



CHANGE THE FORECAST FOR WILDLIFE SOLUTIONS TO GLOBAL WARMING

Global Warming and CONNECTICUT

Connecticut's unique mix of urban and rural communities face a number of potential challenges if global warming continues unabated. The Environmental Protection Agency estimates average temperatures in the state could rise about 4 degrees Fahrenheit by 2100. These warmer conditions could contribute to more extreme fluctuations in precipitation, as well as continued sea level rise along Connecticut's coast. The dense, urban areas around New York City could see a decline in air quality and increased smog levels. Scientists monitoring ice cover on New England waters over the past 40 years have also seen a definite decline in the amount of time lakes and rivers stay frozen, a trend expected to continue. Not only could this hurt wildlife habitat, but traditional activities like ice skating and hockey could have to move indoors permanently.



Global warming effects on Connecticut wildlife

Connecticut is home to an incredible diversity of native wildlife species, including 273 birds, 62 mammals, 46 fish, 27 reptiles and 22 amphibians. Rising temperatures and sea level in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges and adapt.

- Conifer and mixed forests in New England are expected to gradually change to temperate deciduous forests similar to that found today in southeastern Pennsylvania and northern Virginia. Some forest species, such as sugar maple, are projected to disappear entirely from the U.S. over the next century.
- The breeding range of many species of songbirds may be pushed out of Connecticut in the summer, including several different flycatchers, swallows and warblers. Some of these birds are important to the state not only for their beautiful sounds, but for their appetite for gypsy moths, tent caterpillars and other invasive pests that harm native vegetation.



- Sea level rise at Connecticut's Stewart B. McKinney National Wildlife Refuge is expected to inundate precious habitats like the barrier islands and tidal salt marshes that are home to numerous waterfowl and birds like the endangered roseate tern.

What is Global Warming?

When coal, gas and oil are burned, they produce carbon dioxide that builds up in the atmosphere and traps the sun's heat. Much of this greenhouse gas released today remains in the atmosphere after even 100 years, trapping more and more heat.

Since the mid-1800s, emissions of carbon dioxide have skyrocketed, and subsequently global temperatures have risen by about 1 degree Fahrenheit in the last century. Earth has not experienced such a rapid change in temperature in thousands of years.

Unless we reduce the pollution that causes global warming, temperatures could climb between 2-10 degrees Fahrenheit this century. Such a rapid rise in temperature would fundamentally reshape the planet's climate, forever changing the landscape and water resources people and wildlife depend upon.



What's at stake for Connecticut?

Changes from global warming threaten not only to degrade the natural forest and aquatic ecosystems of Connecticut but also the health and economy of the state.

- Sea level in Connecticut has already risen 8 inches over the past century, and is likely to rise another 22 inches by 2100. The state's extensive tidal flats and diverse freshwater marshes could be inundated by sea water, as could expensive development along the coast. The EPA estimates the cost of protecting Connecticut's coastline from a 20-inch sea level rise could be anywhere from \$500 million-\$3 billion in the next century.
- Connecticut's current ozone levels exceed national health standards, and the state is rated as having a serious problem attaining safe levels. Warmer weather could increase concentrations of ground-level ozone, which is known to aggravate respiratory problems such as asthma.
- A 4-degree Fahrenheit temperature rise in Connecticut could mean lower peak stream flows in spring and greater evaporation, which could lead to a reduction in groundwater levels.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 1.1 million people spent nearly \$502 million on hunting, fishing and wildlife viewing in Connecticut, which in turn created nearly 8,000 jobs in the state.

“Global warming poses an overriding challenge to our responsibility to protect wildlife for our children's future. We must advance balanced solutions that work for people, wildlife and the economy to overcome this challenge.”—

Larry Schweiger
President, CEO
National Wildlife Federation



Connecticut's solutions to global warming

Connecticut has been a leader in developing solutions to global warming. The state signed a 2001 compact between New England governors and neighboring Canadian provincial leaders requiring a collective reduction of global warming pollution in the region.

- Connecticut recently finalized an aggressive action plan to reduce global warming pollution to 1990 levels by 2010 and to 10 percent below 1990 levels by 2020.
- Connecticut is adopting California's low emission vehicle standards for new cars, light trucks and SUVs sold in the state, starting with model year 2008.

Following some simple guidelines, you can cut your global warming pollution, become more energy efficient and give something back to nature.

- **Convert to compact fluorescent bulbs:** If every household in America replaced its next burned out light bulb with a compact fluorescent, we would prevent more than 13 billion pounds of carbon dioxide from being emitted. That's the same as taking 1.2 million cars off the road for an entire year.
- **Become a Green Tag subscriber:** Many states now offer options for homeowners to buy electricity from clean, renewable sources such as wind, solar and biomass that produce little or no global warming pollution. Green energy can also be purchased through the National Wildlife Federation by visiting www.nwf.org/energy.

THE REGIONAL GREENHOUSE GAS INITIATIVE:

The Regional Greenhouse Gas Initiative, or RGGI, is a cooperative effort by Northeastern and Mid-Atlantic states to reduce carbon dioxide emissions. In December 2005, Connecticut was one of seven states which agreed to institute a mandatory cap and trade system for global warming pollution emitted from power plants. The Regional Greenhouse Gas Initiative requires carbon dioxide emissions to be stabilized by 2015, with a 10% reduction by 2019, and eventually achieve sharp reductions in all greenhouse gases.

Current states under the program are Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York, and Vermont. Legislation was passed in April 2006 that required Maryland to join the RGGI cooperative by June 2007. Pennsylvania, Massachusetts, and Rhode Island are observing the process and are likely to join in the future.

Visit www.nwf.org/globalwarming or www.rggi.org for more information.

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