negative side effects. Machines create air and noise pollution. Chemicals pollute the ground and contaminate water supplies. The use of machines and chemicals can also be much more expensive and take a long time to work; nothing is as cheap and fast as a "controlled burn." Obviously, no matter the technique, the goal is the same—to keep forests healthy and whole, and to protect the surrounding communities.

Read the statements below and decide if the following statements are TRUE, FALSE, or NOT GIVEN

1. Fire has only been used by humans for harmful purposes.

2. Climate change was officially confirmed by the author as the main cause of Australia's Black Summer wildfires in 2019–2020.

3. The Siberian Taiga wildfires were caused entirely by global warming.

4. Poor communication contributed to the spread of the Siberian wildfires.

5. Controlled burns are a new technique developed in the 21st century.

6. Controlled burns are always safe and effective.

7. The Calf Canyon wildfire was caused by two controlled burns.

8. All residents were evacuated safely before the 2022 wildfire began.

9. Machines and chemicals used in fire prevention have no negative effects.

10. Sharing information is important in managing wildfires.

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