



# The All-Bird Bulletin

## Bird Conservation News and Information

Summer 2010

A publication of the North American Bird Conservation Initiative

### Inside this issue:

<i>El Grupo Cerúleo</i>	2
<i>Participatory Census Methodologies</i>	4
<i>Pampas to Prairies</i>	7
<i>CRIMBI</i>	11
<i>Kirtland's Warbler Research and Training</i>	13
<i>Migratory Birds Across the Rift Valley Flyway</i>	15
<i>Monarch Joint Venture</i>	17
<i>Western Hummingbird Partnership Action Plan</i>	19
<i>Bicknell's Thrush Conservation Plan</i>	20



*Advancing integrated bird conservation in North America*

## Working Beyond Borders for Migratory Species

*Carol Lively, Wings Across the Americas Coordinator, U.S. Forest Service International Programs*

Migratory species know no boundaries and working internationally has become a way of life for many *All-Bird Bulletin* readers and authors. International initiatives and networks are learning to capture advancing science and technology and apply it at landscape and flyway scales, improving the reach and effectiveness of conservation for migratory species throughout the Hemisphere.

Working internationally is more critical now than ever. Forests and grasslands are rapidly disappearing around the world due to expanding agriculture, catastrophic fires, poor land management, destructive logging practices, invasive species, urbanization, and energy development. This occurs despite the vital importance of forests, for example, in storing carbon, conserving biodiversity, and providing clean water, food, medicine, fuel, and income to more than two billion people.

The trends are not encouraging. Deforestation and land degradation are expected to rise. Energy needs and increases in global food prices will drive additional conversion of forests and grasslands to agriculture. Land managers invest millions of dollars in habitat protection and restoration in the United States. But this investment will be lost if critical habitat for migratory species such as birds, bats, Monarch butterflies, and wild Pacific salmon is not conserved outside the US.

International collaboration is helping address some of these issues by advancing international policy, promoting ecosystem services and market-based innovations such as carbon trading, improving conservation methods, and promoting sound planning, inventory, and monitoring at ecoregional scales.

Training and capacity building for students, professors, and resource managers develop practical expertise and promote skill sharing. Conducting research with international counterparts expands information needed for effective management across species' ranges. International workshops and overseas assignments promote an enhanced global understanding and vision, in addition to the sharing of technical expertise and information. Such investments create a multiplier effect and strong international linkages, both personally and professionally.

Articles in this issue of *The All-Bird Bulletin* exemplify the wide variety of creative cross-border activities taking place in the Americas and the Middle East to conserve habitat for migratory birds and the Monarch Butterfly at a flyway scale.

The nature of conservation is changing both in our NABCI world and on a global scale. A new generation of international conservationists, eager to cooperate, offers social networking possibilities and the latest scientific, management, and educational tools. Working with colleagues beyond our own borders is a key strategy to tackle the conservation challenges of migratory species.

## El Grupo Cerúleo: Cooperation for Non-breeding Season Conservation of the Cerulean Warbler

*David Mehlman, The Nature Conservancy and Paul Hamel, USDA Forest Service*

Without collaboration, conservation is impossible for long-distance migrants such as the Cerulean Warbler, a declining forest breeding bird in North America that overwinters in the Andes Mountains of South America. The Cerulean Warbler, one of the fastest declining woodland birds of eastern North America, is considered Vulnerable by BirdLife international, in the Yellow category on the National Audubon/American Bird Conservancy WatchList, and on the U.S. Fish and Wildlife Service's (USFWS) national Birds of Conservation Concern list. Given the conservation status of the Cerulean and the number of partners interested in its research and conservation, the Cerulean Warbler Technical Group coalesced in 2002 at the first Cerulean Warbler Summit in Shepherdstown, West Virginia. During this meeting, working groups were established to coordinate the assessment of critically important parts of the species' biology for conservation purposes. One of these working groups addressed the non-breeding season and named itself "El Grupo Cerúleo."



Female Cerulean Warbler, with radio transmitter and color bands, captured for research in Colombia, 2009. /Edwin Munera

Membership in El Grupo Cerúleo has always been informal and open to all, and began by compiling names of potential collaborators and establishing e-mail communication. An initial organizing and planning meeting was held in 2003 in Ecuador, at which time a draft list of priority strategies was developed for non-breeding conservation and information needs, and country-specific threats and opportunities were identified. El Grupo, under the leadership of Paul Hamel and David Mehlman, then set out to accomplish these priorities by finding resources and appropriate partners to do them. In 2005 through 2008, El Grupo regularly gathered its members in meetings both large and small in the United States, Ecuador, and Colombia.

to address non-breeding season concerns. The group has held regular meetings to increase communication and coordination, developed a plan of action, and implemented a variety of research and conservation activities. The group's success is the direct result of the dedicated participation of its various partners, coordination by Paul Hamel of the USDA Forest Service, and the availability of financial and other resources provided by various funders. The variety of work spawned directly and indirectly by El Grupo Cerúleo is vast and some key successes are summarized below. Numerous other activities by partners at local, regional, national, and international scales have been central to this effort, however, space prohibits listing each of them here.

A critical early action was the implementation of field surveys to find new and confirm old localities for winter resident Cerulean Warblers in South America. Numerous partners carried out surveys in Bolivia, Peru, Ecuador, Colombia, and Venezuela over three different "winter" field seasons. Almost 50 new localities for the warbler were found and numerous historic localities were checked. A second important priority strategy, which depended on this field research, was the development of a predictive model for the Cerulean Warbler in its non-breeding resident range.

The model was developed by El Grupo partners with skills in GIS and modeling. A previously compiled database of Cerulean Warbler occurrences, both current and historic, was combined with climatic, physical, and vegetation data using five different modeling techniques to produce a presence-absence prediction map

*continued next page*

for South America. A sophisticated model verification methodology was then developed in order to test the model's accuracy. This methodology involved sampling random points where the model predicted the warbler to occur, along with nearby randomly selected points where the model predicted a lack of occurrence. Field crews were then sent to the random points to survey for Cerulean Warblers and to measure vegetation.

A parallel effort was initiated in 2004, and subsequent years, by ornithologist Melinda Welton and colleagues, to survey for Cerulean Warbler during spring migration in Central America. This work followed up on Ted Parker's intriguing observation of numerous migrating Cerulean Warblers in the Maya Mountains of Belize in April 1992. In a four-year period, field crews sampled for migrating Cerulean Warblers in early April in Belize, Guatemala, Mexico (Chiapas), and Honduras. Ceruleans were found in all four countries, apparently indicating heavy use of the coastal mountains of northern Central America in spring migration—an important finding with numerous implications for conservation.

El Grupo Cerúleo has also sponsored demographic and ecological research on non-breeding resident Cerulean Warblers to help fill critical data gaps. Using field surveys, behavioral observations, mist-netting, banding, and radio telemetry, the members of El Grupo have increased the knowledge base of the warbler's ecology and life history. Findings include documentation of intra- and inter-season site fidelity, foraging behavior, habitat use, territory size, and mixed species flock associates, to name a few.



Researcher Gabriel Colorado conducting radio telemetry for Cerulean Warblers in Colombia, 2008. /Jorjany Botero

Conservation and outreach activities have always been priorities of El Grupo Cerúleo, though much of the above-mentioned work was essential to complete before targeted conservation activities could be initiated. Several partners, notably Fundación ProAves in Colombia and Fundación Jocotoco in Ecuador, have established private nature reserves in areas known to harbor wintering Cerulean Warblers. These flagship efforts hopefully presage a new era in private land conservation in Latin America for protecting migratory and resident birds and other biodiversity.

Outreach to the public, land owners, and managers has been a central effort of El Grupo partners over the years. Without effective communication and education, it is doubtful that any serious long-term conservation can be accomplished in this region. As one example of this kind of work, the Conservation Biology Program of the Colombian Coffee Growers Federation has developed numerous educational materials about birds and bird conservation for use by local communities throughout Colombia's coffee-growing region. The Program has also developed an innovative methodology for training local people to do bird surveys in their local areas, and is disseminating information on how to improve coffee and other crops as bird habitat (See article on page 4).

