

# Sportsman's Pocket Guide to Climate Change in

## Minnesota



# 4 Iconic Species & Habitats at Risk

## Economic Benefits

**C**limate change poses a serious threat to Minnesota's bountiful fish, wildlife, and other natural resources. From changing seasonal rhythms that throw off hunting seasons to increasing temperatures that cancel ice-fishing seasons, climate change impacts on natural resources threaten Minnesota's economy.

**E**very year, almost 3 million people spend over \$4 billion on hunting, fishing and wildlife viewing in Minnesota. The value of ice fishing, moose, and other wildlife in Minnesota's many lakes goes well beyond the economics of recreation, providing the cultural identity that keep people and businesses in the state.



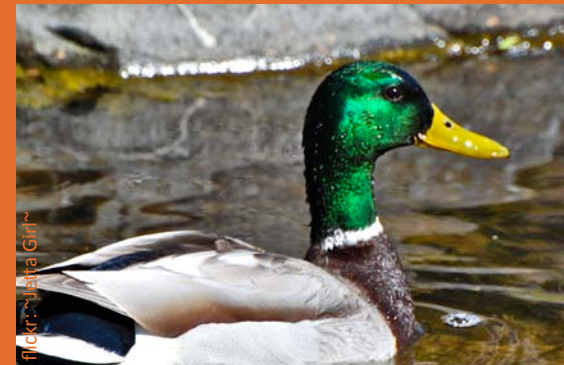
**Moose** Moose become stressed by temperatures above 57oF in summer and above 23oF in winter. Temperature increases in recent decades have dropped the population from some 4,000 animals to about 100 today.



**Trout** In the next 50 years, we face a potential stream habitat loss of 50-100% due to global warming. The loss of fishing opportunities due to climate change would severely damage the fishing economy of Minnesota.



**Yellow Perch** Climate change has already affected the long tradition of winter ice fishing for yellow perch and other species. The mild 2006-2007 winter in the northern states kept anxious anglers on the shores waiting for safe ice. Fishing tournaments were cancelled and the sale of fishing licenses dropped.



**Waterfowl** With global warming likely to affect wetland habitats across North America, reproduction rates, which depend on the health of late-spring wetlands in critical breeding areas, may suffer in Minnesota and nationwide.

Minnesota's wildlife and natural resources are the backbone of Minnesota's economy. In addition to providing essential services like safe drinking water and clean air, these resources sustain the state's booming hunting, fishing and outdoor recreation industry.

### -Annual Participants in Wildlife Recreation:

2.9 million

### -Consumer Spending:

\$4.3 billion

### -Jobs Created:

70,184

### -Funding for MN Natural Resources in Clean Energy and Climate Legislation:

\$11 million avg. per year

Source: 2006 U.S. Fish and Wildlife Service Survey on Fishing, Hunting and Wildlife Associated Recreation

## Call for Urgent Action

The single most important action to protect species and wildlife at risk from climate change is for our local, state, and national leaders to implement comprehensive clean energy and climate policies. These policies must cap and then reduce carbon pollution as well as safeguard America's natural resources. In order to avoid the worst impacts of climate change, the US must reduce emissions by around 80% by mid-century, and as much as possible in the near term.

### State-Based Solutions:

The Prairie Pothole Joint Venture (PPJV), established in 1987 under the North American Waterfowl Management Plan, has called for the protection of 1.4 million acres of wetlands and 10.4 million acres of surrounding grasslands (for nesting and cover) to help conserve waterfowl and wildlife populations. The PPJV estimates that it will cost \$2.7 billion to conserve the 11.8 million acres.

## Safeguarding Wildlife & Natural Resources

To address the impacts we are already seeing on wildlife and habitat and to confront the inevitable impacts of climate change on our natural resources, comprehensive clean energy and climate policies must include funding to safeguard fish, wildlife and natural resources upon which we all rely. These funds should be provided through the revenue generated by the clean energy and climate policies and be dedicated to the federal, state and tribal agencies that manage natural resources. This funding will protect our natural resource based economy, and create tens of thousands of new "green" jobs – restoring wetlands and streams, removing invasive species, building and restoring wildlife corridors, and protecting habitat and natural watersheds.

The following groups support passing comprehensive climate and energy legislation this year. In order to safeguard fish, wildlife, and their habitats, we urge that legislation must include both reductions of greenhouse gas emissions and dedication of allowance value for natural resources adaptation programs.

### National Hunting and Fishing Groups

\*American Fisheries Society  
\*American Fly Fishing Trade Association  
\*American Sportfishing Association  
\*Association of Fish and Wildlife Agencies  
\*Berkley Conservation Institute  
\*Campfire Club  
\*Dallas Safari Club  
\*Ducks Unlimited  
\*Houston Safari Club  
\*Izaak Walton League of America  
\*Mule Deer Foundation  
\*National Trappers Association  
\*National Wildlife Federation  
\*Pheasants Forever  
\*Quality Deer Management Association  
\*The Wildlife Society  
\*Theodore Roosevelt Conservation Partnership  
\*Trout Unlimited  
\*Wildlife Forever  
\*Wildlife Management Institute

### Minnesota Conservation Groups

Alliance for Sustainability \*Audubon Minnesota  
\*Bush Lake Chapter, Izaak Walton League of America  
\*Fox Lake Conservation League  
\*Friends of Crane Meadows National Wildlife Refuge  
\*Friends of Sherburne National Wildlife Refuge  
\*Friends of the Minnesota Valley  
\*Friends of the Morris Wetland Management District  
\*Friends of the Upper Mississippi River Refuges  
\*Friends of Windom Wetland Management District  
\*Great Lakes Committee, Izaak Walton League of America  
\*Izaak Walton League of America, Minnesota Division  
\*Minnesota Chapter of The Wildlife Society  
\*Minnesota Conservation Federation  
\*Refuge Friends Inc, Minnesota Valley National Wildlife Refuge  
\*St. Cloud Area Green Party  
Taramac Interpretive Association, Tamarac National Wildlife Refuge  
\*Voyageurs National Park Association

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