

Carbon Footprint Club's Monthly

Patrons

Dr. Basudob Bakshi

Mr. Sharad Amin

Coordinator

Dr. Rita N. Kumar

Advisors

Dr. Sushmita Sahoo

Ms. Rashmi Thakkar

Ms. Khushboo Pandey



Deo Gratium Habeamus

"Let us be grateful to god"

Monthly Article:

Wildfires

Wildfires occur when two of the necessary elements of a fire triangle come together in a susceptible area: a ignition source is brought into contact with a combustible material such as vegetation, that is subjected to sufficient heat and has an adequate supply of oxygen from the ambient air. A high moisture content usually prevents ignition and slows propagation, because higher temperatures are required to evaporate any water within the material and heat the material to its fire point.





California has dry, windy, and often hot weather conditions from late spring through autumn that can produce moderate to devastating wildfires. At times, these wildfires are fanned or made worse from strong, dry winds, known as Diablo winds in the northern part of the state and Santa Ana Winds to the south. Wildfires in California are growing more dangerous and costly. U.S. taxpayers are paying about **\$3 billion** a year to fight wildfires, triple what it cost in the 1990s, and big fires can lead to billions of dollars in property losses.

On occasion, freak lightning strikes from thunderstorms may also inadvertently spark wildfires in areas that have seen past ignition. Examples of this are the 1999 Megram Fire, the Summer 2008 California wildfires, among others.



Satellite image of the wildfires in Southern California [US] and Baja California [Mexico], on May 15, 2014. 2014 was one of California's worst wildfire seasons on record.

Wildfires can affect local atmospheric pollution, and release carbon in the form of carbon dioxide. Wildfire emissions contain fine particulate matter which can cause cardiovascular and respiratory problems. Increased fire byproducts in the troposphere can increase ozone concentration beyond safe levels. Forest fires in Indonesia in 1997 were estimated to have released between 0.81 and 2.57 gigatonnes (0.89 and 2.83 billion short tons) of CO_2 into the atmosphere, which is between 13%–40% of the annual global carbon dioxide emissions from burning fossil fuels. Atmospheric models suggest that these concentrations of sooty particles could increase absorption of incoming solar radiation during winter months by as much as 15%.



Satellite image of the 2003 Cedar Fire. The Cedar Fire was the largest wildfire in California's history.

The Cedar Fire was a wildfire which burned a large area of land in San Diego County, California in October 2003. The Cedar Fire was one of 15 wildfires burning throughout Southern California during that month, which became known as the "2003 Firestorm" and the "Fire Siege of 2003." The October 2003 California wildfires were estimated to have burned a total of 800,000 acres (3,200 km²). The Cedar Fire was the largest wildfire in recorded California history, with the possible exception of the Santiago Canyon Fire of 1889.

Recent activities of Carbon Footprint Club

Composting



The Composting activity was initiated by Committee of Carbon Footprint Monitoring of the Carbon Footprint Club in order to recycle the organic matter (leaves, straw etc.) as fertilizer. the process of composting simply requires making a heap of wetted organic matter known as green waste (leaves, food waste) and waiting for the materials to break down into humus after a period of weeks or months. Modern, methodical composting is a multi-step, closely monitored process with measured inputs of water, air, and carbon- and nitrogen-rich materials. The decomposition process is aided by shredding the plant matter, adding water and ensuring proper aeration by regularly turning the mixture. This activity is regularly monitored and will serve as an example of organic farming method in the town. Additionally, it will be an effective method of recycling.

Executive meeting



Date: August 24, 2016

Attendees:

Coordinator: Dr. Rita N. Kumar

Club Patron: Sharad Amin

Core Committee

Conveners :

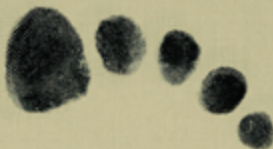
- Yukti Sharma
- Palak Joshi
- Kanishka Thakur
- Purvi Patel
- Aishwarya Patel

Members :

Kashyap Desai, Ravi Amipara, Nutan Marwadi, Ritu Shah & Darshika Kava



Scheduled Events & Activities:



September 15, 2016

Carbon day observance

September 16, 2016

Ozone day observance

September 24, 2016

Jack O' Lantern making event

Variable dates

No Vehicle Day

Carbon Footprint Auditing of local institutes

Eco-shop initiative