



News

Noise pollution may prevent forest growth: Study

The effects of noise can reach organisms without ears. Because of the way living things rely on each other, noise pollution may actually stop some forests from growing, a new study suggests. In a New Mexico woodland dominated by pinyon pine and juniper trees, researchers found far fewer tree seedlings in noisy sites than they did in quiet ones. The study raises questions about the future of the area. "If the noise stays there long term, are we going to see the slow-motion transition from a pinyon-pine forest to more of a scrubland, and lose this important ecosystem of the pinyon pine which supports so much wild-life?" said Jennifer Phillips, a behavioral ecologist at Texas A&M University-San Antonio. The study area is dotted with gas wells, some of which are quiet and some of which have compressors that create a constant din. This allowed Phillips and her colleagues to compare sites that were similar except for noise level. In areas that had been noisy for at least 15 years, the researchers found only about 13 pinyon seedlings and four juniper seedlings per hectare, compared with 55 pinyon seedlings and 29 juniper seedlings per hectare in quiet areas. The noise also seemed to affect the rest of the plant community, with different wildflower and shrub species dominating in loud versus quiet sites. [.....Read more...](#)

Date: April 18, 2021**Source:** ABC News**Common plants and pollinators act as anchors for ecosystems**

The findings, published this month in *Ecology*, provide valuable insights for prioritizing the conservation of species that contribute to the strength of ecological communities. "A lot of times, conservation efforts are geared toward things that are rare. But oftentimes, species that are common are also in decline and could go extinct, and that could have really big repercussions for maintaining biodiversity," said Julian Resasco, lead author on the study and assistant professor of ecology. A "generalist" simply refers to a species that interacts with a lot of other species. For example: A bee that visits many different species of flowers, or conversely, a flower that's visited by many species of bees and other pollinators, said Resasco. Bumblebees are well-known generalists, their fuzzy, cute bumbling bodies having garnered a large fan base of admirers over the years. But there are unsung heroes among generalist pollinators, including an insect that we often consider with disdain: flies. According to Resasco, some flies are the most common visitors to flowers, and they visit lots of different flowers. Generalist plants that Colorado residents may recognize include mountain parsley (*Pseudocymopterus montanus*), which are made up of bunches of small yellow flowers, and common yarrow (*Achillea millefolium*), which looks similar but are usually white. These plants may not be the famous, [.....Read more...](#)

Date: April 19, 2021**Source:** Science Daily**Seedkeeping can connect people with their roots and preserve crops for future generations**

"All seeds are sacred, these seeds are connected to 10,000 years of human relationship to the land," says Owen Taylor, co-founder of Philadelphia-based Truelove Seeds, who sells vegetable, herb and flower seeds that tell ancestral and regional stories. He adds, "seedkeeping refers to not just the saving of seeds, but also the keeping of seed stories, cultural information, traditions, recipes, rituals and so on." Taylor says many of the varieties in Truelove's seed catalog are seeds that farmers and gardeners have collected from others, through seed exchanges and family lineages. "Most of our growers are on their own search for their beloved varieties—and to provide an outlet for some of the crops from home," he says. Seeds from Syria to the African diaspora, those that tell the story of Philadelphia's history and a wide variety of other culturally important seeds are included in the catalog. [.....Read more...](#)

Date: April 22, 2021**Source:** phys.org**Exploiting plants' ability to 'tell the time' to make food production more sustainable**

Like humans, plants have an 'internal clock' that monitors the rhythms of their environment. The authors of a study published today say that now the genetic basis of this circadian system is well understood and there are improved genetic tools to modify it, the clock should be exploited in agriculture -- a process they describe as 'chronoculture' -- to contribute to global food security. "We live on a rotating planet, and that has a huge impact on our biology -- and on the biology of plants. We've discovered that plants grow much better when their internal clock is matched to the environment they grow in," said Professor Alex Webb, Chair of Cell Signalling in the University of Cambridge's Department of Plant Sciences and senior author of the report. A plant's circadian clock plays an important role in regulating many of the functions that affect yield including flowering time, photosynthesis, and water use. The genes controlling the circadian rhythm are similar in all major crop plants -- making them a potential target for crop breeders wishing to gain more control over these functions. [.....Read more...](#)

Date: April 29, 2021**Source:** Science Daily

NEWSBULLETIN COMMITTEE

Executive Editor

Dr. Pankaj Kumar Srivastava

pankajk@nbri.res.in

Compiled By

Mr. Sunil Tripathi, Mr. Diwakar Saini

NBRI ENVIS Node: <http://www.nbrienviis.nic.in>**NBRI Website:** <http://www.nbri.res.in>**ENVIS Cell:** <http://enviis.nic.in>**Ministry of Environment & Forests:** <http://envfor.nic.in>

The Environmental Information System at Eco-Auditing Laboratory, National Botanical Research Institute is focussed on "Plants & Pollution". This is the E-mail Publication that Feature News, Information and Events Related to Plants & Pollution.

The Focus of ENVIS has been on Providing Environmental Information to Decision Makers, Policy Planners, Scientists and Engineers, Research Workers, etc. all over the World.

Eco-Auditing Group is Involved in R & D on Eco-Monitoring, Environmental Impact Assessment, Eco-Friendly Models that are Technologically and Economically Feasible for Phytoremediation of Polluted Lands and Polluted Waters etc.