

Mutations, DNA damage seen in Fukushima forests: Greenpeace

March 4 2016



A TEPCO employee measures the radiation in front of the No. 2 and No.3 reactor buildings during a press tour at the Fukushima Daiichi nuclear power plant on February 10, 2016

Conservation group Greenpeace warned on Friday that the environmental impact of the Fukushima nuclear crisis five years ago on nearby forests is just beginning to be seen and will remain a source of contamination for years to come.

The March 11, 2011 magnitude 9.0 undersea earthquake off Japan's northeastern coast sparked a massive tsunami that swamped cooling systems and triggered reactor meltdowns at the Fukushima Daiichi nuclear plant.

Radiation spread over a wide area and forced tens of thousands of people from their homes—many of whom will likely never return—in the worst nuclear accident since Chernobyl in 1986.

As the fifth anniversary of the disaster approaches, Greenpeace said signs of mutations in trees and DNA-damaged worms were beginning to appear, while "vast stocks of radiation" mean that forests cannot be decontaminated.

In a report, Greenpeace cited "apparent increases in growth mutations of fir trees... heritable mutations in pale blue grass butterfly populations" as well as "DNA-damaged worms in highly contaminated areas", it said.

The report came as the government intends to lift many evacuation orders in villages around the Fukushima plant by March 2017, if its massive decontamination effort progresses as it hopes.

For now, only residential areas are being cleaned in the short-term, and the worst-hit parts of the countryside are being omitted, a recommendation made by the International Atomic Energy Agency.



Workers, wearing protective suits and masks, are seen near the No. 3 and No.4 reactor buildings at the Fukushima Daiichi nuclear power plant on February 10, 2016

But such selective efforts will confine returnees to a relatively small area of their old hometowns, while the strategy could lead to re-contamination as woodlands will act as a radiation reservoir, with pollutants washed out by rains, Greenpeace warned.

The conservation group said its report relies largely on research published in peer-reviewed international journals.

But "most of the findings in it have never been covered outside of the close circles of academia", report author Kendra Ulrich told AFP.

The Japanese government's push to resettle contaminated areas and also restart nuclear reactors in Japan that had been shut down in the aftermath of the crisis are a cause for concern, Ulrich said, stressing it and the IAEA are using the opportunity of the anniversary to play down radiation impacts.

"In the interest of human rights—especially for victims of the disaster—it is ever more urgent to ensure accurate and complete information is publicly available and the misleading rhetoric of these entities challenged," she said.

Scientists, including a researcher who found mutations of Fukushima butterflies, have warned, however, that more data are needed to determine the ultimate impact of the Fukushima accident on animals in general.

Researchers and medical doctors have so far denied that the accident at Fukushima would cause an elevated incidence of cancer or leukaemia, diseases that are often associated with radiation exposure.

But they also noted that long-term medical examination is needed especially due to concerns over thyroid cancer among young people—a particular problem for people following the Chernobyl catastrophe.

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