

## Protecting Resources in the East

By working with partners and concerned citizens, we are establishing cooperative practices to address emerging threats to forests that extend beyond geographic boundaries. Projects range from reducing the risk of catastrophic wildfire to reducing the impact of white nose syndrome in threatened bat species. In working together, we will strengthen our efforts to protect the plants and animals that depend on a healthy ecosystem.



Mingo Job Corps Student firefighter performs cold training during mop-up operations.

### FIRE & AVIATION MANAGEMENT

Key highlights of the Aviation and Fire Management program in 2010 were job creation, wildfire protection planning for communities, and fuel treatment effectiveness. The latter includes reducing fire intensity and employment of safer fire suppression actions.

Eastern Region national forests partnered with various Job Corp Centers to provide wildland fire training and experiential learning opportunities for students. Upon completion of training, Job Corp students had the opportunity to be a part of crews that handled prescribed burning, fuels reduction, and wildfire suppression work. A number of these fire-trained students have been enrolled in the Student Career Experience Program.

#### Hazardous Fuels Accomplishments

- Through the use of Wyden Authority – a tool that allows the Forest Service to enter into project agreements with other organizations to reduce the risk of natural disasters where public safety is threatened – six national forests contributed to fuels reduction activities on adjacent non-federal lands.
- A total of 139,644 acres of hazardous fuels have been reduced with appropriated funds.
- Recovery Act funded the reduction of an additional 21,938 acres of hazardous fuels.

### RENEWABLE RESOURCES: TIMBER & BIOMASS

Despite this year's challenging economic conditions, the health of 36,697 acres of forest was improved and 664,435 hundred cubic feet of timber – valued at \$34,424,418 – were sold. Thirteen percent of all timber volume sold contributed to the country's need for wood products.

A substantial challenge facing forest managers is the restoration and maintenance of forest ecosystems in the midst of increased changes to the climate. One option for adaptation and mitigation is woody biomass utilization. Woody biomass is the material from trees and woody plants, including limbs, needles, and leaves that are by-products of forest management. Biomass removal combined with forest management activities resulted in 251,430 green tons for bio-energy and 86,421 green tons for bio-based products.

In fiscal year 2010, the Department of Energy (DOE) completed six biomass project feasibility studies on the Mark Twain National Forest in Missouri. The Forest is exploring the possibility of using biomass heating and/or combined heat and power (CHP) at their office facilities. The studies were a facet of a recent partnership between the Forest Service, Department of Interior, and DOE. The three agencies initiated a national working group to develop power generation and thermal application projects that could use biomass generated from national forests.



Bat affected with white-nose syndrome.

### WHITE-NOSE SYNDROME

*Geomyces destructans*, the fungus blamed for the onset of white-nose syndrome (WNS) in bats, spread into Canada and farther across the U.S. in 2010. The Eastern Region has been an active participant in the development of the National White-Nose Syndrome Response Plan for State, Federal and Tribal agencies. The Region assisted state wildlife agencies with similar plans, as well as research scientists in gathering genetic samples from bats for various projects geared towards finding ways to manage and control white-nose syndrome. In 2010, we completed the following projects:

- Continued the collection and analysis of baseline maternity season populations on 14 National Forests using echolocation recording devices;
- Repeated 1995- and 2007-era surveys in New York, Vermont, and New Hampshire to assess bat population changes after onset of white-nose syndrome in the Northeast;
- Relocated Northern long-eared bat roost trees in New Hampshire for a 15-year assessment to determine how their structure and suitability changed;
- Constructed a bat-friendly gate on a Shawnee National Forest cave where the public was ignoring cave closure orders established for the protection of endangered species;
- Collected fungal swabs from the skin and fur from bats in New York, Missouri, Illinois and Indiana for analysis of the presence of *Geomyces destructans*

## THREATENED & ENDANGERED SPECIES

The Forest Service and its partners implemented a variety of projects that benefited 34 federally threatened or endangered species. Some highlights include:

<b>American Burying Beetle</b>	Released 78 additional pairs onto National Forest System lands as part of a 5-year reintroduction effort
<b>Canada Lynx</b>	Closed and decommissioned roads to maintain or restore habitat security
<b>Cheat Mountain Salamander</b>	Increased coarse woody debris on the forest floor and enhanced soil moisture through the installation of a specialized irrigation system
<b>Clubshell and Northern Riffleshell</b>	Prevented the spread of non-native invasive zebra mussels into occupied habitat through boater outreach and boat and/or boat trailer inspections
<b>Eastern Massasauga</b>	Improved wetland habitat along the Little Manistee River and enhanced habitat and prey populations through prescribed burning
<b>Gray Bat</b>	Repaired a breeched bat-friendly gate and closed illegal off-road vehicle trails around a cave
<b>Gray Wolf</b>	Monitored status of territories through howling surveys and roadside track surveys
<b>Indiana Bat</b>	Protected hibernating individuals from human disturbance by constructing bat-friendly gates on cave entrances, and enhanced summer roosting and foraging habitat by creating snags and ephemeral wetlands in known maternity areas
<b>Karner Blue Butterfly</b>	Restored savanna habitat by reducing woody tree and shrub density and increased nectar sources through seed collection, propagation and planting
<b>Kirtland's Warbler</b>	Utilized a combination of timber harvesting, prescribed burning, and planting to ensure availability of early successional Jack Pine habitat
<b>Mead's Milkweed</b>	Eliminated competition by reducing encroachment of woody shrubs and trees around the population
<b>Piping Plover</b>	Protected nesting habitat and active nests through patrols and public outreach
<b>Running Buffalo Clover</b>	Removed non-native invasive plant species in areas around occupied habitat and took action to ensure appropriate light levels are maintained around the populations
<b>Shale Barren Rockcress</b>	Removed non-native invasive species (Tree of Heaven and Autumn Olive) from occupied habitat



A scenic wilderness area on the White Mountain National Forest.

## REGION RECEIVES NATIONAL RECOGNITION AS WILDERNESS STEWARDS

In New Hampshire, the White Mountain National Forest Wilderness Team received the Traditional Skills and Minimum Tool Leadership group award for basic principles of wilderness stewardship. The minimum tool concept involves the use of traditional or primitive tools to keep wilderness areas in their natural, wild state. The group was recognized for their dedication in meeting Wilderness Stewardship Challenge goals and emphasizing the use of traditional tools to accomplish tasks. Recent projects have included removing a suspension bridge, replacing a bridge and reconstructing facilities with cooperation and assistance from partners including the New Hampshire Conservation Corps, the Appalachian Mountain Club, and the Student Conservation Association.

In Michigan, the Huron Manistee National Forests were acknowledged for Outstanding Stewardship of River Resources by the 2010 National Wild and Scenic River Awards. The group was recognized for their exemplary leadership and performance in protecting river values on five designated wild and scenic rivers. Through their ongoing collaborative and cooperative efforts with a range of partners, Forest leadership and staff have successfully protected and enhanced visitors' experience and the character of the setting.



Canoeing the wild & scenic Au Sable River in the Huron Manistee National Forests.