The above is merely a sample of activities undertaken by El Grupo Cerúleo to conserve a migratory species of high conservation concern. By encouraging local initiative and supplying a small amount of coordination and financial resources, the partnership has accomplished great things. Perhaps most exciting, a comprehensive non-breeding season conservation plan is now under preparation, coordinated by El Grupo partner Fundación ProAves. This plan should allow El Grupo Cerúleo to recruit new partners and expand its conservation horizons even further. The plan will complement the existing Conservation Action Plan for the Cerulean Warbler produced by USFWS in 2007.

*continued next page*



Finally, none of this would have been possible without financial support from numerous partners, including the National Council for Air and Stream Improvement, National Fish and Wildlife Foundation, USDA Forest Service Office of International Programs, The Nature Conservancy, and U.S. Fish and Wildlife Service. Read more at <http://www.srs.fs.usda.gov/egc/index.html>.



Coffee farm in Colombia. /Randy Dettmers

For more information  
on Neotropical bird conservation  
and shade grown coffee production,  
watch the following video:

[http://www.fws.gov/northeast/  
climatechange/stories/warbler.html](http://www.fws.gov/northeast/climatechange/stories/warbler.html)

## Learning to Look at the Farming Environment through the Eyes of Birds: Participatory Census Methodologies

*Jorge Botero, Andrés López, Rocío Espinosa, Néstor Franco, and Catalina Casas, Cenicafé*

Birds are a diverse and ecologically important taxonomic group in the mountains of the Colombian Andes—a region of some of the highest biodiversity on the planet. The varied soil and climate of this region—with its three Cordilleras and the Sierra Nevada de Santa Marta range near the Caribbean—support thousands of species of plants and animals. Its climate and soil also make it excellent for growing coffee—the well known and excellent “café de Colombia.” The enormous diversity of birds in coffee-producing areas is considered a natural heritage that ought to be preserved. In the last century, however, natural habitat has given way to agriculture and cattle production in most areas.



Field day with coffee growers of Asprotimaná in Timaná, Huila, learning to use a field guide to identify the birds in their region. /Conservation Biology Program Photo Archive, Cenicafé

Participatory methodologies in research have shown use in biodiversity studies and as a tool to promote conservation. Since 2004, the [National Coffee Research Center](http://www.cenicafé.org) (Cenicafé) has been conducting a program of periodic censuses to study birds and promote their conservation in the Colombian coffee growing region. The program is known as “Participatory Bird Census In Coffee-Producing Areas of Colombia” and brings together coffee producers, researchers, extension personnel from Colombia’s Coffee Federation. Birds are beautiful and charismatic and generate interest among human communities.

In Colombia coffee is produced only in the mountains, at elevations that range from about 1000 m to 2000 m. It is an agriculturally productive region with a high population density. Developing and adopting biodiversity-friendly production systems that ensure the conservation of birds, but at the same time provide sustainable economic well-being to the farming communities, is a major challenge for all.

*continued next page*

Coffee farmers, their families, extension personnel, and researchers collaborate to conduct bird inventories in and around coffee farms. The project includes an educational program on birds, their basic ecology, conservation, and research techniques. A variety of activities, such as games and workshops, and a series of publications, including bulletins and posters, are used to foster, among adults and children, an interest in birds and the protection of the natural environment around their farms. Because of its participatory nature, the community takes part in the selection of census sites, objectives, and emphasis of the study in each region. Results are shared and discussed with the participants, who examine their environmental significance and potential use in conservation, educational, or even marketing campaigns.

In six years, 29 communities have participated in the program and conducted bird inventories in their regions. With their help, the frontier of ornithological knowledge in the Colombian Andes has been extended significantly: 448 species of birds have been recorded so far (25% of the total for Colombia), including 22 in the red data book. The Chestnut-bellied Hummingbird and Niceforo's Wren, both endemic and critically endangered, have been observed in coffee farms in the central part of the department of Santander on the Eastern Cordillera. The Yellow-headed Manakin, the Blossomcrown and Emerald hummingbirds, and the Dusky-headed Brush-finch were found to be common in and around patches of oak forest adjacent to coffee farms in southern Huila. The Gray-throated Warbler has been recorded only in a couple of forest patches in Guaduas, Cundinamarca, and the White-mantled Barbet in farms in Libano, Tolima and San Vicente de Chucurí, Santander. Both have been classified as almost endangered.

Thirty boreal migrants have been observed, including 12 species of warblers, seven flycatchers, tanagers, grosbeaks, and orioles. Swainson's Thrush, Blackburnian Warbler, and Summer Tanager are the most commonly observed. Six migrant species were found to have what appears to be high affinity to the coffee-growing regions of Colombia, through an analysis in which population estimates and number of sightings were compared. Among these, Cerulean Warbler, Canada Warbler, and Blackburnian Warbler could be considered as priority migrants for research and conservation. Cerulean Warbler, a species for which there is much conservation concern, has been observed in many localities throughout the entire Andes. This information confirms the importance of this region to wintering populations of these species.

More than 100,000 copies of educational bulletins and thousands of posters on the birds and their conservation have been given away. Hundreds of farmers and their families have attended workshops and talks on conservation strategies applicable to the coffee-producing landscape. The project has assisted in the design and implementation of several regional conservation initiatives that include reforestation with native species, developing school educational programs, designing conservation plans for oak forests, and promoting conservation of endangered species. An evaluation of the effects of the program on bird conservation has confirmed that conservation programs can have a significant impact on people's interest in birds and readiness to invest in their conservation. Several participating communities have initiated actions that go beyond the scope of the program.



Red-headed Barbet. /Conservation Biology Program Photo Archive, Cenicafe

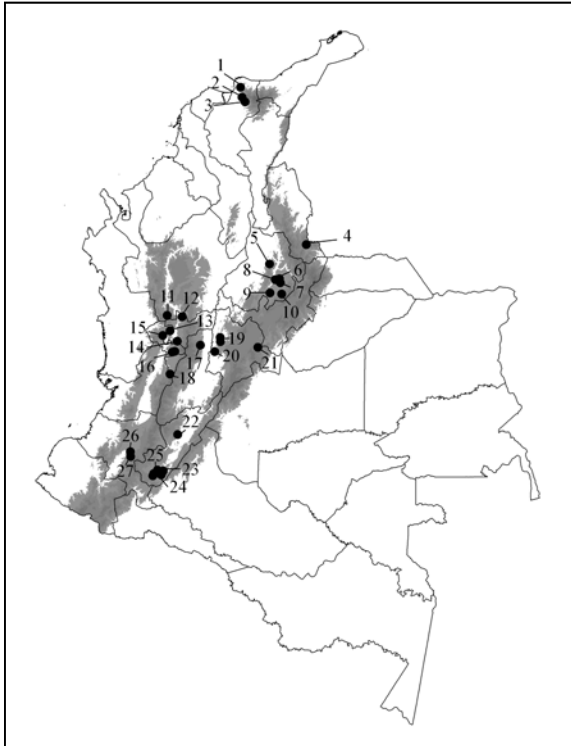


White-tipped Sicklebill. /Conservation Biology Program Photo Archive, Cenicafe

*continued next page*

El Grupo Asociativo San Isidro, from Acevedo, Huila, is one of those groups of coffee growers that have taken bird conservation in their own hands, and by doing so, have become environmental leaders in their region. They are actively promoting the conservation of patches of black oak forest that persist around their farms. They have obtained economic support from their members and the local government to purchase

critical patches of forest, and have produced a forest conservation plan that includes the selection of bird species as indicators. To market their coffee, they are putting images of several endangered bird species on the coffee bags and using conservation messages in the campaigns. El Grupo San Isidro believes that conserving the forest at the top of the watershed is critical to the long-term functioning of the Cooperative. Forest conservation will result in increased water quality and quantity for downstream communities and adjacent coffee farms as well as providing for increased biodiversity.



