WINGS ACROSS THE AMERICAS
Conservation Awards

2009

WINGS ACROSS THE AMERICAS

2009 Conservation Awards Ceremony

INTRODUCTION

Carol Lively
Wings Across the Americas Program Coordinator
US Forest Service

REMARKS

Importance of Conservation and Partnerships
Hank Kashdan
Associate Chief
US Forest Service

PRESENTATION OF AWARDS

Anne Zimmermann
Director
Watershed, Fish, Wildlife, Air & Rare Plants Program
US Forest Service

Butterfly Conservation Award
Bat Conservation Award
Research and Management Partnership Award
Habitat Management and Partnership Award
International Cooperation Award

COCKTAIL RECEPTION

Marriott Crystal Gateway
Arlington, Virginia
March 19, 2009
6:00 – 7:30pm
74th North American Wildlife and
Natural Resources Conference

AWARD RECIPIENTS

US Forest Service

Ottawa National Forest:
- Sean Dunlap
- Christine Makuck
- Susan Trull

Partners

- Stephen Ross, Wood Turtle Publications

CERTIFICATE RECIPIENTS

Chequamegon-Nicolet National Forest
- Matthew Bushman

Ottawa National Forest:
- Carmen Allen Garrison
- Teri Mansfield
- Thomas Strietzel
- Joanne Thurber
- Sarah Mase
- Robert Johnson, retired

Butterfly Inventory and Habitat Recovery on the Ottawa National Forest

Since 2005, the Ottawa National Forest Butterfly Inventory and Habitat Recovery Program has conducted survey and habitat enhancement activities in the western Upper Peninsula of Michigan. The program includes field surveys for state-listed or Regional Forester's Sensitive butterflies: the northern blue, West Virginia white, chryxus arctic and tawny crescent and their host plants. Surveys have covered many acres for northern blue and its host plant, dwarf bilberry; and various forested and open land types for other butterfly species. A total of 32 species has been observed.

Habitat enhancement activities have focused on providing larval host plants, specifically the dwarf bilberry, for the northern blue butterfly. This plant is classified as both 'Michigan threatened' and 'Regional Forester's Sensitive.' In 2005, berries were collected, and seeds were extracted, prepared, and sown at the Forest Service's Toumey Nursery. Seedlings were raised under varying protocols to test propagation success. Two years later, about 400 seedlings were planted on the Ottawa National Forest. Based on subsequent monitoring, populations are establishing at three of the four planting sites. In 2008, 270 more seedlings were planted in two new locations. Establishment of additional bilberry sites is planned, with the long term goal of moving northern blue butterfly larvae to these sites.

Additional butterfly conservation work on the Forest includes; use of a West Virginia white host plant as a management indicator species; use of poverty oats, chryxus arctic host plant, for revegetation work on the forest, and pollinator education and outreach. With increasing recognition of the sensitivity of many of these species, it is hoped that this important work will continue to conserve all of the region's beautiful butterflies.

Northern Region Bat Inventory and Habitat Improvement

Bats are important to forest and grassland ecology—despite popularly held misinformation about them. Until recently, scientists knew little about the 6 bat species found in the National Forests and Grasslands within Region 1 of the U.S. Forest Service. Their distribution and habitat use were undocumented. The region encompasses the upper half of Idaho, all of Montana, and two Grasslands in the Dakotas. It was clear that many practices such as silviculture, fuels management, grazing, mining, and recreation activities were affecting these fragile species, but they were not well understood.

Beginning in 1996, wildlife biologists set out to examine the interrelationships between bat populations and these practices. Studies were conducted in 300 locations, starting with abandoned mine surveys on the Idaho Panhandle National Forest and nearby private and state lands. In 2005, the inventory was expanded to every National Forest and Grassland in Region 1 to: (1) use a standardized grid-based protocol to survey bats in a wide variety of habitats throughout the Region; (2) train Forest Service biologists and interested partners to conduct these surveys; and (3) consolidate bat data in state Natural Heritage Program databases to facilitate future bat research and partnerships. The information gathered has led to habitat improvements at more than one hundred mines. Bat gates were installed to protect people from unsafe mine conditions and to allow bats to hibernate and rear their young undisturbed.

