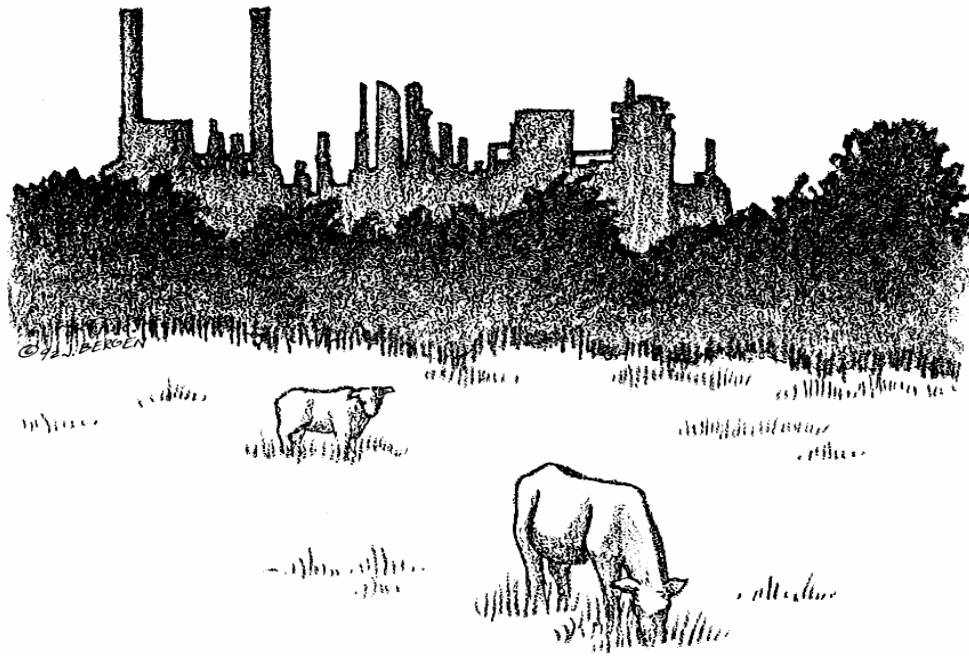


Global Warming

by Kenn Oberrecht



Heat-trapping gases in the atmosphere create what is commonly called the "greenhouse effect" and consist mainly of water vapor, carbon dioxide, methane, nitrous oxide, and ozone. These are naturally occurring gases that combine to

delay the escape of infrared radiation from earth. Without the greenhouse effect, our planet would be colder by 63 degrees Fahrenheit (33 degrees C.).

So it's not the existence of such gases that has led scientists to speculate on the potential threat of global warming, but rather the excesses that seem to have accelerated the warming process. The effect is called "climate forcing."

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The impacts of human overpopulation, leveling of the world's forests, burning of fossil fuels, global industrialization, the introduction of chlorofluorocarbons (CFCs) to the atmosphere, and other destructive and disastrous practices associated with human activity have combined to amplify the greenhouse effect by more than 500 percent since the 19th century. Deforestation and the burning of fossil fuels are the chief contributors to increased atmospheric carbon dioxide, up 25 percent since pre-industrial times.

CFCs are industrial compounds found mainly in refrigerants, solvents, and foam insulation. They're also used in the manufacture of semiconductors and were once widely used as propellants in many aerosol products, such as hair sprays, deodorants, and insect repellents.

Although molecules of CFCs in the atmosphere are far fewer than molecules of carbon dioxide, the experts tell us they can be 10,000 to 20,000 times more damaging. What's more, once they've been released into the atmosphere, they take about 100 years to break down.

Rises in levels of atmospheric methane can be traced to the rapid growth of human population, which, in the developing nations, amounts to about a million more people every 4-1/2 days. That's equivalent to reproducing the entire U.S. population every 56 days.

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The more humans on earth, the more crops and livestock we raise, the more garbage we create, the more petroleum products we produce, and the more mining we do. While methane is released naturally into the atmosphere during decomposition in bogs and swamps, as well as during the digestive process of termites, it is also released from rice paddies and landfills and during the digestive processes of cattle and sheep. Moreover, it leaks from gas-production facilities and exposed coal seams.

Scientists aren't sure why levels of nitrous oxide have increased, but some have suggested that greater worldwide use of nitrogen fertilizers might be one cause.

The phenomenon of global warming can be traced to the age of industrialization that burgeoned in the late 19th century. The earth's temperature began to rise ever so gradually in 1890 and has continued since. During the 1980s, a period of increased worldwide emissions of greenhouse gases, the temperature rise accelerated.

During the past century, earth has warmed by about one degree Fahrenheit. In the polar regions, the warming has ranged from four to seven degrees. Granted, that doesn't sound like a great threat, but remember, much of that increase is recent and will continue. In fact, some experts contend that even if it were possible to immediately cease all production of greenhouse gases, global temperatures still might rise another four to 10 degrees Fahrenheit by the year 2020, with results that could be disastrous and certainly will be costly.

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