**Map of participatory bird census locations in Colombia.**

Locations visited during the project (Departments in bold letters; municipalities numbered according to numbers in map; shaded area corresponds to the mountainous regions of Colombia). **Atlántico:** 1-Bella Vista, 2-San Javier, 3-Palmor; **Norte de Santander:** 4-Toledo; **Santander:** 5-San Vicente de Chucurí, 6-San Gil, 7-Valle de San José, 8-Socorro, 9-Oiba, 10-Encino; **Antioquia:** 11-Jardín; **Caldas:** 12-Aguadas, 13-Anserma, 14-Chinchina; **Risaralda:** 15-Apiá, 16-Pereira (veredas Jordán y Altagracia); **Tolima:** 17-Libano; **Quindío:** 18-Génova; **Cundinamarca:** 19-Guaduas, 20-Pulí, 21-Guavio; **Huila:** 22-Teruel, 23-Timaná, 24-Acevedo (veredas San Isidro y La Marimba), 25-Pitalito (Reserva Pompeya y corregimiento de Bruselas); **Cauca:** 26-Timbío, 27-La Sierra.

In the geographic area of the participatory censuses, several groups of birdwatchers have been formed and receive program support, including optical equipment, bird guides, and technical supervision. Each one of those groups is now conducting their own bird conservation or educational program. The birding group in Libano, Tolima, which selected the Orange-billed Sparrow as the species symbol, is conducting an educational program on bird conservation for other groups of producers. The group in Génova, Quindío, named Tángara Real—the Spanish name of the Blue-necked Tanager—is conducting bird and tree inventories in the farms of coffee producers in the area. In Pitalito, Huila, el Grupo Atlapetes Oliváceo, named after one of the area's endangered species, is conducting periodic bird censuses, and even doing a Christmas bird count in their region. The program's effectiveness has been recognized in other areas, and recently, members of the Cenicafe team were asked to make a presentation to a group of coffee farmers in Peru on starting a similar program in their community.

The Participatory Bird Census Program is helping rural communities learn to look at their farming environment through the eyes of the birds. By doing so, it aims to contribute to the conservation of biodiversity, the preservation of environmental services, and sustainability in a farming environment.

"This project has helped me learn about birds and their environment, improved my quality of life and developed my ecological conscience. I have learned so much about the birds and, thanks to that, I love them and conserve them," says Norma Constanza Olarte, a coffee grower from Villeta, Cundinamarca, who has participated in the bird census program.

The Participatory Bird Census Program was initiated in 2004 and works in partnership with the U.S. Forest Service International Program's Wings Across The Americas, The Nature Conservancy Migratory Bird Program, several regional branches of the National Federation of Coffee Growers of Colombia, and several associations of coffee producers. Optics for the Tropics has provided optical equipment and bird guides to use in the program and to provide to groups of birdwatchers.



## Pampas to Prairies: The Birds and the Threats that Connect Us

*Anibal Parera, BirdLife International and Jim Ringelman, Ducks Unlimited*

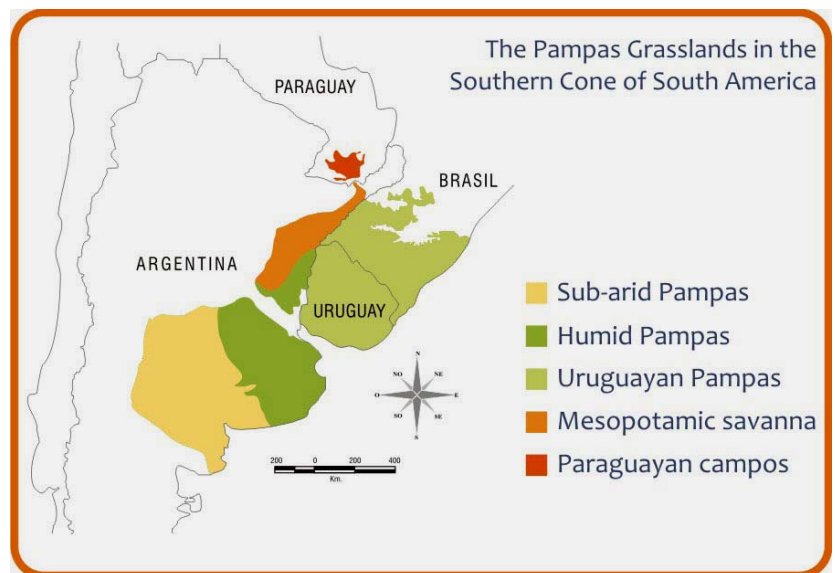
A plain of grasslands stretching to the horizon, a spirited horse, and a wide-brimmed hat are not the only things a South American gaucho has in common with a North American cowboy. The Pampas are home to the former and the prairies, the land of the latter. But aren't those birds flying across the sky in hasty flocks or soaring in broad circles sighted by both? They may well be, if the flocks include Swainson's Hawk, Upland Sandpiper, Cliff Swallow, Bobolink, or other species that migrate between the grasslands of North and South America.

These and other birds connect the grasslands of the Western Hemisphere in a most tangible way. But they are also stark reminders of the threats common to grasslands of the world. Temperate grassland is, after all, one of the Earth's most endangered biomes. Conversion to cropland is by far the greatest, historic threat and most grasslands have already met this fate. However, new risks are on the horizon, including afforestation to produce lumber, fiber or biofuel. Even if a grass-dominated landscape is only partially converted to other uses, the resulting habitat fragmentation can foster the invasion of undesirable species, both plant and animal. Habitat fragmentation, tree plantings, and human-made features have allowed non-native mammalian and avian predators to expand their ranges into grasslands, causing higher predation rates on breeding birds and reduced nest survival.

If there is a silver lining to this story, it's that threats common to grassland biomes can often be addressed with solutions perfected in one region and applied to another. The joint venture model, initially developed under the [North American Waterfowl Management Plan](#) (NAWMP), is a shining example. The basic tenet of the joint venture is that a group of conservation partners banding together can leverage their conservation resources for greater effect. In many cases, partner organizations can offer incentive-based conservation programs to landowners—particularly those engaged in grass-based agriculture—by working with the economic and personal interests of those who live on the land. JVs provide the venue for coordination and financial leveraging among partners. But how does this model perform at both ends of the hemisphere?

**The Pampas.** These grasslands originally covered a surface area of close to one million square kilometres (around 100 million hectares, twice the size of Spain), almost half of which have gone under urban development or crop production, whether agricultural or timber. The remaining grasslands are in private hands and used for rural production, largely the raising of the famous Pampa cattle. Only 2% of the total surface area are parks or nature reserves and quite a bit less if only those areas effectively organized are considered.

Every year thousands of hectares of grasslands are turned into crops. Thus, the habitat of the Saffron-Cowled Blackbird, the Black-and-White Monjita, the Strange-tailed Tyrant, and a whole collection of tiny grassland Seed eaters is being transformed with the resulting decline of these threatened species.



Map of the Alliance for the Pampas. The region handled by the South American Alliance involves a 100 million-hectare area spanning four countries.

*continued next page*

The Pampas are being replaced by industrial crops such as soybean and forests of North American pines and Australian eucalyptus. Soybean is currently the most widespread crop on the Pampas, particularly in Argentina and Southern Brazil. In Argentina alone, a surface area of over 23 million hectares is sown to this crop annually (an area equivalent to the U.S. state of Minnesota), causing considerable loss of biodiversity as a result of habitat loss coupled with contamination by chemicals used on plants that have been genetically modified to tolerate *Glyphosate*—a powerful pesticide legally marketed in the region.

Replacement of grasslands by afforestation is a more recent event and less significant in terms of surface area: Uruguay has just under a million hectares; the Brazilian State of Rio Grande do Sul almost over 2 million; the Argentine provinces of Corrientes and Entre Ríos, jointly 600,000 hectares, and in Paraguay forestry is incipient. However, this forestry practice may be producing a harsher impact on birds, and the rest of the grassland-related biodiversity, largely due to the complete replacement of physiognomy (herbaceous/arboreal) and the duration of these plantations (usually, decades rather than years).



A Brazilian gaucho riding a criollo stallion wearing the “poncho campeiro,” working with red Angus in the highs of Lavras do Sul, Sao Crispim Fazenda. /Aníbal Parera.

