

Radiation from Japan found in kelp off US West Coast

April 10 2012



This file photo shows a girl dragging kelp along a beach in California. Radioactive iodine was found in kelp off the US West Coast following last year's earthquake-triggered Fukushima Daiichi nuclear meltdown, according to a new study.

Radioactive iodine was found in kelp off the US West Coast following last year's earthquake-triggered Fukushima Daiichi nuclear meltdown, according to a new study.

It was already known that radioactive [iodine 131](#) (^{131}I), carried in the atmosphere, made it across the Pacific within days of the March 11, 2011 tsunami disaster, albeit in minuscule amounts.

But [marine biologists](#) at California State University, Long Beach (CSULB) discovered the [radioactive isotope](#) in ocean kelp, which is "one

of the strongest plant accumulators of iodine," within a month of the accident.

"We measured significant, although most likely non-harmful levels of [radioactive iodine](#) in tissue of the [giant kelp](#) *Macrocystis pyrifera*," said Steven L. Manley, author of the study with Christopher G. Lowe

"Although it is probably not harmful for humans because it was relatively low levels, it may have affected certain fish that graze on the tissue because fish have a thyroid system that utilizes iodine."

The study, "Canopy-Forming Kelps as California's Coastal Dosimeter: ¹³¹I from Damaged Japanese Reactor Measured in *Macrocystis pyrifera*," appears in the online edition of the journal *Environmental Science & Technology*.

The Fukushima Daiichi plant, 220 kilometers (135 miles) northeast of Tokyo was crippled by meltdowns and explosions after the quake and tsunami, which killed more than 19,000 people.

Radiation was scattered over a large area and made its way into the sea, air and food chain in the weeks and months after the disaster.

Tens of thousands of people were evacuated from their homes around the plant and swathes of this zone remain badly polluted. The clean-up is proceeding slowly, amid warnings that some towns could be uninhabitable for three decades.

(c) 2012 AFP

Citation: Radiation from Japan found in kelp off US West Coast (2012, April 10) retrieved 22 September 2024 from <https://phys.org/news/2012-04-japan-kelp-west-coast.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.