



TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS

RESEARCH

Vulnerable People During Wildfires

Climate change is increasing the risk of wildfires, and this risk is particularly acute and severe for people with disabilities. The purpose of the study, written by Dr. Carmit Rapaport, from the School of Environmental Sciences, and colleagues, was to understand the challenges people with hearing loss face when responding to wildfires. They [conclude](#) that individuals with hearing loss, especially Deaf people, constitute a vulnerable group during emergencies due to various communication deficiencies.

Vulnerability of Wild Barley

Climate warming and drought threaten crop production and worsen malnutrition, but data on plant genetic responses is scarce. [This study](#) by Prof. Emeritus Eviatar Nevo and colleagues examines 10 wild barley (WB) populations using landscape genomic and machine learning methods through whole-genome sequencing. Results reveal shifts in genetic diversity, selection, and mutation burden over 28 years, with analyses identifying adaptive genes and key environmental



Rewind's team (Credit: Science)

factors. Overall, wild barley populations showed decreased genetic diversity and increased selection pressure due to climate warming. Prof. Nevo is among the university's senior researchers.

Underwater Climate Change

Prof. Dror Angel, from the School of Archaeology and Maritime Cultures, seeks to combat climate change by adding waste wood to ancient shipwrecks at the bottom of the Black Sea, where low-oxygen conditions preserve them. Prof. Angel is a science lead for *Rewind*, an Israeli company focused on carbon capture technologies. By sinking terrestrial biomass, such as forestry and agricultural waste, carbon can be locked away for

centuries. This method is simpler and less likely to disrupt marine ecosystems compared to growing seaweed or phytoplankton for carbon capture. [An article in Science](#) tells their story.

COMMUNITY ENGAGEMENT

Change of Direction: The Resilience Plan

The Climate and Environmental Sustainability Center at the University of Haifa, in collaboration with the Israeli Climate Forum, hosted a [summer conference](#) titled 'Change of Direction – The Resilience Plan'. Founded in January 2022 under President of Israel, Yitzhak Herzog, the Israeli Climate Forum is a not-for-profit NGO promoting

a diverse environmental movement. The conference brought together academics, political and media figures, local authorities, and religious leaders to address the climate crisis following October 7 and the ongoing societal challenges.

Climate and Environmental Sustainability Center

The lack of an integrative policy on health and the environment incurs significant costs, prompting the creation of '[The Initiative for Environment and Health Research and Policy](#)', which includes Prof. Maya Negev from the Health and Climate Resilience Lab. This joint project between the Forum for Health and Environment and the Taub Center for Social Policy Research aims to influence public policy through applied research and engagement with decision-makers. It will serve as a foundation for Israel's scientific community, hosting consultation meetings and conferences.

COP29 Annual Summit

The University of Haifa has been admitted as an observer at the Conference of the Parties (COP) and the UN Framework Convention on Climate Change (UNFCCC). [The 29th international annual summit](#), COP29, will be held in Baku, Azerbaijan in November 2024. The University of Haifa is the only Israeli university that received the status of Observer, alongside 9 other organizations from Israel. The university is represented by Prof.

Maya Negev, from the School of Public Health, Faculty of Social Welfare and Health Sciences at the University of Haifa.

LEARNING AND STUDENTS

Ecological Crisis and Religions

Prof. Yossi Hayut, Rabbi Micha Odenheimer, and international students from the Intercultural Religious Studies program participated in a [summer workshop](#) on climate change and religions.

History, Climate, and Environment

A [Methodological Course](#) for Master program Students, titled: 'History, Climate, and Environment' taught by Dr. Anna Gutgarts, from the History Department. The course will focus on the historiography of climate and environment and the changes that have occurred.

Tree Hugging Forum

The '[Tree Hugging Forum](#)' operates within the Climate and Environmental Sustainability Center, which encompasses all

academic activities related to the climate crisis, the environment, and sustainability. This includes a series of online lectures for the public. The center brings together researchers and lecturers from various environmental fields, such as geography, natural resource management, biology, and marine sciences, while also incorporating insights from diverse disciplines that tackle broader environmental issues.

OPERATIONS

Improving the Rabin Building Entrance

The School of Environmental Sciences has launched a project to enhance the entrance of the Rabin Building. Led by Prof. Leah Wittenberg, the team of volunteers started by removing a significant amount of waste and planting trees and plants in its place. Soon, the entrance will showcase greenery and shaded seating areas.



The Israeli Climate Forum (Credit: Amos Ben Gershon, Central Press Office).