In the absence of a land use plan for the Pampas territory, which is shared by four countries (Uruguay, Argentina, Paraguay and Brazil), agricultural production continues to spread to the detriment of important areas for wildlife as well as to the more traditional activity of the area: cattle-raising for beef. Some cases of biological loss stemming from the impacts of grassland transformation are well known. Such is the case of the Strange-Tailed Tyrant, a grassland resident flycatcher that performs amazing aerial leks. This species, a faithful indicator of vast grasslands, once enjoyed an extensive territory several decades ago, but has since been cornered into a few grassland expanses.

Armed with experience from the [Prairie Pot-hole Joint Venture](#) (PPJV) in North America, Carol Lively (for years the PP JV’s coordinator with the U.S. Fish and Wildlife Service) and a group of colleagues from The Audubon Society and Birdlife International began applying lessons from the prairies too the Pampas. Why not create a joint venture among the gauchos, not only as a way to guarantee conservation of migratory birds, but also as a way to strengthen ties within the Americas?

BirdLife International immediately embraced this idea and mobilized its four partners in the region behind it. This first step was possible thanks to the support of the Neotropical Migratory Bird Conservation Act, investments by partner organizations, and the growing involvement of other organizations. The first challenge facing this initiative was to find a motivational name, since “joint venture” did not seem very “gaucho-like.” Alianza del Pastizal” or [Alliance for the Grasslands](#), in English, became the agreed upon name and the Saffron-Cowled Blackbird, a well-suited icon to represent the four countries involved. This yellow and black bird is another good example of the Pampa’s troubles, as it is currently threatened and confined to the equivalent of approximately 10% of its original territory.

Soon after coming into being, the Alliance for the Grasslands drew the attention of civil society, especially that of certain farmers aware of the problem, such as the [APROPAMPA](#) leaders, a group of cattle ranchers in southern Brazil. In contrast to the North American scene, where the federal government funds and promotes good farming practices, the governments of the southern nations not only fail to

*continued next page*



fund such policies, but also often invest in the opposite, promoting the colonization and replacement of the grasslands. Hence, the Alliance is compelled to test other creative, novel ways to “reward” the producers for conserving the grasslands.

Jointly, with a handful of “natural farmland” cattle ranchers, and with the support of the Declaration of Bagé, the Alliance is developing a certification system that makes it possible to add value to the beef produced under Pampa conservation systems. “We have to encourage the markets to recognize a new attribute in a steak: the conservation of the Pampas,” explained Gerardo Evia, a veterinarian and cattle rancher of Vaquería del Este, currently on the Alliance for the Grassland’s board.

“It’s not just about rewarding those who practice conservation, but above all those who manage to do so with a good return,” states Amiro Perez Leroux. “If there is no return, in the end, there won’t be any conservation, as soybean and afforestation are very competitive business alternatives in the short term.”

Now the Alliance for the Grasslands and the [Mississippi River Initiative](#) under the Audubon Society are engaged in talks related to nature-friendly beef production. According to Fernando Adaauto, Brazilian director of the Rural Federation of Brazil as well as a board member of the Alliance for the Grasslands, “The challenge ahead is for the governments to begin to recognize the environmental services provided to society by the grasslands and to compensate producers providing such services with the conservation of their grasslands.” The Alliance has recently approached the public sector of the four countries involved to request financial aid from the Inter-American Bank (IDB), to consolidate an official system for the recognition of environmental services.

**The Prairie Pothole Region.** Aside from containing some of the largest remaining tracts of temperate grassland in North America, the Prairie Pothole Region (PPR) encompasses millions of shallow wetlands—potholes—making it a most unique grassland biome. Not only does the PPR provide habitat for the full spectrum of grassland songbirds and raptors, but it also affords resources for 37 of the 50 species of shorebirds that breed in the U.S. as well as habitat for some 4.2 million breeding duck pairs.

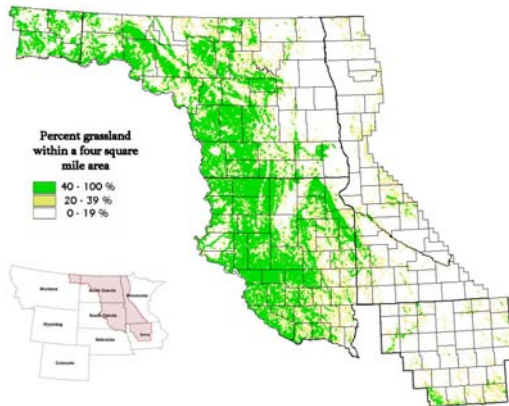
Much of the PPR has already been altered. More than half of the original 7-8 million wetlands have been drained, and in some places less than 1% of the native prairie remains. Nearly 70% of the original grassland now supports crop production. Despite these losses, there are portions of the PPR that still support a viable livestock industry. These include the Prairie Coteau of South Dakota, the Missouri Coteau in both Dakotas, the Hi-Line region of northern Montana, and the grasslands of eastern Alberta and portions of Saskatchewan. These areas present the greatest opportunities for the U.S. Prairie Pothole Joint Venture (PPJV) and the [Canadian Prairie Habitat Joint Venture](#) to work with private landowners.

Protection of the existing wetland-grassland base is the highest priority of the PPJV. Although considerable progress has been made acquiring key lands for federal and state wildlife refuges, there are financial and political limitations to this strategy. To address these constraints, conservation easements are being used to secure millions of acres of grassland while allowing those lands to remain in private ownership. Most often these easements are purchased with a one-time payment to the landowner and restrict only a few land rights. Wetland easements ensure that ponds can never be burned, filled, levelled, or drained.



Grasslands in the U.S. Prairie Pothole Region. /Jim Ringelman, Ducks Unlimited

*continued next page*



Grassland distribution in the U.S. Prairie Pothole Region.

don't nest in restored, non-native grassland derived some benefit from the reduction in cropland and food sources that enhanced overwinter survival of mammalian predators.

Along with easements and CRP, PPJV partners are funding grazing systems that benefit grassland plant diversity, while enhancing beef production and the rancher's "bottom line." Partners are also working on more effective techniques to control invasive plants that degrade range condition. Indeed, most conservationists in the PPR recognize that an economically viable ranching industry is key to the future of grasslands, which is why investigations are underway to develop new strategies that enhance avian habitat while benefitting the livestock industry.



Upland Sandpiper nests in the native prairie grasslands of the Dakotas, but winters in Argentina and other South American countries. /Jim Ringelman, Ducks Unlimited

As we look to the future, increasing attention is being given to grass as an energy source. Biomass energy derived from grass is coming to the PPR, and conservationists are already working to help shape this emerging industry so it is bird-friendly. Whether liquid fuel will be derived by fermentation, pyrolysis, or another process, the key to compatibility may lie in how the grass crop is managed and how (and when) it is harvested. The biofuel industry has a vested interest in working with conservationists to sustain a green image, so many partners view the emergence of the biofuel industry as a potential opportunity. However, it's recognized that not all species may benefit from stands of grass grown for biofuel, even if such stands are managed for avian co-benefits. That's why it's important to emphasize that destruction of native grasslands for any purpose is not consistent with green energy.

No doubt there will be new and as yet unforeseen challenges in preserving the grasslands of the PPR. However, with some creativity and continued collaboration with grassland conservation partners in the southern hemisphere, we just might be able to hold onto those grassland-dominated, wetland-rich landscapes that make the PPR so unique.

The grasslands of both Americas have more commonalities than differences and their winged inhabitants are experiencing some of the same challenges. Thus, despite being separated by thousands of miles, the key strategies to conserve grasslands are remarkably similar in both hemispheres. Forming alliances among conservation partners creates a synergy that takes the scope and scale of conservation to a new level. Perhaps even more importantly, finding conservation solutions that also address the needs of those who make a living on the land—be they gauchos or cowboys—invests a broader group of stakeholders and helps ensure a lasting conservation legacy. It won't be long before we will be talking about a transcontinental North-South alliance for grasslands—something the birds figured out long ago.

