

Southern Europe and western parts of Canada and the US have been devastated by wildfires this year. And they're not the only ones – it seems like much of the world is ablaze right now. And this could be the new normal.

This year has been a terrible year for wildfires across the globe. And there doesn't appear to be an end in sight.

Over the last several weeks, more than a dozen massive blazes have swept through Northern California, killing 41 people, destroying 6,000 homes and devastating the area's celebrated wine country.

Authorities have called the disaster the deadliest and most destructive series of blazes in California history. Across the US, the government has spent more than \$2.7 billion (€2.2 billion euros) on firefighting in its just-finished budget year, a new record.

Thousands have been evacuated in northwestern Spain in recent days, with fires killing at least four people.

In neighboring Portugal, a series of wildfires broke out on Sunday in the center and north of the country, killing 41 and injuring another 71, according to the civil protection agency.

These latest fires came after similar huge blazes in June killed 64 people, making 2017 the deadliest year on record for forest fires in the country.

Over the summer, wildfires burned out of control on several continents. Southern Europe endured a record heat wave this year, creating hot, dry conditions that saw Italy, France, Croatia, Spain and Greece all swept by three times the average number of wildfires.

The western Canadian provinces of Alberta and British Columbia saw the worst season for fires since records began, with more than 1.26 million hectares (3.11 million acres) going up in flames by mid-October, according to provincial wildfire services.

But it's not just North America and Southern Europe that have been hit. In Siberia, wildfires destroyed hundreds of homes, and around 700 hectares of Armenian forest were also destroyed by fire. Earlier this year, Chile saw wildfires that were unparalleled in the country's history, according to President Michelle Bachelet.

Even Greenland, not known for its hot, dry conditions, suffered an unprecedented blaze this summer with a large grassy peatland fire burning for two weeks.

Big picture

"A lot of these things are happening locally, but people don't always connect them to climate change," said Kevin Trenberth, a scientist at the Climate Analysis Section of the National Center for Atmospheric Research in the US. "But there is a real climate change component to this and the risk is going up because of climate change."

With global temperatures rising, scientists say wildfires are likely to become increasingly

frequent and widespread.

“What’s really happening is that there is extra heat available,” Trenberth told DW. “That heat has to go somewhere and some of it goes into raising temperatures. But the first thing that happens is that it goes into drying — it dries out plants and increases the risk of wildfires.”

#### Tough competition

It certainly looks like it’s been a big year for fires in Europe and North America. But Martin Wooster, professor of earth observation science at King’s College London, said other parts of the world have seen worse in recent years.

“For example, this year, fires across Southeast Asia are extremely unlikely to be anything like as severe as they were in 2015,” he told DW.

Two years ago, drought caused by the El Nino weather system created lethal conditions for Indonesian forests and peatlands already degraded by draining and logging.

The smoldering peat — ancient, decayed vegetable matter condensed into a carbon-heavy fuel — kept fires burning for months on end.

“This led to huge fires, far bigger than any seen in Europe, and some of the worst air pollution ever experienced,” Wooster said.

#### Longer fire seasons, longer recovery

But there does appear to be a distinct trend, as fire seasons seem to be becoming longer and harsher. “In the western United States, the general perception is that there is no wildfire season any more, but that it’s continuous all year round,” said Trenberth.

In many parts of the world, wildfires are part of a natural cycle. Savannas, for example, are maintained by fire. Some trees not only survive fires but need them to release their seeds. Human intervention can disrupt these cycles, the scientific discipline of fire ecology has found. Putting out small fires can allow flammable debris to accumulate until a colossal fire starts that cannot be controlled.

But global warming is resulting in hotter, drier conditions that mean such infernos are becoming more common, even with careful forest management. And the changed climatic conditions can mean forests take far longer to recover. Meanwhile, fires are also starting in areas like the tropics that have no natural fire ecology.

#### Human fingerprints

Climate change isn’t the only man-made factor. Fires can also be started by careless humans dropping cigarettes or letting campfires burn out of control.

And in regions like the Amazon, where the annual fire season increased by 19 percent between 1979 and 2013, fire is deliberately used to clear forest to make way for agriculture.

“Farmers light fires to clear an area and what happens in drought conditions is that these fires become wild because the vegetation is so dry, it gets out of control,” said Trenberth. All this can have a feedback effect — more fires mean more carbon released into the atmosphere, which in turn drives climate change.

Source: m.dw