

## ECOLOGICAL DISRUPTION IN MOTION

### *A Warning from the Birds* February, 2009

The long-term threats of global climate change—though widely accepted as real—continue to be mistakenly perceived as far off in both time and locale. But new analyses by Audubon scientists reveal that 40 years of bird habitat shifts add up to a very different message: ecological disruptions caused by climate change have been happening across North America for decades and are having a measurable and visible impact on familiar bird species.

Nearly 60% of species that winter in North America have moved their ranges northward or inland, with climate playing a likely role in shifts that can exceed hundreds of miles. Changes can be seen among the birds of Vermont. Though implications for individual species can appear benign, the long-term environmental disruptions they portend are serious for birds, for other wildlife and people alike.

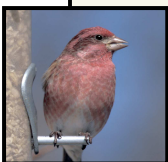
Visit [www.Audubon.org/climatebirds](http://www.Audubon.org/climatebirds) to learn more on findings and to join Audubon's campaign to curb global warming and shape a better future for birds and all life on Earth. Global climate change is happening now. What happens tomorrow is up to us.

## VERMONT BIRDS SHOW THE SIGNS



### **AMERICAN ROBIN** (*Turdus migratorius*)

This woodland bird has moved 206 miles north. Continentally, its population is stable but in Vermont it has increased 2,419% in 40 years. During the winter, Robins wander in search of fruit such as crabapples. Once a harbinger of spring, more and more Robins are able to spend the entire winter in Vermont. However, as these birds move north, they may be at increased risk from unusually cold winters or harsh storms.



### **PURPLE FINCH** (*Carpodacus purpureus*)

This woodland and feeder bird has moved 433 miles north. While its winter population in Vermont has increased 158% in 40 years, it has declined nationally by 60%. Woodland and feeder birds show the most northward movement; the amount of forest cover in the USA remains high, and woodland (forest) birds have been able to winter farther north with the warmer winters.



### **RED-BELLIED WOODPECKER** (*Melanerpes carolinus*)

This woodland bird has moved 60 miles north. Virtually unknown in Vermont 40 years ago this newcomer began to consistently be reported on Christmas Bird Counts in the mid-1990's, numbers continue to increase with 53 Red-bellied Woodpeckers counted in 2005. Nationally, its population has increased 104%. Vermont's high-quality woodlands are providing year-round habitat as our winters have warmed an average of 4°F since 1970.



### **BOREAL CHICKADEE** (*Poecile hudsonica*)

The boreal forest bird has moved north 279 miles. Vermont is at the southern edge of this bird's range and its population has decreased by 92% in the last 40 years compared to a continental decline of 50%. Boreal habitats in Vermont are likely to shrink as they experience the effects of climate change before other forest types.

## Help Vermont Birds and Habitat in a Shifting Climate



- Vermont's forests provide high-quality habitat for both wintering birds and neo-tropical migratory birds that breed here in the summer. Proper management and conservation of forestland and large grassland habitats will help birds adjust to a changing climate. Landowners can implement Audubon's bird friendly management guidelines in their woodlands and delay mowing of grasslands. See [www.vt.audubon.org](http://www.vt.audubon.org).
- Support conservation initiatives that protect and restore essential bird habitat. Audubon Vermont's Important Bird Areas program is building a statewide network of conservation stewards. Volunteer to get involved in your community.
- Become a citizen scientist. By taking part in Audubon's Christmas Bird Count or the Great Backyard Bird Count in February, you can provide scientists with the data they need to monitor the impacts of global warming and other environmental threats to birds.

## Join the Fight Against Global Warming



- Get involved with Audubon Vermont's Forest Bird Initiative. If you own forestland incorporate bird-friendly forest management into your plans. The more high-quality habitat that exists in the landscape the easier it will be for birds to adjust to climate changes. For more information visit [www.vt.audubon.org](http://www.vt.audubon.org).
- Support efforts to protect forest habitat in your community to provide refuge to both existing Vermont bird species and new species expanding their ranges. Protected forests can also serve as places to store carbon.
- Join Audubon's activist team and urge our policy-makers to make climate change a top priority by signing our petition at [www.birdsandclimate.org](http://www.birdsandclimate.org). Let them know you support funding for land acquisition programs like the Vermont Housing and Conservation Trust Fund and the Forest Legacy Program.
- Streamline your own energy profile. There are many things you can do to make a difference. Visit [www.audubon.org](http://www.audubon.org) and [www.birdsandclimate.org](http://www.birdsandclimate.org) for more information.