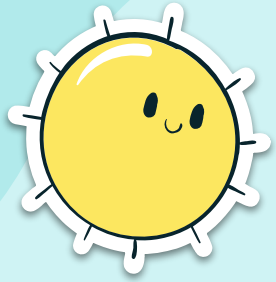
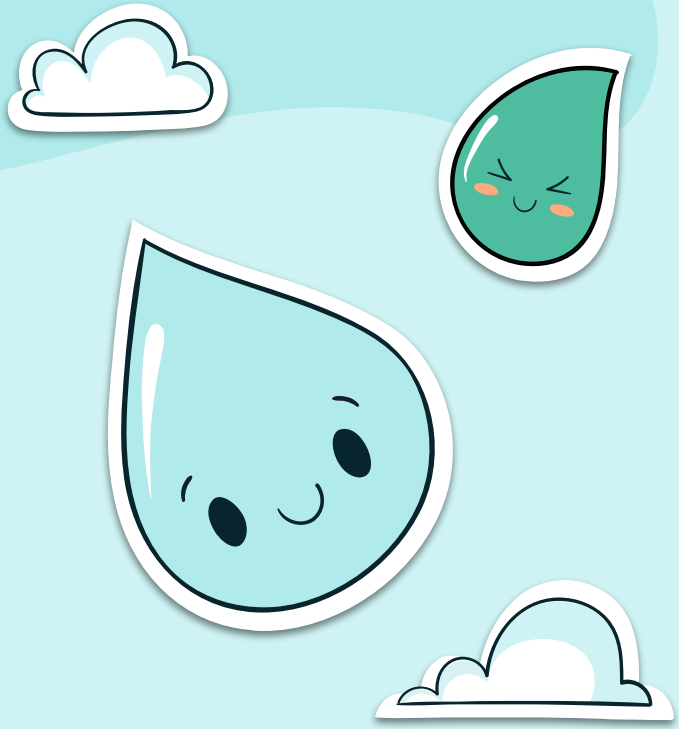


Oregon Encyclopedia Climate Change Project

Robin Eckensberger

Oregon Climate Commission



Goals

- Tracks trends in greenhouse gas emissions
- Sets forth recommendations for how to reduce emissions on the state and local levels
- Prepares Oregon communities for the effects of climate change

Top Priorities

- Decrease greenhouse gas emissions in Oregon
- Ensure the health and well-being of Oregonians
- Continue to keep Oregon's economy vibrant and healthy

Other Encyclopedia Entries

01 Glaciers in Oregon

02 Droughts in Oregon

03 Heat Dome of 2021

04 Oregon Forests and Climate Change

05 Klamath Suckers

Timeline of Climate Change in Oregon

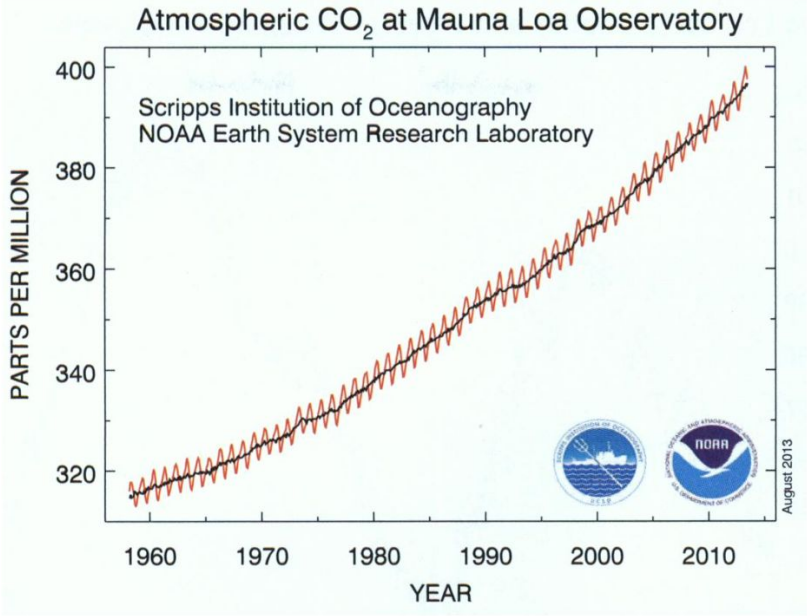


Figure 1. Atmospheric CO_2 at Mauna Loa Observatory. The oscillating red line of the Keeling Curve tracks the actual monthly average of measured atmospheric CO_2 over time while the solid, upward sloping black line represents the same data corrected for the seasonal cycles that cause the oscillations. Credit: Dr. Pieter Tans, NOAA/ESRL and Dr. Ralph Keeling, Scripps Institution of Oceanography, 2014. Pieter Tans and Ralph Keeling, *Trends in Atmospheric Carbon Dioxide*, Earth Systems Research Laboratory Global Greenhouse Network, http://www.esrl.noaa.gov/gmd/ccgg/trends.

Glossary of Terms

- **Adaptation:** Climate change adaptation refers to altering the way we live and how we behave in order to lessen the impact of climate change on our families, communities, and environment.
- **Carbon Footprint:** A carbon footprint is the total amount of greenhouse gases that one produces through their actions.
- **Climate:** Climate is the prevailing temperatures and weather conditions in a place over a long period of time.
- **Fossil fuels:** Fossil fuels are naturally occurring fuels that were formed in the geological past from the remains of living organisms. Examples include oil, coal, and petroleum.
- **Mitigation:** Mitigation refers to efforts in reducing or preventing greenhouse gasses from being released and climate change from occurring. Mitigation efforts include using renewable energy, conserving energy and water, conserving and restoring forests, and more!

