Wildfires blister Alaska with increased frequency, intensity

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In this June 7, 2015 file photo, smoke rises from the Bogus Creek Fire, one of two fires burning in the Yukon Delta National Wildlife Refuge in southwest Alaska. Wildfires are blistering Alaska forests with increasing frequency and intensity and forest managers and climate scientists are trying to explain why and predict what's next. One common factor associated with the increase, which doesn't bode well for 2015 or beyond, is warm weather, even if experts don't explicitly blame climate change. (Matt Snyder/Alaska Division of Forestry via AP)

Alaska residents endure the nation's harshest winters for the reward of beautiful summer days with sunshine that lingers until midnight.

But increasingly, large wildfires have marred the pristine outdoors, filling the skies with black smoke and forcing people who live near forests to flee for safety.

A study released Wednesday reinforces a trend revealed by state records, showing that wildfires have been blistering Alaska with greater frequency and intensity.

The findings have left forest managers and climate scientists to try to explain why and predict what's next. "Fire seasons seem to be starting earlier and lasting longer," said Tim Mowry, a state Division of Forestry spokesman.

A common factor associated with the increase—which doesn't bode well for 2015 or beyond—is warm weather, even if experts don't explicitly blame climate change.

Temperatures climbed 20 degrees above normal to the mid-80s last week in Anchorage, currently situated between a pair of active blazes that have charred dozens of homes and buildings.

Warm weather in early summer has a strong correlation with the number of square miles that eventually burn, climate expert Scott Rupp said. But it's too soon to blame global warming. "We don't have that understanding or the data that allows us to make those relationship connections," Rupp said.

Still, climate models predict heat-trapping, greenhouse gasses will lead to warmer Alaska summers. "They're all consistently trending up," Rupp said.

Records on Alaska wildfires date to 1939 and show that three of the worst fire seasons have come in the last 12 years, including 2004, when more than 10,000 square miles—about 6.5 million acres, or the size of Delaware and Rhode Island combined—went up in flames.

Hundreds of fires are dotting the state even now, including growing blaze of about 1 square mile near the Yukon River village of Nulato. Thick smoke has made air evacuations impossible, forcing some in the small Athabascan Alaska Native community to evacuate by boat, 36 miles to the nearest town. Another fire in the state's interior has led a dog sled racing champion to evacuate his animals along with some of the people in the remote community of Eureka. Musher Brent Sass posted on his kennel's verified Facebook account that he was "preparing the homestead for the worst but hoping for the best."

The blazes come as a new study from Climate Central, a group of scientists and journalists who research climate change, indicates that the number of large Alaska wildfires have nearly doubled in the 1990s and 2000s compared to the '50s and '60s.

The analysis wasn't a cause-and-effect study, but it notes Alaska has warmed more than twice as fast as the rest of the country in the last 60 years.

So far this season, more than 500 square miles have been scorched, drawing in dozens of crews. Nearly 1,100 people were called in, including elite Hotshot crews that battle flames on the front lines, to fight the fires burning near homes north and southwest of Anchorage.

Rupp, a University of Alaska Fairbanks professor and principal investigator for the U.S. Geological Survey's Alaska Climate Science Center, who researches and projects forest ecology, said Alaska's forests and tundra have evolved to burn with high intensity. Issues arise, Rupp

said, when communities spring up in the middle of forests. "That's when we have problems like we've seen over the past week," he said.

On June 14, a fire ignited about 40 miles north of Anchorage and burned 55 homes. A day later, flames kicked up 60 miles southwest of the state's largest city and went on to burn 10 buildings.

The forest floor—filled with spruce needles and leaves—dries out and provides fuel for fires, especially if snow disappears early, as has been happening lately. So when a blaze starts from an untended campfire or a lightning strike, "these fires can extend for a very long period of time," Rupp said. "That tends to be the pattern we see in these big fire years, where we're burning multiple millions of acres."

To combat the flames, crews have been deploying earlier and maintaining their focus on populated areas. Smokejumpers, for example, have been getting ready in April rather than May for several years.

This season, nearly 500 fires have blackened tundra and forest lands. Close to half are still blazing.

"This is the kind of behavior that we would expect," said Todd Sanford, lead author of the Climate Central study.

He notes that warmer temperatures coincide with more wildfires, "and unfortunately it's likely to continue into the future."