A significant amount of useful data has been collected by U.S. Forest Service biologists and partner agencies and organizations. Individual bats representing fifteen species have been captured in mist nets, bat calls have been recorded at 202 sites, and tissue biopsies have been collected from 891 bats for genetic analysis and species identification. Of the total number of bat records processed, 80 individuals were identified as sensitive in the region. Future research will shed valuable light on more effective ways to protect bats and ensure that the vital role they play in the national forests and grasslands continues.

AWARD RECIPIENTS

US Forest Service

- Jenny Taylor, Idaho Panhandle National Forest
- Sarah Kaufman, Idaho Panhandle National Forest
- Jen Holifield, Kootenai National Forest
- Amie Shovlain, Beaverhead-Deerlodge National Forest
- Joann Bonn, Nez Perce National Forest
- Pat Ormsbee, Willamette National Forest
- Lewis Young, retired

Partners

- Dan Taylor, Bat Conservation International
- Dr. Joe Szewczak, Humboldt State University
- Bryce Maxell, Montana Natural Heritage Program
- Kristi Dubois, Montana Fish, Wildlife and Parks
- Dr. Cori Lausen, Birchdale Ecological

AWARD RECIPIENTS

US Forest Service

Pacific Northwest Research Station
- Martin G. Raphael
- Thomas D. Bloxton, Jr.

Pacific Southwest Research Station
- C.J. Ralph
- Sherri Miller
- Jim Baldwin

Partners

- Gary A. Falxa, US Fish and Wildlife Service
- Deanna Lynch, US Fish and Wildlife
- Scott F. Pearson, Washington Department of Fish and Wildlife
- Monique Lance, Washington Department of Fish and Wildlife
- Craig Strong, Crescent Coastal Research
- S. Kim Nelson, Oregon Cooperative Fish and Wildlife Research Unit

CERTIFICATE RECIPIENTS

- Beth Gallagher, Pacific Northwest Research Station, US Forest Service
- Rich Young, US Fish and Wildlife Service

Ecology and Population Dynamics of Marbled Murrelet in the Pacific Northwest

The Marbled Murrelet, a small, diving seabird, is a listed species that lives in nearshore waters along the Pacific Coast from the Aleutian Islands thousands of miles south to Monterey Bay in California. Unlike other seabirds, the murrelet nests on the limbs of large coniferous trees. Harvest of old-growth forest within its nesting range has threatened populations. The Northwest Forest Plan included steps to stop the loss of habitat in Washington, Oregon, and California and to provide for the recovery of suitable habitat for the bird. To judge the effectiveness of the Plan, a research and management partnership formed to characterize the ecology of the bird and to monitor populations and habitat in the Plan area—from northern California to the Canadian border. For the past 9 years, this research and management partnership has:

- Designed comprehensive and scientifically reliable population and habitat monitoring plans for the murrelet;
- Worked with state and private partners to implement the plan each year;
- Conducted a comprehensive evaluation of how well the Northwest Forest Plan is conserving and restoring habitat and populations of the Marbled Murrelet;
- Created a new habitat-suitability map, covering all lands within the range of the murrelet in the Plan area;
- Documented rates of loss of higher-suitability nesting habitat on both federal and non-federal lands within the Plan area;
- Showed that range-wide populations have been declining over the years 2001 to 2008 over the Plan area;
- Used data on status and trend of populations and habitat to help inform an impending decision whether to change the listing status of the murrelet under the Endangered Species Act are warranted;
- Worked with partners from the land management agencies to update and revise habitat maps for the murrelet throughout its range in the Northwest Forest Plan area.

Outcomes of the partnership are critical to helping this bird survive. Studies have shed light on predation, an important threat to nesting murrelets, and identified forest management practices which help the species, and contributed greatly to the understanding of the ecology and behavior of this beautiful bird.

Status and Trends of the Population of Northern Spotted Owl Over Its Range

Since year 1990, the Northern Spotted Owl has been listed as a Threatened subspecies. Concern over its waning population has been a driving force behind the development of the Northwest Forest Plan. The Plan provided steps to stop the loss of habitat needed by the owl and to establish a reserve system to foster future habitat needs. Since 1985, scientists from the Pacific Northwest and Pacific Southwest Research Stations, and partners from the US Forest Service's Regions 5 and 6, the Oregon/Washington Bureau of Land Management, and Colorado State University have monitored and estimated populations of the owl and its habitat in the area of the Northwest Forest Plan. The results of the monitoring program provide the basis for ongoing consultation between land management agencies and the US Fish and Wildlife Service which is responsible for recovery of the owl