SCOPE news letter
STUDENT COUNCIL ON POLLUTION AND ENVIRONMENT

No. 7 December 22, 1970

THEY SPEAK FOR THEMSELVES

IN A RECENT SENATE ENVIRONMENT SUBCOMMITTEE HEARING, DR. DAVID KLEIN OF HOPE COLLEGE, MICHIGAN, AND DR. ALBERT FITSCH OF THE UNIVERSITY OF TEXAS, TESTIFIED THAT THE AVERAGE PERSON'S MERCURY INTAKE IS 350 ug/week, SOME 10 TIMES GREATER THAN 35 YEARS AGO. WHAT'S MORE, THEY ADDED THAT PERSONS CONSUMING LARGE QUANTITIES OF FISH MIGHT BE RECEIVING AS MUCH AS 750 ug/week. CHRONIC MERCURY POISONING COULD END IN PREMATURE SENILITY WITH PREMATURE DEATH A DISTINCT POSSIBILITY.

LUNG DAMAGE, APPARENTLY CAUSED BY RISING LEVELS OF AIR POLLUTION, IS SO WIDE-SPREAD THAT ALMOST NO ONE REACHES THE AGE OF 12 WITHOUT SUFFERING SOME DETERIORATION, ACCORDING TO DR. RUSSEL P. SHERWIN, HASTINGS PROFESSOR OF PATHOLOGY AT THE UNIVERSITY OF SOUTHERN CALIFORNIA SCHOOL OF MEDICINE. AFTER EXAMINING THOUSANDS OF LUNGS, HE HAS YET TO FIND ANYONE WHO HAS MANAGED TO ENTER HIS TEENS WITH LUNGS UNSCATHED. U.S. PEDIATRICIANS NOW SPEND UP TO 85% OF THEIR OFFICE TIME ON RESPIRATORY DISEASES.

EVIDENCE THAT 2500 CHILDREN HAVE DIED IN NORTHERN ILLINOIS OVER THE PAST DECADE AS THE RESULT OF NORMAL OPERATION OF A NUCLEAR POWER PLANT HAS BEEN ANNOUNCED BY PITTSBURG UNIVERSITY PROFESSOR DR. EARNST J. STERNGLASS.

ACCORDING TO BIOPHYSICIST WILLIAM A. CURBY, A CLOUD OF TINY PARTICLES, UNAFFECTED BY RAIN OR STRONG WINDS, HAS FORMED IN THE AIR ALONG THE EAST COAST FROM BOSTON TO FLORIDA. NOT ONLY IS THE CLOUD APPARENTLY IMMUNE FROM STORMS WHICH MIGHT CLEANSE THE AIR, BUT IT CAN CAUSE A STORM WHICH BUMPS THE CLOUD TO CHANGE ITS COURSE. ALTHOUGH MUCH OF THE DIRT COMES FROM AUTO EMMISSIONS, EVEN IF CARS ARE CLEANED UP, SCIENTISTS SAY THE CLOUD MAY NEVER GO AWAY.

SO ALL-PERVASIVE HAVE PESTICIDES SUCH AS DDT BECOME IN THE OCEANS AND ATMOSPHERE THAT VIRTUALLY ALL EGGS LAID BY PELICANS, COMMORANTS, EGRETS, HERONS AND MURRES ALONG THE CALIFORNIA COAST LAST YEAR BROKE BEFORE THEY COULD HATCH. THERE WAS ONLY ONE PELICAN BIRTH. BIRDS EAT THE FISH, FISH HAVE HIGH CONCENTRATIONS OF DDT, BIRDS LAY EGGS WITH TOO-THIN SHELLS, BABY BIRDS DIE. VERY SIMPLE, VERY CLEAN.

address correspondence to: SCOPE NORTHWEST
582 Pittock Block
Portland, Oregon 97205
Phone (503) 226-3361 ext. 2332

GUIDELINES FOR CITIZEN ACTION

The crisis now facing the environment demands that all of us take immediate effective action. It is not enough simply to be aware and concerned. We all must act, even if the action is only in our own back yards. There are ways that YOU can help resolve environmental problems. The first thing is not to add to the problem through your own actions. The real enemy, as Pogo has said is "US." We must all be willing to make personal commitments and sacrifices to protect the environment. The following is a beginning; a list of suggestions of what you can do to reduce your own contribution to environmental degradation.

AIR POLLUTION

1. Do not burn leaves or trash. Why not start your own compost pile to return to the soil the nutrients in leaves and other wastes?
2. Do not let your automobile idle unless this is necessary. The automobile is the single greatest source of air pollution; conscious efforts should be made to reduce its contribution to unclean air.
3. Whenever possible, walk, bicycle, or use rapid transit rather than your car. If you must drive, form driving pools.
4. When buying a new car, ask for detailed information about pollution control equipment. Compare the cars you are considering and buy that one which has best abatement device. In general, smaller engines cause less pollution than larger, more powerful ones.
5. Check to see if your town has an air-pollution control ordinance. If it does not, or if one it has is ineffective, obtain copies of model ordinances from the National Air Pollution Control Administration.
6. A tuned car emits fewer pollutants. Keep your car well tuned. Air pollution control devices also need constant upkeep.
7. Make an oral or written statement at hearings on air pollution and insist on enforcement of air pollution laws. Report offenders.
8. Stop smoking. The average New Yorker takes into his lungs the equivalent in toxic materials of 38 cigarettes a day. Don't add to the problem - for your own body and the environment.
9. Inefficent incinerators cause much unnecessary pollution. Check or inquire about incinerators in schools, public buildings, offices, etc. Large users of paper should recycle their paper, not burn it.

WATER CONSERVATION

1. Gently place a brick in the flush tank of every toilet you use. This will reduce the amount of water used without decreasing the efficiency of the toilet. Potential savings in a city of 100,000 equals 300,000 gallons a day.