



drishti

High Temperature at Death Valley

 drishtias.com/printpdf/high-temperature-at-death-valley

Why in News

Recently, **Death Valley** (USA) registered a temperature of 54.4°C which, once verified, could be the **highest temperature in more than a century**.

- The temperature was recorded at the **USA National Weather Service's automated weather station at Furnace Creek** on 16th August 2020.
- The Death Valley in **southeastern California is the lowest point in the North American continent**, and is a National Park. It is also the **hottest and driest** part of the continent.



Key Points

- The temperature has been **termed as preliminary and not final as it awaits verification.**
- According to the **World Meteorological Organization** (WMO), Death Valley's **all-time record high is 56.7°C taken on 10th July 1913** at Greenland Ranch.
 - It still stands as the **hottest ever recorded on the planet's surface.**
 - However, since the temperature-recording mechanisms a century ago were not as advanced, many have doubted if that reading was reliable.

- **Cause:**

The high temperature is a result of a '**heat dome**' that is smothering the west coast of the USA.

- **Heat Domes:** High-pressure circulation traps hot ocean air like a lid or a cap trapping heat at the surface and favouring the formation of a **heat wave**.
- Higher daily peak temperatures and longer, more intense heat waves are becoming increasingly frequent globally due to **climate change**.

- **Effects of Extreme Heat:**

- According to the **World Health Organization** (WHO), extreme heat can **exacerbate pre-existing health conditions**, including respiratory diseases, heart conditions and kidney disorders.

The **immediate effects** on the human body are heat cramps, dehydration and even potentially fatal heat strokes.

- It can also have a **severe impact on agriculture and forests**.
 - It either causes **vegetables to wilt and die** or **encourage the spread of plant diseases**.
 - It causes **wildfires** which lead to **forest cover reduction and death of fauna**.
- It **affects infrastructure too** by straining power grids and causing blackouts. It can ground planes, melt roads and cause the inside of vehicles to overheat to dangerous levels.

Source: HT