Results of this research-management partnership have been widely published. In addition, increased understanding of the owl and its ecology has been developed through this work including:

- Development of comprehensive and scientifically reliable population and habitat monitoring plans for the species;
- Collaboration with federal, state, and private partners to implement the plan and carry it out each year;
- A comprehensive evaluation of the degree to which the Northwest Forest Plan is meeting its objectives for conservation and restoration of habitat and populations of the Northern Spotted Owl;
- A new habitat-suitability map, covering all lands within the range of the owl in Oregon and Washington;
- Documentation of loss of higher-suitability nesting habitat on both federal and non-federal lands within the Plan area; and
- Documented population declines from 1985 to present in the northern range and stable populations to moderate declines in the southern range.

Results of the partnership, coupled with vegetation mapping, have led managers and researchers to experiment with new methods of habitat management for spotted owls in fire-prone forests. The partnership provides information that is critical to both the conservation of the owl and the development of innovative management approaches to accelerate the development of old-growth forest structure and provide for timber harvest from Northwest Forest Plan lands.

AWARD RECIPIENTS

US Forest Service

- Eric Forsman, Pacific Northwest Research Station
- Ray Davis, Umpqua National Forest
- Jon Martin, Tongass National Forest
- Shawne Mohoric, Pacific Northwest Region

Partners

- Joseph Lint, Oregon State Office, USDI Bureau of Land Management
- Robert Anthony, Oregon State University
- Carl Schwarz, Simon Fraser University
- Jim Nichols, Patuxent Wildlife Research Center, US Geological Survey
- Jim Hines, Patuxent Wildlife Research Center, US Geological Survey
- Colorado State University
    - Alan Franklin
    - Ken Burnham
    - David Anderson
    - Gary White

CERTIFICATE RECIPIENTS

US Forest Service

- Janice Reid, Pacific Northwest Research Station
- Brian Biswell, Pacific Northwest Research Station

Partners

- Oregon State University
    - Steve Ackers
    - Steve Andrews
    - Stan Sovern
    - Katie Dugger
- Scott Gremmel, US National Park Service
- Rob Horn, USDI Bureau of Land Management
- Lowell Diller, Green Diamond Resource Company
- Peter Carlson, Colorado State University
- Dale Herter, Raedeke Associates, Inc

HABITAT MANAGEMENT AND PARTNERSHIP AWARD

AWARD RECIPIENTS

US Forest Service

Dolores Public Lands Office
- Kristen Philbrook
- Shauna Jensen
- Annette Joseph
- Elaine Sherman
- Gary Ferdinando

Partners
- Colorado Division of Wildlife

CERTIFICATE RECIPIENTS

- San Juan Public Lands Office Employees
- Dolores Public Lands Office Employees
- Colorado Natural Heritage Program
- Southwest Wetlands Focus Group

The Glade Wetlands Restoration Project

Glade Lake encompasses 50 lush, green acres on the San Juan National Forest of the Dolores Public Lands. It is significant because water and riparian habitats are so limited in this region. Well known among wildlife enthusiasts, the Lake is featured in the book, Colorado Wildlife Viewing Guide, as an excellent wildlife viewing location. To conserve this important area, the Glade Wetlands Restoration project was developed. It is a multi-year effort to recover and restore five large and unique wetlands on the San Juan National Forest of the Dolores Public Lands.

The area's wetlands have been deteriorating for years due to many practices, including cattle grazing and off road vehicle use, resulting in low quality habitat, especially upland nesting habitat for waterfowl. Headcuts threatened to drain two of the wetlands within the next few years. In 1998, several employees of the Dolores Public Lands Office recognized the importance of this area and began a wetland restoration program that is still going today. An environmental assessment was completed, and served to implement two main objectives: improve the hydrologic integrity for the five wetlands; and improve the associated wetland and upland habitat for waterfowl and other wildlife species.