## Copper River International Migratory Bird Initiative (CRIMBI)

*Jim Chu, U.S. Forest Service International Programs*

The Copper River watershed is a highly productive ecosystem encompassing boreal forests, complex wetlands, and coastal barrier islands. The 700,000-acre delta is the largest contiguous wetland on the Pacific Coast of North America. The extensive coastal mudflats comprise the most important stopover site for Western Sandpiper and Pacific Dunlin. As many as five million shorebirds stop on the Delta during spring migration before they head to their breeding ground in western Alaska. The [Copper River International Migratory Bird Initiative](#) (CRIMBI) was established in 2001 by representatives of the U.S. Forest Service (International Programs, Pacific Northwest Research Station, and Alaska Region) and Ducks Unlimited offices. The group established CRIMBI because they recognized that migratory bird conservation requires international cooperation.

The goal of CRIMBI is to protect bird habitat through international collaborative partnerships that link stopover areas along the Pacific Flyway from Tierra del Fuego in Argentina to the Copper River Delta. The initiative recognizes the importance of conserving the Copper River area's migratory birds through effective international partnerships and action on-the-ground.

CRIMBI is not a granting source, but has limited partner funding available as seed money for projects. CRIMBI has worked with governments and non-governmental organizations in the United States, Mexico, Canada, Colombia, and Panama. Groups in Ecuador and Peru have recently been invited to participate in CRIMBI and have expressed an interest. CRIMBI's vision is to link additional sites in Chile and Argentina to create a complete Western Hemisphere Pacific Coast flyway network.

The following are several examples of the types of projects that CRIMBI partners are working on:

In Mexico, CRIMBI worked with Pronatura on several shorebird projects in the Bahia Santa Maria and the state of Sinaloa. One project involved developing a mobile classroom equipped with shorebird education materials for school-aged children, which travelled to different schools within Bahia Santa Maria several times a month. As a result of this project, several hundred local children learned about shorebird biology and their habitat requirements. The children were also involved in service learning projects, where they removed trash from the many islands that are found in the Bahia Santa Maria Bay.

In 2004–2005, Pronatura and a local television channel in Culiacan, MX developed three television shows to document the link between shorebirds in Bahia Santa Maria and the Copper River Delta in Alaska. These programs were viewed by over 200,000 viewers Northwest Mexico. As a result of this project, the mayor from Angostura, MX travelled to the Copper River Delta during its shorebird festival. As part of the proceedings, the mayors of Angostura, MX and Cordova, AK signed a document pledging to protect shorebirds in their communities.

CRIMBI provided assistance to Pronatura and others in the region to work on several research and monitoring projects, including examining the wintering characteristics of Western Sandpiper in Ensenada Pabelones; documenting the distribution and abundance of these species in Northwest Mexico, and strengthening coordination among partners in this region. Partners also are working on a project to determine levels of heavy metal and organic pollutant concentrations in the blood and feathers of Western Sandpipers and to evaluate patterns by sex and age class.



*continued next page*



In Colombia, CRIMBI is working with Asociacion Calidris (nonprofit, non-governmental conservation organization that was started in 1989 in Cali, Colombia) to strengthen conservation of migratory shorebirds and restoration of their habitat. The collaboration includes several projects:

- Improving the accuracy of estimates of Western Sandpiper populations along the coastal zone of Nariño Bocana de Iscuandé;
- Developing a communication strategy directed at local peoples to increase their awareness of Bocana de Iscuandé, flyway connections, and negative impacts to shorebird populations;
- Assisting with the development of local-based initiatives to address environmental threats and increasing public awareness of the importance of migratory birds and their ecosystems to the municipality of Iscuandé;
- Holding regional workshops about wetland conservation issues and to teach shorebird census techniques; and
- Developing pilot surveys in two different ecosystems to determine the abundance of shorebirds in these areas.

These projects have helped to increase protection of important shorebird sites in Colombia.

In Panama, CRIMBI has worked with Panama Audubon Society (PAS) to help protect the Upper Bay of Panama. The primary focus of the work with PAS has been to increase public awareness of shorebirds and the importance of their habitat in the Upper Bay of Panama. This has been done by working with school-aged children, organizing a bird festival, holding workshops with community leaders, establishing a local conservation group, and increasing public relations efforts through a series of radio and newspaper interviews. This project has also increased awareness among the local population about the shorebird link between Alaska and the Upper Bay of Panama.

CRIMBI partners are sharing information, technical assistance, funding, and advancing science and conservation techniques along the Pacific Flyway. New partners such as those in Ecuador and Peru are excited about the possibilities of collaboration and are looking forward to participating in CRIMBI. Through participation in CRIMBI, resource managers have the opportunity to evaluate and prioritize actions at a hemispheric as well as local scale. Coordination for habitat conservation along the Pacific Flyway increases the number and quality of locations that share birds from the Copper River Delta. CRIMBI is an investment that pays dividends for migratory birds—especially shorebirds and waterbirds—because of its focus on range-wide conservation.



Copper River Delta, Alaska. /U.S. Forest Service



Asociacion Calidris' efforts at increasing awareness of birds in the local community of Cali, Colombia. /Richard Johnston

## The Kirtland's Warbler Research And Training Project

*Joseph Wunderle, Jr., International Institute of Tropical Forestry, USDA Forest Service and David Ewert, The Nature Conservancy*

As one of North America's most endangered migrant songbirds, the Kirtland's Warbler has been the focus of intensive federal and state conservation efforts. By managing early successional jack pine habitat, required for breeding and reducing nest parasitism by Brown-headed Cowbirds, resource managers have successfully raised the Kirtland's Warbler population from a low of 400 birds in the 1970's and 1980's to over 3,500 individuals today. The breeding population has not only increased in Michigan, but expanded its range to Wisconsin and Ontario, Canada.

Despite the success of recovery efforts on the breeding grounds, little was known about the warbler's winter habitat in the Bahamas archipelago, where the species exclusively resides for seven months during the winter. This was of concern to the Kirtland's Warbler Recovery Team since events on the wintering grounds could compromise breeding ground conservation efforts. Thus the Kirtland's Warbler Recovery Plan ranks wintering warbler population and habitat research as a high priority and recommends building the Bahamas' conservation capacity.

To respond to these needs, the Kirtland's Warbler Research and Training Project (KW Project) was initiated by the U.S. Forest Service's [International Institute of Tropical Forestry](#) and [The Nature Conservancy](#) in collaboration with [The Bahamas National Trust](#) and College of The Bahamas.

Although historically Kirtland's Warbler has been found throughout the Bahamas, most records were of only a few birds briefly encountered in sites scattered throughout the archipelago. The paucity and irregularity of encounters led to considerable controversy regarding its winter habitat requirements. But a breakthrough occurred in March 2002, when the Ornithology Group of The Bahamas National Trust discovered a small concentration on the island of Eleuthera. The KW Project followed up on this discovery the next winter by finding additional sites on Eleuthera where the warblers could be captured, banded, and studied to document habitat use. Based on 153 capture sites, KW Project participants were able to characterize the warbler's habitat on Eleuthera. The study indicates that the warbler uses anthropogenically disturbed broad-leaved habitats in the early stages of succession (6 to 30 years after disturbance).

All sites where warblers were captured had been disturbed by humans, who initially cleared vegetation for agriculture or construction or burned the sites. Once abandoned, the revegetated sites attract the warblers, especially if they have an abundance of fruit. Warblers track fruit production, abandoning sites as fruiting ceases and shifting to new sites where fruit was more abundant. As disturbed sites mature, the production of fruit, favored by the warbler, declines, which likely explains its absence from most mature habitats. Therefore the KW Project's findings indicate that just protecting parcels of land where succession naturally proceeds without disturbance is unlikely provide sufficient winter habitat in the future.

The Kirtland's Warbler's dependence on early successional habitats on the wintering ground poses a challenge for conservation. In prehistoric times, the frequency of natural disturbances such as fire and hurricanes was sufficient to produce early successional patches in the extensively forested islands. But as habitat is lost to development, there is less available area for these processes. Thus the warbler requires human-induced recurring disturbances to complement natural habitat disturbance.

