



# Climate Change Update

June 2009

## New Report Assesses National, Regional Impacts of Global Climate Change

Climate change is already having visible impacts in the United States, and the choices we make now will determine the severity of its impacts in the future, according to a new federal study assessing the current and anticipated domestic impacts of climate change. <http://www.globalchange.gov/publications/reports/scientific-assessments/us-impacts>

## Webinar Focuses on Downscaling Climate Data

The U.S. Fish and Wildlife Service and National Wildlife Federation co-hosted a Webinar on downscaling climate data June 17. To view the archived session, visit [http://training.fws.gov/branchsites/CSP/Resources/climate\\_change\\_webinars/archives.html](http://training.fws.gov/branchsites/CSP/Resources/climate_change_webinars/archives.html)

Led by instructor Dr. Katherine Hayhoe, Professor, Texas Tech University, the Webinar is the second in the Safeguarding Wildlife from Climate Change Web Conference series. Using examples from regional studies in the Great Lakes, the Midwest, and the U.S. Northeast, Hayhoe illustrates how scientists can generate future climate change projections, and how these projections can be used to quantify the ways in which climate change is expected to alter our world.

## Hawai'i Conservation Conference Focuses on Climate Change

The theme for this year's Hawai'i Conservation Conference (July 28-30 in Honolulu) is "Hawai'i in a Changing Climate: Ecological, Cultural, Economic

and Policy Challenges and Solutions." The keynote speaker will be Dr. Stephen H. Schneider, a noted climate change expert and member of the Intergovernmental Panel on Climate Change (IPCC). He received the Nobel Peace Prize for his work on the panel. Plenary speakers include Dr. Pualani Kanakaole Kanahale, an internationally renowned cultural practitioner, scholar, teacher, and Hawai'iian community leader, and Mr. Jon Jarvis, Director of the Pacific West Region of the National Park Service.

Topics at this year's conference include:

- Global climate change impacts in the United States, Hawai'i and island communities;
- The role of indigenous knowledge and climate change;
- Carbon Sequestration in Hawai'i: importance and current state of knowledge;
- Sea level impacts in Hawai'i and the Pacific Islands;
- Climate change and Hawai'i's evolving energy policy;
- Ecological restoration in a changing world.

For more information, visit <http://hawaiiiconservation.org/2009hccprogram.asp>.

## Researchers Link Climate Change with Potentially Deadly Virus

Biologists from the University of California Davis, Stanford University School of Medicine, and the U.S. Fish and Wildlife Service's Alaska Region have confirmed the presence of a potentially deadly pathogen, phocine distemper virus in sea otters in the North Pacific Ocean—the first confirmation of this communicative virus in marine mammals in the Pacific. The researchers hypothesize that global climate change played a role in introducing this virus into the Pacific from the Atlantic because changes in seal haulout and migration patterns—in response to reduced Arctic sea ice—likely resulted in contact between the two populations that had not been possible previously.

The findings are published in the June 2009 edition of the Centers for Disease Control and Prevention's journal *Emerging Infectious Diseases*. Fish and Wildlife Service authors are Verena A. Gill and Angela M. Doroff. A copy of the paper can be found at <http://www.cdc.gov/eid/content/15/6/925.htm>

## Cultivating 'Climate Stewards'

The U.S. Environmental Protection Agency, in partnership with the U.S. Fish and Wildlife and six other federal agencies, has developed a new Climate Change, Wildlife and Wildlands Toolkit for formal and informal educators. The kit contains materials that will

help classroom teachers and informal educators in parks, refuges, forest lands, nature centers, zoos, aquariums, science centers, and other venues teach middle school students about how climate change is affecting our nation's wildlife and public lands and how everyone—including kids—can become “climate stewards.” <http://www.globalchange.gov/resources/educators/toolkit>

## *IN THE NEWS*

### **Panel Warns of Emission Effects on Marine Ecosystems**

The InterAcademy Panel, a network of the world's science academies, has issued a statement warning that ocean acidification caused by carbon dioxide emissions will have a profound impact on marine ecosystems. The statement calls on negotiators at upcoming U.N. climate change talks to recognize the threat of ocean acidification and to mitigate it by reducing carbon dioxide emissions by at least 50 percent of 1990 levels by 2050, with further reductions thereafter. <http://www.fws.gov/home/climatechange/>

### **Carbon Sequestration Project Goes Gold**

The Conservation Fund, U.S. Fish and Wildlife Service and Environmental Synergy Inc. (ESI) announced June 1 that a 1,182-acre forest carbon sequestration project along Louisiana's Red River has received Gold Level Validation, the highest level available under the Climate, Community and Biodiversity Alliance (CCB) standards. <http://www.fws.gov/home/climatechange/>

### **Climate Change Threatens Endangered Honeycreepers**

As climate change causes temperatures to increase in Hawaii's mountains, deadly non-native bird diseases likely are also creep up the mountains, invading most of the last disease-free refuges for honeycreepers – a group of endangered and remarkable birds.

A U.S. Geological Survey (USGS) review discusses the likelihood of a forthcoming “disease invasion” by examining the present altitudinal range of avian malaria and pox, honeycreeper distribution, and the future projected range of diseases and honeycreeper habitat with climate change. <http://www.fws.gov/home/climatechange/>

## *INSIDE STORY (FWS Employees)*

### **Working Together**

Executive-level leaders from across the conservation spectrum have taken key first steps toward building a collaborative national strategy to address the impacts of accelerating climate change on wildlife and the habitats upon which they depend. [http://intranet.fws.gov/climatechange/conservation\\_leadership\\_forum.html](http://intranet.fws.gov/climatechange/conservation_leadership_forum.html)

### **Putting Landscape Conservation on the Map**

A team of U.S. Fish and Wildlife Service and U.S. Geological Survey experts from across the country will meet at the National Conservation Training Center June 23-25 to design a prototype of a national geographic framework for implementing landscape conservation on a continental scale. <https://intranet.fws.gov/region9/scienceadvisor/shc/index.html>

### **The Pacific Regional Office goes carbon neutral in FY 2009**

The Pacific Regional Office is working with the General Services Administration and local natural gas and electricity companies to go ‘carbon neutral’ in FY 2009. The Regional Office has joined NW Natural Gas' Smart Energy Program at the 100 percent offset level, and is purchasing carbon offsets, which support projects that prevent greenhouse gas emissions. For more information visit <https://intranet.fws.gov/region1/climatechange/activitiesROpage.html>

### **Taking Action Now**

During 2009, the Service has established key first steps to prepare us for efforts to adapt to accelerated climate change in 2010 and beyond. These steps build on the Strategic Habitat Conservation framework and support our FY 2010 climate change budget proposal.

For full details of the recommendations, visit each action, visit [http://intranet.fws.gov/climatechange/pdf/strategic\\_plan\\_docs/FY09\\_Priority\\_actions\\_directorate\\_decisions.pdf](http://intranet.fws.gov/climatechange/pdf/strategic_plan_docs/FY09_Priority_actions_directorate_decisions.pdf)

To view progress on the FY 09 Actions: Sharepoint site at <http://sharepoint.fws.net/di/ccfy09ap/default.aspx>

For more information on how the Service is working with others to conserve the nature of America in a changing climate, visit <http://www.fws.gov/home/climatechange/>

For employee information on Service activities and actions related to climate change, visit <https://intranet.fws.gov/climatechange/>

Send stories and announcements on your office's climate change activities to [David\\_Eisenhauer@fws.gov](mailto:David_Eisenhauer@fws.gov)