Significant milestones have been reached since completion of the Environmental Assessment in 2005. Projects implemented to date have protected and improved nearly 300 acres of wetland and upland habitat. For example, the construction of the large exclosure around Glade Lake protected a large and significant cultural site. It also promoted better livestock management and facilitated the improvement of upland habitats for duck nesting. Future projects include the construction of two new stock ponds, construction of an exclosure around Ferris Reservoir, the decommissioning of two roads, and the development of a wildlife viewing area. With US Forest Service funding, the project is successful because of excellent partnerships with the Colorado Division of Wildlife, the local Wetland Focus Group, the San Juan Mountains Association, the Colorado Natural Heritage Program, as well as local landowners, ranchers, and permittees. Numerous US Forest Service and US Bureau of Land Management employees have supported the interdisciplinary team on portions of this project. The Glade Wetlands Restoration Project is also a testament to the dedication of employees who wanted to make sure this important area was protected and maintained for its value to riparian and hydrologic health, long-term livestock management, cultural resources, and wildlife habitat improvement.

Migratory Bird Conservation Using Alternative Coffee Cultivation and Processing Methodologies

Coffee is one of the most significant agricultural systems in Latin America, where 700,000 coffee farmers manipulate of 40% of agricultural lands to generate $10 billion annually. However, the consumption of energy for coffee processing and loss of native habitat from coffee production present a potentially grave ecological threat. An innovative partnership between the US Forest Service Northern Research Station, the Mesoamerican Development Institute, the Montes de Oro coffee cooperative, the Department of Natural Resources Conservation at the University of Massachusetts, and the Honduran Coffee Institute, has resulted in the development and testing of technology for sustainable coffee processing and alternative methodologies for coffee cultivation. These technologies and approaches have transformed this tremendous cost into a potentially significant conservation opportunity—in the form of market-based incentives for conservation. These technologies and approaches not only save energy costs and increase yields, but also conserve biodiversity.

The technologies to conserve energy include a solar/biomass coffee drying system that uses a combination of solar thermal and cogeneration to dry the beans. Thus, habitat degradation associated with the consumption of electricity and wood is almost entirely eliminated. To reduce the habitat degradation and destruction associated with coffee production, farmers cultivate coffee in small, lightly-shaded coffee plantations and conserve an equivalent amount of adjacent forest. This integrated open canopy coffee production supports forest-dependent bird species that don't occur in shade coffee, thereby addressing the deficiencies of shade coffee for biodiversity conservation. Species include Neotropical migrants such as the Golden-winged Warbler, which is identified by Partners in Flight as perhaps the most threatened Neotropical migrant species not already protected under the U.S. Endangered Species Act. The use of integrated open canopy also offers economic advantages to farmers including flexibility to regulate shade levels for optimal fruit production and disease control, decreased wind damage, and erosion, and increased pollination services from adjacent forest, which translate to higher yields relative to shade coffee. Regenerating forests also qualify farmers to receive payment for carbon credits under the Kyoto protocol.

These technologies and approaches are showcased at the MDI/Montes de Oro Demonstration and Training Center in Mirimar, Costa Rica, demonstrating the benefits of the alternative drying technology. The information developed from these activities is being transferred to Honduras with cooperation of the Honduran Coffee Institute. It is hoped that this model will serve to transform the Honduran coffee sector to a more environmentally sustainable industry and open opportunities to capture a higher portion of the growing market for sustainable products. Reducing the environmental costs of coffee production, while simultaneously improving economic conditions for the people in coffee producing regions is at the heart of successful coffee production and conservation in the future.

AWARD RECIPIENTS

US Forest Service

- David I. King, Northern Research Station

Partners

- Raul Raudales and Richard Trubey, Mesoamerican Development Institute
- Victor Arce, Cooperative Montes de Oro

CERTIFICATE RECIPIENTS

- Arley Morales, Cooperative Montes de Oro
- Reyes Picado, Cooperative Montes de Oro
- Sixto Aguerro, Mesoamerican Development Institute
- Richard Chandler, Department of Natural Resources Conservation, University of Massachusetts at Amherst

WINGS ACROSS THE AMERICAS

Conservation Coordination Team

International Programs
Carol A. Lively
Wings Across the Americas
Program Coordinator
(202) 273-4725
clively@fs.fed.us

Research & Development
Miranda Mockrin
Acting National Wildlife
Habitat Research Leader
(703) 605-5280
mhmockrin@fs.fed.us

National Forest System
Gene DeGayner
National Wildlife
Program Leader
(202) 205-1281
edegayner@fs.fed.us

State and Private Forestry
Wilhelmina Bratton
National Partnership
Coordinator
(202) 205-1144
wbratton@fs.fed.us

www.fs.fed.us/global/wings

Wings Across the Americas is a partnership across:

National Forest System
State and Private Forestry
Research and Development
International Programs