

Greenolution *Digest*

Greenolution e-Newsletter, December 2014

COVER STORY 1

Global War(n)ing!

MUST KNOWS! 2

GREEN QUIZ 3

GREEN CLICK 4

Global War(n)ing!

By definition, global warming is the observed century-scale rise in the average temperature of Earth's climate system (Source: Wikipedia). Just to put the urgency into perspective, the Earth's average surface temperature rose by 0.74 ± 0.18 °C over the period 1906–2005. The rate of warming over the last half of that period was almost double that for the period as a whole (0.13 ± 0.03 °C per decade, versus 0.07 ± 0.02 °C per decade). Temperatures in the lower troposphere have increased between 0.13 and 0.22 °C (0.22 and 0.4 °F) per decade since 1979, according to satellite temperature measurements.

Global mean land-ocean temperature change from 1880 to 2013, relative to the 1951–1980 mean. The black line is the annual mean and the red line is the 5-year running mean. The green bars show uncertainty estimates. **Source: NASA GISS**

WILDFIRES

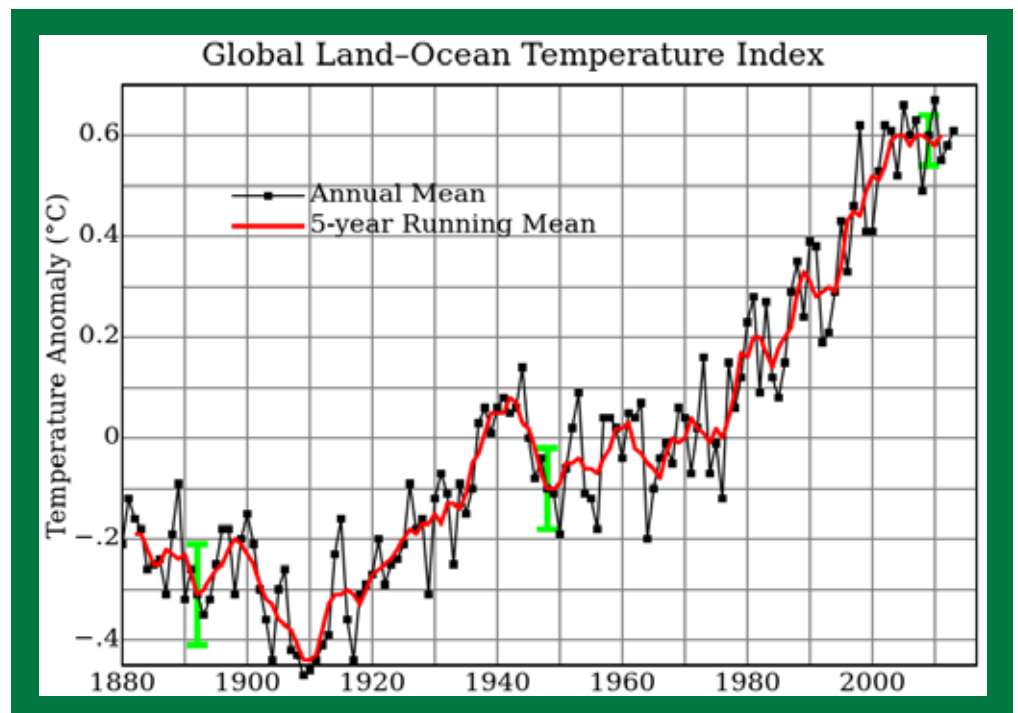
This prediction is based on how trees absorb carbon dioxide, which is the primary greenhouse gas in Earth's atmosphere, and release oxygen. If too many trees burn from wildfire, there will not be enough to remove the carbon dioxide, which would cause temperatures to rise and more wildfires.

FLOODING

According to the British newspaper, the "Guardian," experts believe that global warming will cause Earth's polar caps to melt, which will result in massive flooding. Studies in 2009 by the University of Northern Arizona revealed temperatures in the Arctic Circle, or the North Pole, were the highest they had been in the previous 2,000 years. Pakistan experienced an increase in floods in the summer of 2010, which was attributed to the melting of glaciers in the nearby Himalayan mountain range. In 2007, the United Nations released a public statement that linked flooding to global warming.

EARTHQUAKES

One consequence of melting polar caps by global warming is the increasing frequency of earthquakes. These natural disasters occur as a result of the disintegration of glaciers in the Arctic Circle. The glaciers in this region of the planet act as a weight on Earth's crust. If the ice is removed, Earth's crust will rebound, or move upward. This will result in the shifting of tectonic plates, which, in turn, causes earthquakes. According to Live Science, scientists believe that Earth's current crustal rebounding could be caused by the melting at the end of the previous Ice Age. An increase in earthquakes will also cause an increase in tsunamis.



**MUST
KNOWS!**

Did You Know?

- Some of the world highest and longest mountains lie under the ocean. The world's largest underwater mountain is **Mauna Kea** in Hawaii.
- The **mid-Atlantic Ridge** is the world's longest chain of undersea mountains.
- **Mount Everest** is not the tallest mountain in the world, if we calculate the height of the mountain from the base to the peak. Mauna Kea of Hawaii is the tallest.
- If we measure the height of the mountain from the centre of the earth, **Chimborazo**, a volcano in the Andes of Ecuador is the tallest, since it is located nearly on the equator where the earth bulges the most. Everest is tallest mountain if we measure the height from above the sea level.
- It is estimated that **12%** of the world population live in mountain areas.
- Amongst the entire mountain areas, **Alps** are densely populated.



GREEN QUIZ

Quiz

Mountains play a pivotal role in our ecosystem. Besides being a treasure trove of a variety of flora and fauna, mountains also have a great effect on the climate of that region. The Himalayas, for instance, have a profound effect on the climate of the Indian subcontinent and the Tibetan Plateau. They prevent frigid, dry winds from blowing south into the subcontinent, which keeps South Asia much warmer than corresponding temperate regions in the other continents.

December 11 is International Mountain Day, and let's test your knowledge on them. Take the quiz!

1 Which of these mountains is also an active volcano?

- A. Popocatepetl (Mexico)
- B. Mauna Kea (Hawaii)
- C. Pobeda Peak (Kyrgyzstan/China)

2 Which of the following mountain ranges reaches the highest altitude?

- A. Andes
- B. Pyrennees
- C. Rockies

3 Which of these mountains is the highest mountain in the United States?

- A. Pike's Peak
- B. Mt. McKinley
- C. Mount Hood

4 Mt. Ararat, long thought to be the traditional resting place of Noah's Ark, is located where?

- A. eastern Turkey
- B. northern Afghanistan
- C. southern Ethiopia

To know the winner for last issue

visit www.greenolution.com

**GREEN
CLICK**

DT 3,5-4,5 / 16-80 AZ



Tushar Tripathi - Group Head - CHP, CGPL



Rahul Sute, DCS



Debarghya Mitra, Bhira



Tulshidas Chavan, Bhira