



CHANGE THE FORECAST FOR WILDLIFE

SOLUTIONS TO GLOBAL WARMING

Global Warming and KANSAS

The Environmental Protection Agency estimates that average temperatures in Kansas could rise about 3 degrees Fahrenheit by 2100 if global warming continues unabated. Already, this warming can be clearly seen in other regions of the world like the Arctic, where towns are literally melting into the sea. While many Kansans might think those problems are far away from them, a recent computer model done by the NASA Goddard Institute of Space Studies shows just how connected the two are. The climate of Kansas is directly affected by cold air masses that blow in from the Arctic. A warmer Arctic winter means a warmer Kansas winter, which is bad news for winter wheat crops in the Sunflower State. Agriculture producers would not be the only ones feeling the affects of global warming. Similar models and research suggest changes ranging from more extreme weather events to declining wildlife habitat to more problems with Kansas' water resources, all of which would touch the lives of everybody in the state.



USDA

Global warming effects on Kansas wildlife

Kansas is home to an incredible diversity of native wildlife species, including 341 birds, 82 mammals, 64 reptiles, 121 fish and 29 amphibians. Rising temperatures in the state will likely change the makeup of entire ecosystems, forcing wildlife to shift their ranges or adapt.

- Tallgrass Prairie National Preserve supports more than 620 species of plants and animals, including badgers, white-tailed deer, coyotes and the unique grasses for which the preserve is named. A warmer and drier climate could increase untimely wildfires and cause further habitat destruction.
- Cheyenne Bottoms Wildlife Area and Quivira National Wildlife Refuge are critical habitats for a number of migratory

bird species, including waterfowl, shorebirds and sandhill cranes. A greater need for irrigation, coupled with an already degraded ecosystem has caused these wetlands to frequently dry up—a problem that could be exacerbated by hotter, drier conditions from global warming.

- The breeding range of 34 species of songbirds could shift out of Kansas due to climate factors and changing food sources. Included are six sparrows, four warblers and three vireos.



Bob Gress

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 Kansans?

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

- As climate warms, Kansas farmers may be forced to shift to different crops, which could impact the state's \$7.3 billion annual production agriculture industry.
- Scientists have found that warmer temperatures caused by global warming can lead to higher concentrations of ground-level ozone pollution, a leading cause of respiratory problems, especially for children and seniors.
- Warmer conditions could increase the lifespan of disease-carrying insects, spreading illnesses like West Nile virus and Lyme disease.
- Loss of wildlife and habitat could mean a loss of tourism dollars. In 2001, more than 1 million people spent more than \$590 million on wildlife viewing, hunting and fishing in Kansas, which in turn supported 13,559 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

THE CLIMATE STEWARDSHIP ACT:

The Climate Stewardship Act is a bipartisan plan of action in Congress that sets achievable goals for reducing global warming pollution in the United States. The bill requires power plants, oil companies and other major sources to collectively reduce emissions of carbon dioxide and other greenhouse gases to what they emitted in the year 2000. The bill also allows businesses to implement their own solutions, using a flexible emissions trading system that has successfully reduced air pollution under the Clean Air Act at a fraction of the anticipated costs.

The Act will:

- Create more than 6,000 new energy technology jobs in Kansas by the year 2020.
- Provide Kansas with at least \$7 million each year in additional wildlife conservation funding to help protect the state's wildlife from the impacts of global warming.
- Provide new income to Kansas' farmers by rewarding environmentally friendly farming and forestry practices.

Visit www.nwf.org/globalwarming or www.climatenetwork.org/csa for more information.



Kansas' solutions to global warming

Kansas is in the process of developing innovative solutions to global warming.

- About 70-100 farmers in the state are taking part in a pilot project through the Chicago Climate Exchange, using “no-till” and other strategies to store carbon in the soil. The practice has been found to be one of the best ways to reduce carbon pollution and has the added benefits of decreasing soil erosion while increasing wildlife habitat, soil fertility and water quality.
- Kansas ranks third in the nation in wind energy potential, with the prospect of producing more than 100 percent of the state's power from wind. Properly sited wind operations that do not harm native wildlife and habitat have promise as viable renewable energy sources.
- In April, 2005, the University of Kansas received a \$19 million grant from the National Science Foundation to finance the Center for Remote Sensing of Ice Sheets, where researchers will be better able to understand global warming and the affects of rising sea levels.

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

- **Plant shade trees:** The Department of Energy says planting three trees strategically around your home to block the sun in summer and wind in winter can reduce your annual heating and cooling costs by an average of 40 percent.
- **Act locally:** Contact your mayor and ask that (s)he sign the U.S. Mayors Climate Protection Agreement, committing your city or town to meet or beat the global warming pollution reductions outlined in the Kyoto Protocol.

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