One approach is to augment or modify existing recurring human disturbances. Disturbances that might be manipulated include those on goat farms, utility corridors, boundary lines, and fire breaks. The warbler occurs frequently on farms, where goats browse on plants that compete with the warbler's favored fruit plants, while ignoring the latter. In

*continued next page*



Student Intern, Ingeria Miller, with a captured Kirtland's Warbler after banding it on Eleuthera, The Bahamas. /Dave Currie

addition, the warbler has been observed in utility corridors, fire breaks, and boundary lines that have been maintained by bulldozing or mowing. Some important Kirtland's Warbler fruit plants respond well to periodic cutting, mowing, or even bulldozing and will re-sprout and fruit shortly thereafter, indicating that they may thrive in these disturbed habitats. By harnessing these recurring disturbances, managers should be able to cost-effectively manage for the warbler's preferred plants on private lands.

Like most of the archipelago, the island of Eleuthera has very little protected public land and, therefore, conservation requires working with private landowners. Fortunately, the KW Project has established good relations with a diversity of landowners and managers, including goat farmers, resort developers, Bahamas Electric Company, Water Authority, various communal lands (locally known as commonage and generational lands) and the Bahamas National Trust's Leon Levy Native Plant Preserve. The diverse management of these lands provides opportunities to devise and test the effectiveness of different management interventions to produce habitat for the warbler. Habitat management practices under investigation include or will include effects of grazing and mowing on regrowth and fruiting of plants, different propagation methods (e.g., seeds vs. stem cuttings), and using goats to selectively manage habitat. Management interventions that prove successful and cost-effective will be publicized to educate managers and the public about how to create winter habitat for the Kirtland's Warbler.

The KW Project has also involved studies of migration and connectivity between wintering and breeding grounds. We have located over 50 uniquely color-banded individuals on both The Bahamas and the breeding grounds. These observations indicate that some Kirtland's Warblers take no more than 13 days to complete spring migration and that warblers wintering in southern Eleuthera disperse widely across the breeding range in Michigan, Wisconsin, and Ontario. This is good news for conservation, as warblers at one breeding site may not be vulnerable to loss of a wintering site.

Stopover sites, used by birds to rest and refuel during migration, are little known. So the Recovery Team is collaborating with others to define attributes of stopover sites in the Great Lakes region, especially near Lake Erie, where many Kirtland's Warblers have been seen during migration. Sites near Lake Erie have been mapped with Geographic Information Systems to guide the conservation of migration habitat for Kirtland's Warblers and many other species in an area where most of the landscape has been converted to agriculture or urban areas.

The KW Project is also educating Bahamian students about the Kirtland's Warbler by actively involving them in the project and providing fellowships to complete their bachelor's degrees in the U.S. Each student intern from the College of The Bahamas assists warbler researchers during a seven-month field season on Eleuthera. Then the interns go to Michigan to work with biologists studying the warbler or managing its habitat, with support from The Huron and Manistee National Forests and The Nature Conservancy. After completing a second winter field season, interns are funded by The Nature Conservancy to complete their bachelor's degree in biology and natural resource management. Funding for the project in the Bahamas has come largely from the U.S. Forest Service International Program's Wings Across The Americas, which has also provided support for Bahamians to travel to Michigan to attend Recovery Team meetings as well as work on the breeding warblers.

The KW Project's interns to date have graduated from Cornell University, University of Maryland-Eastern Shore, University of Minnesota, and Northern Michigan University and two of these students have successfully completed master's degrees. Four additional interns are matriculated in other U.S. colleges and universities. So far two of the Bahamian Project participants have returned home to work for conservation organizations on the warbler's behalf.

Guided by research findings, the KW Project is strengthening conservation capacity in The Bahamas, providing citizens with the training and tools they need to conserve and manage wintering habitat for the Kirtland's Warbler.



Kirtland's Warbler with a radio transmitter mounted on a backpack. Antenna is just barely visible beyond the tail. *Insert:* Radio transmitter relative to a quarter. Radio telemetry was used to study winter habitat use on Eleuthera, The Bahamas. /Dave Currie



## Migratory Birds Across the Rift Valley Flyway: Promoting Collaboration for Conservation

David King, U.S. Forest Service Northern Research Station, University of Massachusetts

This spring I traveled to Azraq, a small town in the province of Zarqa Governorate in central-eastern Jordan, to take part in a monitoring workshop organized by Christopher Soriano, Middle East Specialist with the [U.S. Forest Service \(USFS\) International Programs \(IP\)](#). The workshop was designed to increase coordination and standardization of bird monitoring efforts throughout the Rift Valley Region.

The Rift Valley extends from Turkey to Mozambique, and connects migratory bird populations that breed in Europe and Asia with their wintering areas in the Middle East and Africa. [The Rift Valley](#) is important to migration because it provides cliffs and ridgelines that create updrafts needed by soaring birds for migration, as well as stopover habitats for birds to rest and refuel. Because the timing of migration is influenced by weather and discrete landforms, migratory movements tend to be concentrated both spatially and temporally, making migratory birds vulnerable. It is estimated that 500,000 birds migrate annually through this area, and many species winter within the Rift Valley, including most of the world population of Eurasian Cranes.

Birds migrating through this region face many threats, including hunting for recreation or illegal trade, collision with high tension wires, communication towers, windmills or other structures, habitat destruction, or poisoning by agricultural chemicals or at polluted stopover sites. Monitoring is critical for the conservation of these migratory bird populations. Monitoring yields information on population trends, so declining species or populations in need of conservation attention can be identified. It provides information on the effects of human activities, so mitigation can be planned, or the response to conservation actions, so management can be evaluated.

The workshop included representatives from government agencies and non-governmental organizations from Jordan, Palestine, Lebanon, Egypt and Ethiopia. The level of experience and education in the group was variable, but generally advanced, so my task—to provide instruction on monitoring principals and techniques—was extremely challenging. If the material was too remedial, I risked boring or offending the more experienced participants. If it was too advanced, less experienced participants might not benefit from the training.

Instead I decided to describe the process North American conservationists have used to evaluate and improve the efficiency and effectiveness of bird monitoring, using the 2007 report of the U.S. North American Bird Conservation Initiative Monitoring Subcommittee, [Opportunities for Improving Avian Monitoring](#). The “Evaluation Criteria” from Appendix 4 of the report was a particularly helpful reference. During the introduction, I presented a slightly modified version of these criteria as “Critical Elements of a Monitoring Program” (see insert) with examples to emphasize the need to define objectives, develop a rigorous experimental design, and carefully store data with appropriate metadata.



Chris Soriano, U.S. Forest Service, at one of the bird monitoring workshops in Azraq, Jordan. /David King

### Critical Elements of an Effective Monitoring Program

<b>Rationale:</b>	Clearly articulated survey objectives that provide management and conservation context.
<b>Design:</b>	Explicitly defined geographic scope and spatial sampling unit. Taxa and inferential populations are defined. Primary response variables and environmental covariates. Survey protocols (sampling frame, procedures, precision and bias). Appropriate analytical procedures. Long-term data storage and access, preferably in a central facility.
<b>Coordination:</b>	Clearly defined responsibilities across geographic coverage. Training programs. Accessible reports, data, and metadata.

U.S. NABCI Committee

*continued next page*



Morning field activity—counting wading birds and waterfowl. /David King

This was illustrated with a presentation of the “Ten Steps to Successful Bird Conservation through Improved Monitoring” from *The Northeast Bird Monitoring Handbook* (<http://www.nebirdmonitor.org/handbook>) developed by the Northeast Coordinated Bird Monitoring Partnership. Additional supporting material was taken from Vesely et al. (2006) *Development of Protocols To Inventory or Monitor Wildlife, Fish, or Rare Plants* (USFS Gen. Tech. Report WO-72; [http://www.fs.fed.us/rm/pubs\\_other/wo\\_gtr072.pdf](http://www.fs.fed.us/rm/pubs_other/wo_gtr072.pdf)), and Voříšek et al. (2008) *A Best Practice Guide for Wild Bird Monitoring Schemes*.

