



NEWS BULLETIN

Plants and Pollution

ENVIS RP-NBRI

ENVIS RP-NBRI



Vol. 08, September 2019

Plants to Protect Water Pollution

CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

Rain garden, bioswale to reduce pollution

Record Eagle, 02 September 2019

The National Fish and Wildlife Foundation awarded a \$150,000 grant to the village through its Sustain Our Great Lakes program. The money will be spent to install rain gardens and a bioswale to reduce both floods in the marina parking lot and pollutants that pour into East Bay.

“This funding will let us take the first important step of designing and installing the first of many planned green infrastructure projects in the village,” said Sarah U’Ren, program director for the Watershed Center Grand Traverse Bay.

Village officials worked with the nonprofit organization to create a stormwater action plan adopted last year. This is the first big project.

“We’ve been discussing potential projects for a number of years and have really just been waiting for funding to come through for design and implementation,” U’Ren said.

A bioswale is a landscape element that removes debris and pollution from surface water runoff, as does a rain garden but on a larger scale. They hold onto rainfall runoff for a longer period, allowing the water to seep into the ground and pass through plants’ root structures, rather than quickly draining off directly into surface water and carrying street pollutants with it.

Such pollutants can include toxins, pathogens, nutrients, sediments and other chemicals, all of which impact water quality. Environmental advocates argue sediments and nutrients are the greatest threats to water quality in Grand Traverse Bay, on which Elk Rapids sits on its.....

[Read More...](#)

Protect the Western Ghats to tackle floods

Deccan Chronicle, 23 September 2019

Floods are now an annual nightmare in many parts of southern and western India. Valleys in the states of Maharashtra, Karnataka and Kerala that weren’t considered flood-prone until recently are at risk.

During floods and landslides in August 2019, two villages were completely destroyed killing several people, while a year earlier Kerala saw its worst floods in a century.

These floods appear to be getting more severe. Climate change is causing stronger and more erratic rainfall with recurrent floods in low-lying areas while population growth is putting more people in risky areas. And another problem comes from deforestation in the mountain range where much of the water first fell: the Western Ghats.

The Western Ghats run for 1,600km in parallel with India’s west coast, from Gujarat right down to Tamil Nadu at the tip of the subcontinent. It is – or was – a picturesque landscape of serene valleys, steep gorges and virgin forests. Yet recurring floods and landslides in the mountains, hills and areas downstream (between the Ghats and the sea) show that India must rethink its environmental law to balance the needs of nature and humans.

The mountains are teeming with life. Though they cover only a small part of India’s total land area, the Ghats are home to more than 30% of the country’s species of plants, fish, reptiles, birds and.....

[Read More...](#)



NEWS BULLETIN

Plants and Pollution

ENVIS RP-NBRI
ENVIS RP-NBRI



Vol. 08, September 2019

Forest Fire: An Environmental Disaster

CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

Singapore haze reaches worst level in three years as Indonesian forest fires rage

South China Morning Post, 14 September 2019

Singapore's air quality deteriorated to "unhealthy" levels on Saturday for the first time in three years, data from the National Environment Agency (NEA) showed, threatening to deepen a regional dispute over forest fires.

Every dry season, smoke from fires to clear land for palm oil and pulp and paper plantations in Indonesia clouds the skies over much of the region, raising concerns about public health and worrying tourist operators and airlines.

The 24-hour Pollution Standards Index, which Singapore's NEA uses as a benchmark, was in a range of 87-106 in the afternoon. A reading above 100 is considered unhealthy. This is the first time the 24-hour benchmark has breached 100 since August 2016, data shows.

"There has been a deterioration in the haze conditions in Singapore this afternoon," the NEA said in a statement.

"This was due to a confluence of winds over the nearby region that led to more smoke haze from Sumatra being blown toward Singapore."

Many Singaporeans chose to stay indoors on Saturday as a grey haze shrouded the city.

Singapore, which prides itself on its clean air, passed a cross-border air pollution law in 2014 that makes those who cause haze both criminally and civilly liable.

Next weekend is the Singapore Formula One Grand Prix road race, a marquee event that draws the world's attention to the wealthy tourist destination.....

[Read More...](#)

Indonesia forest fire rages creating post-apocalyptic blood red skies

ABC, 23 September 2019

Jamaludin, who goes by one name, from the village of Jebus, said his home has been surrounded by smog for the past three months.

But conditions worsened over the weekend when they sky turned red, a sign of unusually high pollutant contents in the air.

"The haze has caused smoke particles and dust to rain down to the ground and you can only see between 40 to 50 metres in front of you."

Haze caused by land clearing fires this year is among the worst the country has seen, with a state of emergency declared across at least six Indonesian provinces.

There have been more than 73,000 fire alerts across the country since the beginning of September alone, causing flight cancellations and closures of schools.

Jamaludin said it was the first time he had seen the sky become such a dramatic colour, and residents are worried it will continue to worsen.

Their village is only 5 kilometres from a burning peatland.

ABC meteorologist Nate Byrne said the eerie red light was caused by the same phenomenon that makes sunrises and sunsets red, called Rayleigh scattering.

"Light from the sun gets scattered when it hits molecules or small particles in the atmosphere," he said. When the blue light gets scattered away,.....

