

Bushfires in Australia

Why in news?

Australia is witnessing widespread bushfires, and the country has declared a state of emergency for the state of New South Wales (NSW) along with a catastrophic fire warning.

What does the warning mean?

- When catastrophic fire warnings are put in place, residents are supposed to leave bushfire prone areas immediately.
- Across NSW, over 600 schools were shut.
- The recent bushfires have, notably, left at least three people dead.

Are bushfires new to Australia?

- Bushfires are a routine occurrence in the country.
- The Australian climate is hot, dry and prone to droughts.
- So, at any time of the year, some parts of Australia are prone to bushfires.
- Such fires happen when grass, branches, trees start burning in an uncontrolled manner.
- For New South Wales and Queensland, the peak risks for bushfires is during spring and early summer, which is around November-December.



What is distinct about the present bushfire season?

- The above pattern now seems to be breaking down, and bushfires are happening outside the regular places and times.
- This bushfire season is believed to be the worst and has started even before the beginning of the Southern Hemisphere summer.
- Furthermore, these bushfires are also affecting the quality of air in the areas surrounding them.
- The readings for PM 2.5 (223) and PM 10 (399) fell in the "hazardous" category (readings above 200) as per the Australian scale.
- On a particular day, 75 fires were ablaze; out of these, 9 were considered at the emergency level and 37 were not contained.
- The day saw over 300 new bushfires as well.

What causes bushfires?

- Bushfires, while are generally slow moving, have a higher heat output and can smoulder for days.
- Bushfires are thus considered to be an intrinsic part of Australia's environment.
- Its natural ecosystem has been shaped by and has evolved with historic and recent fires.
- It is difficult to tame and control naturally occurring bushfires; but their consequences can be minimised if certain measures are taken.
- There are other factors that create a favourable environment for bushfires.
- These include factors such as fuel load (leaf litter, barks, small branches), fuel moisture, wind speeds, high temperature, oxygen, low humidity and ignition source.
- They can be caused by both human activity and lightning, which is responsible for about half of ignitions in Australia.
- The remaining fires have human origins that are classified as deliberate or accidental.
- In fact, police in Australia are investigating if the fire in Sydney's upper north shore was deliberately lit by suspected arsonists (who commit the criminal act of deliberately setting fire to property.).

Is there a climate change link to this?

- There are speculations about the links between climate change and bushfires.
- While the bushfires are not directly triggered by climate change, climate change is increasing the risk of more frequent and intense bushfires.
- This time, fires are burning in places and at intensities never experienced before.
- E.g. rainforests in northern NSW, tropical Queensland, and the formerly wet old-growth forests in Tasmania
- The drought being faced is more intense than the Millennium Drought, with higher levels of evaporation due to higher temperatures.
- This has dried out the bush and made it easier for fires to start, easier for them to spread quickly.

Source: Indian Express