During the rest of the week, I presented more information on developing monitoring programs and specific monitoring techniques through both lectures and field exercises, largely based on Manley et al. (2006) *Multiple Species Inventory and Monitoring Technical Guide* (USFS Gen. Tech. Rep. WO-73; [http://www.fs.fed.us/rm/pubs\\_other/wo\\_gtr073.pdf](http://www.fs.fed.us/rm/pubs_other/wo_gtr073.pdf)) as well as Bibby et al. (2000) *Bird Census Techniques*. These included separate presentations and exercises on counting songbirds, monitoring with mistnets, and counting waterbirds and soaring birds. During these subsequent presentations, I repeatedly referred back to the introductory foundation materials to reinforce their importance and application.



Pond at Azraq Wetland Preserve. /David King

I was accompanied by Bill DeLuca, a doctoral student under my supervision at the University of Massachusetts, who presented a condensed version of a class he co-taught at UMass on modeling bird abundance in R. Both of us also consulted with participants one on one as requested. The participants also presented their work, which displayed varying amounts of scientific sophistication, but a uniformly high level of dedication and commitment to conservation.

Since returning to the U.S., there has been a flurry of e-mails by participants organizing future steps to keep the momentum of this workshop going, a tribute to the success of the workshop and particularly to the organization and coordination efforts of USFS International Program's Chris Soriano. The participants are planning on circulating a regular newsletter to maintain the group's momentum. Additional trainings in both the U.S. and the Middle East are

being planned by USFS IP. In addition to these steps, I suggested that the group develop a handbook specifically designed for migratory birds across the Rift Valley.

All in all, it was a very successful workshop. Our strategy of presenting material based on NABCI's evaluation of our own monitoring programs was well received. Two participants expressed interest in doctoral study at the University of Massachusetts—an excellent way to help develop a lasting legacy of regionally coordinated bird monitoring in the Rift Valley Flyway, one of the goals of the IP.

Tracking bird populations over a region as huge as the Rift Valley is an undertaking too large to be accomplished by any one group. But if participants in the workshop are successful at forging a scientifically rigorous monitoring system, with standardized protocols so data can be shared across the region, together they can make real progress toward conserving the awesome spectacle of bird migration along the Rift Valley Flyway. I look forward to continued progress on this important project!

## New Joint Venture Forms to Protect Monarch Migration

Priya Shahani, Coordinator, Monarch Joint Venture, University of Minnesota

The IUCN listed the North American Monarch migration as an endangered phenomenon in 1983. The western Monarch population has demonstrated a consistent downward trend in census numbers over the past decade, and the eastern population was at its lowest on record during the 2009 overwintering census conducted by World Wildlife Fund-Mexico (WWF). Just this year, WWF included the Monarch butterfly on its list of the *Top 10 to Watch in 2010*, all species in need of closer monitoring and protection.

In 2008, the Commission on Environmental Cooperation asked a group of Monarch conservationists to develop [\*The North American Monarch Conservation Plan\*](#), a strategy outlining actions needed across the continent to achieve protection for the species. Soon after the Plan was completed, the U.S. Forest Service International Programs (USFS-IP) gathered a group of Monarch conservationists in the fall of 2008, to evaluate the feasibility of a joint venture effort. The similar migratory nature of birds and Monarchs, and their use of multiple habitats across a large landscape, make the joint venture model ideal for building Monarch conservation efforts.

With enough dedicated parties, a strong sense of vision for Monarch conservation, and initial financial support from USFS-IP, the Monarch Joint Venture (MJV) was formed in December 2008. Current members of this collaboration include federal and state agencies, (USFS-IP, U.S. Fish and Wildlife Service, USDA's Natural Resources Conservation Service (NRCS), and Texas Parks and Wildlife Department), conservation-focused non-governmental organizations (the North American Butterfly Association, the Xerces Society for Invertebrate Conservation, the Pollinator Partnership, and the Monarch Butterfly Fund), and academic organizations (Monarch Watch and Monarchs in the Classroom). All of these partners have agreed to work together to uphold the following mission:

*Recognizing that North American Monarch (*Danaus plexippus*) conservation is a responsibility of Mexico, Canada and the U.S., as identified in the North American Monarch Conservation Plan, this joint venture will work throughout the U.S. to conserve and protect Monarch populations and their migratory phenomena by implementing science-based habitat conservation and restoration measures in collaboration with multiple stakeholders.*

North American Monarchs travel as far north as southern Canada and as far south as central Mexico. The plight of Monarch overwintering sites in Mexico receives much media and conservation attention; but, the Monarchs' challenges are not in Mexico alone. The MJV is thus focused on coordinating and facilitating Monarch conservation efforts across the lower 48 United States. The numbers of Monarchs overwintering both in Mexico and in California are dependent not only on habitat quality in these overwintering sites, but also on habitat throughout their breeding range in the U.S.

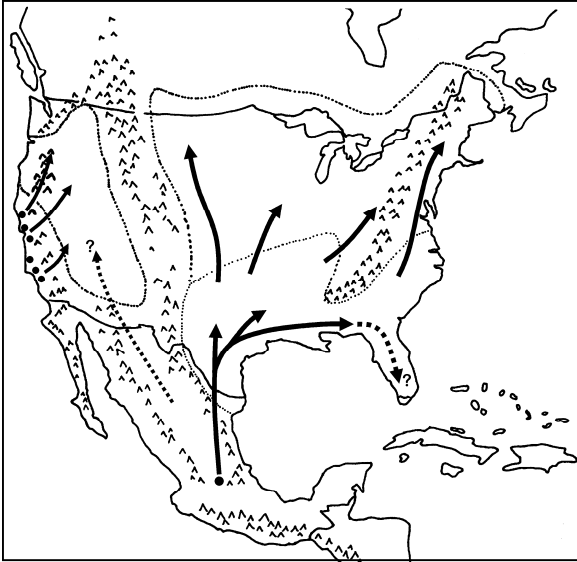
Breeding habitat for North American Monarchs is declining as milkweed is reduced in abundance on the landscape through habitat conversion and changes in land management practices. Without milkweed, Monarchs cannot reproduce and continue their life cycle. Overwintering habitat in California is threatened by development within and adjacent to overwintering groves, and decay of overwintering trees as they senesce. Monarchs also experience direct threats, including mortality from pesticides intended to control other insects. To counter these threats and to build the MJV, the MJV Steering Committee convened in January 2010, and developed an initial two-year implementation plan. This plan prioritizes numerous conservation opportunities

*continued next page*



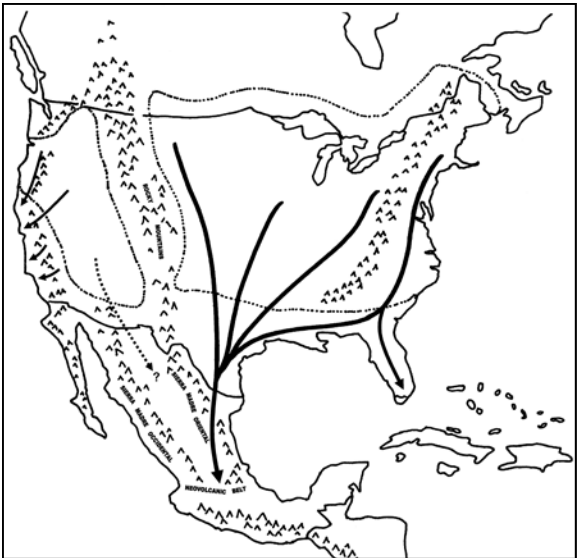
Monarch nectaring on common milkweed. /Chip Taylor





Spring migration: In March, eastern Monarchs head north looking for milkweed, the host plant required to oviposit and for their caterpillars to develop. Monarchs that overwintered in Mexico travel as far north as the southern U.S.; their offspring will re-colonize the remainder of their breeding range, in the northeastern quarter of the U.S. and southern Canada. In the west, the overwintering generation likely disperses to re-colonize the majority of the western Monarch breeding range. Modified by S. Altizer and K. Oberhauser from Brower 1995.

Illinois, Mexico, and Canada will learn how to use Monarchs to teach students about science and conservation. A specialized website will keep participants, their students, and workshop instructors communicating and learning from each other throughout the year.