[Read More...](#)



NEWS BULLETIN

Plants and Pollution

ENVIS RP-NBRI

ENVIS RP-NBRI



Vol. 08, September 2019

Movement to Save Trees

CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

Red Tape Movement: People's Movement For Trees, Biodiversity And Climate Action

Youth Ki Awaaz, 17 September 2019

Mexico's Earth is under the grip of climate change which, in turn, is the result of increasing level of carbon dioxide and other greenhouse gases (GHGs)—due to deforestation, urbanization, industrialization, pollution and increasing human population. Melting of polar ice caps, oceanic acidification, increasing global temperature, flood, drought, increasing sea level, and depleting biodiversity are important impacts of "Climate Change". Anthropogenic activities are raising the level of CO₂ by about two parts per million a year in the atmosphere.

According to the Centre For Research On The Epidemiology Of Disaster (CRED) & UNISDR, people exposed to natural hazards in low-income countries are seven times more prone to deaths, and six times more prone to injuries or displacement compared to equivalent populations in high-income countries.

According to the IPCC 2014 report, the damage caused by climate change will increase as temperatures rise, and it will affect vulnerable populations through food insecurity, higher food prices, income losses, lost livelihood opportunities, adverse health impacts, and population displacements.

Climate change threatens to create a vicious cycle for the world's poor, as further warming pushes more people into poverty, increasing their vulnerability to climate impacts..... [Read More...](#)

No Tree Will Be Felled in Aarey till September 30 for Metro Car Shed, Rules Bombay High Court

News 18, 20 September 2019

The Bombay High Court on Tuesday said Mumbai Metro Rail Corporation Ltd (MMRCL) shall not fell trees in the Aarey Colony area here to make way for a Metro car shed till September 30.

The court will hear a petition challenging proposed felling of over 2,600 trees in this area in north Mumbai from September 30, said a division bench of Chief Justice Pradeep Nandrajog and Justice Bharati Dangre.

Activist Zoru Bathena has filed a petition challenging the approval granted by the Brihanmumbai Municipal Corporation's Tree Authority on August 29 to cut trees for the Metro car shed.

When the bench said it would commence hearing on Bathena's petition on September 30, his counsel Janak Dwarkadas said that on September 13 the tree authority issued final permission letter to MMRCL for felling or transplanting 2,646 trees.

However, no trees can be cut for the next 15 days, because under the Maharashtra (Urban Areas) Protection and Preservation of Trees Act, 1975, this much period has to be granted to citizens to raise objections, Dwarkadas said.

"The 15-day period gets over on September 28. We would like MMRCL to make a statement that it would not start cutting trees till September 30," he said..... [Read More...](#)



NEWS BULLETIN

Plants and Pollution

ENVIS RP-NBRI

ENVIS RP-NBRI



Vol. 08, September 2019

Green Space

CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, LUCKNOW

Green Spaces

[Psychiatric Times, 19 September 2019](#)

William Blake was onto something in his “Laughing Song” poem. We need green spaces. Not only are they pleasant to look at, but these spaces are also healing. Almost anyone who has spent substantial time in a forest, up a mountain, or along a river recognizes that this is healing.

Nature provides both physical and psychological benefits. Studies have shown improved healing in hospitals with green spaces outside windows rather than brick walls and decreased anxiety and increased workplace satisfaction in offices with plants and/or views of nature.

How does this healing through exposure to nature occur? A variety of possible mechanisms have been proposed, from improved air quality to increased physical activity and enhanced social integration. Ming Kuo, PhD, has studied how green spaces affect humans and has postulated that there may be at least one common pathway toward wellness acting through the immune system.

The immune system has been implicated in depressive and anxiety disorders, as well as other mental and physical health problems. Certainly, reduced air pollution, increased physical activity, and improved social ties may all occur with an increase in green spaces and are associated with improved functioning of the immune system. In addition, plants produce antimicrobial organic compounds called phytoncides that change autonomic function and increase immune functioning. Walks in the forest decrease inflammatory cytokine..... [Read More...](#)

These Indoor Plants Will Make Your Space Healthier—and They're Hard to Kill

[Yahoo Life Style, 19 September 2019](#)

It's really hard to deny that plants are pretty much everywhere these days. You might see them all over your Instagram feed. You might find yourself in conversations with your friends about the various stages of "plant parenthood." You even might have read various think pieces about why millennials love plants, like this one or this one. Even though plants have been around since the beginning of time, their popularity is off the charts these days.

We're not complaining, though. Plants add so much to a space. It's a great way to refresh a room's look without spending a fortune on a new piece of furniture. For those new to the #adulting scene, they also give you some responsibility—consider it baby steps on the road to being a pet parent or a real parent. And they also have some health benefits, too.

We've written about how plants could reduce anxiety and stress, help you focus, and help you breathe easier (by recycling the carbon dioxide we exhale back into oxygen thanks to photosynthesis). Some studies have shown that plants in the workspace can increase productivity, too. And research from NASA found that plants can improve the air quality in indoor spaces and remove toxins.

"Biophobia is becoming more relevant as people are raised within urban settings, and surrounded by technology rather than nature and other living things..... [Read More...](#)