Fall migration: Beginning in September, eastern Monarchs begin their journey south to the mountains of central Mexico, while most western Monarchs travel west to coastal California. Unlike the spring migration in the east, which is conducted over the course of multiple generations, a single butterfly will travel the entire distance of this southward trek. Modified by S. Altizer and K. Oberhauser from Brower 1995.

to benefit Monarchs, and focuses its efforts in three primary areas: 1) habitat conservation, maintenance, and enhancement; 2) education to enhance awareness of conservation issues and opportunities; and 3) scientific research and monitoring to inform conservation efforts.

Habitat conservation and enhancement is the MJV's highest priority, including supporting both near- and long-term enhancement efforts. Noting an insufficient supply of native, regionally appropriate milkweed seeds and plants available for habitat enhancement efforts, the MJV is working with NRCS and the Xerces Society to increase commercial milkweed seed availability. To encourage best practices in the creation of butterfly habitat, we are working with the North American Butterfly Association to develop butterfly habitat creation guidelines for key states within the U.S. We are working with the USFS-IP, Monarch Watch, and the Monarchs in the Classroom program to increase Monarch habitat in private yards, corporate landscapes, schools, and nature centers. Other projects include working with the Xerces Society to conduct an assessment of overwintering sites in California.

Education is critical to engaging the public in Monarch conservation. In addition to producing informational brochures, MJV partners (USFS-IP and Monarchs in the Classroom) are hosting a workshop where teachers from Texas, Virginia, Alabama, D.C.,

Monitoring and research is needed to inform Monarch conservation efforts. The MJV is supporting MonarchNet, a collaboration of Monarch scientists, to create a trinational web portal for researchers to share population data (akin in concept to the Avian Knowledge Network) and to conduct data analyses to better evaluate population trends and identify their drivers. The MJV is also supporting efforts to expand Monarch monitoring in priority geographic areas.

In addition to moving forward on these projects, the MJV is seeking to expand the partnership and will be reaching out to other organizations that can help further Monarch conservation in the U.S. We will also be seeking additional sources of funding to ensure the continuation of this joint venture effort.

The MJV is striving not only to protect the Monarch, but also to promote it as a flagship species whose conservation will sustain habitats for other species, including other pollinators, plants, and animals. Please visit our website to learn more about the MJV: <http://www.monarchjointventure.org>. For more information, contact Priya Shahani, MJV Program Coordinator, 612-625-8304 or [pshahani@umn.edu](mailto:pshahani@umn.edu).

## Western Hummingbird Partnership Releases Action Plan

*Susan Wethington, Coordinator, Western Hummingbird Partnership*

The Western Hummingbird Partnership (WHP) is a developing network of partner organizations and individuals collaborating to build an effective and sustainable hummingbird conservation program through science-based monitoring, research, habitat restoration and enhancement, and education and outreach. Hummingbirds occur only in the Americas and the WHP goal is to address conservation issues for the family of hummingbirds with an initial focus on Western North America.

In June 2010, the WHP released its Action Plan (visit: [http://www.hummonnet.org/pdf/201006whp\\_actionplan.pdf](http://www.hummonnet.org/pdf/201006whp_actionplan.pdf)). The Plan

- summarizes the background and creation of the WHP;
- identifies key conservation issues facing hummingbirds;
- recommends priority actions to address these issues;
- defines an organizational structure for sustaining WHP activities;
- lists WHP projects that have begun addressing the priority actions;
- and identifies the North American hummingbird species the WHP will focus on initially.

As you read the plan, think about how you might contribute to the WHP, which is in the process of developing its committees. The first four committees include monitoring, research, habitat restoration and enhancement, and education and outreach. A fifth committee is needed to address the effects of changing climate on hummingbird communities and the distribution and availability of their nectar resources. As other over-arching conservation issues are identified for hummingbirds, it is likely that additional committees will be added.



The WHP Management Board will be defined and become active soon. It will be the guiding entity that will make programmatic decisions; determine priorities among action items defined by the committees; and identify and pursue funds for priority activities, projects, and coordination and administrative services. The most recent meeting of the WHP occurred in Santa Fe, New Mexico from August 13-18. During this meeting, the Habitat Restoration/Enhancement and Education/Outreach committees met.

As projects are designed, they will be peer-reviewed. You might be interested in helping with these reviews. Perhaps you are involved with projects that are consistent with the WHP's mission and would like to formally join the WHP by including them in WHP's project list. Or perhaps you could help us in other ways such as hosting a listserv for the WHP or helping develop the Management Board.

The mission of the WHP is to work together to maintain thriving hummingbird populations and their habitats for present and future generations. Please contact WHP coordinator, Susan Wethington [swething@dakotacom.net](mailto:swething@dakotacom.net), with questions, ideas, or suggestions about WHP and how to get involved.

*The North American Bird Conservation Initiative (NABCI) is a coalition of organizations and initiatives dedicated to advancing integrated bird conservation in North America.*

*The vision of NABCI is to see populations and habitats of North America's birds protected, restored, and enhanced through coordinated efforts at international, national, regional, state, and local levels, guided by sound science and effective management.*

*The goal of NABCI is to deliver the full spectrum of bird conservation through regionally based, biologically driven, landscape-oriented partnerships.*

*The All-Bird Bulletin is a news and information-sharing publication for participants of NABCI.*

*For subscription or submission inquiries, contact the Editor, Roxanne Bogart, U.S. Fish and Wildlife Service, 802-872-0629 ext. 25 or [Roxanne\\_Bogart@fws.gov](mailto:Roxanne_Bogart@fws.gov). To download back issues, visit <http://www.nabci-us.org/news.html>.*

*The All-Bird Bulletin publishes news updates and information on infrastructure, planning, science, funding, and other advancements in the field of integrated bird conservation and management. Include author's name, organization, address, telephone and fax numbers, and e-mail address. Pictures are welcome but not necessary.*

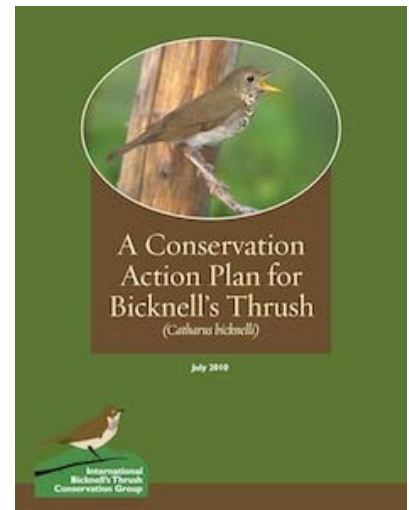
## Hemispheric Conservation Plan for Bicknell's Thrush Released

The International Bicknell's Thrush Conservation Group (IBTCG), an alliance of scientists, conservationists and governments, unveiled a plan to protect the Bicknell's Thrush across its entire range from Canada to the Caribbean. The plan proposes to increase the global population of Bicknell's Thrush by 25 percent over the next 50 years, mostly by preventing further loss of its breeding and wintering habitats.

The thrush breeds in specialized mountainous habitat in eastern North America and winters in threatened forests of the Caribbean Greater Antilles. Threats to the songbird, which is in steep decline over portions of its range, include atmospheric pollution, climate change and loss or degradation of its forest habitats.

*A Conservation Action Plan for Bicknell's Thrush* establishes a course of conservation and research over the next five years designed to boost the worldwide Bicknell's Thrush population. Actions include:

- Partnering with timber companies and managers of public lands in North America to develop and implement practices that enhance Bicknell's Thrush breeding habitat, which includes high-elevation forests of New England, New York, Quebec, New Brunswick and Nova Scotia.
- Conducting scientific research to monitor and predict the impacts of climate change on Bicknell's Thrush habitat.
- Improving the protection of currently occupied winter habitat and developing management plans for key forested areas on Hispaniola, including restoration of degraded habitats.
- Strengthening links with local partners in the Caribbean and expanding funding for on-the-ground conservation projects throughout the winter range.



The IBTCG will launch implementation of its ambitious Plan via a three-day international meeting in Santo Domingo, Dominican Republic during early November of 2010. As many as 50 key conservation partners from the U.S., Canada, and several Caribbean countries will assemble to discuss tangible solutions to the challenges facing conservation of Bicknell's Thrush across the hemisphere.

The principal organizations involved in developing the plan include U.S. Fish and Wildlife Service, Vermont Center for Ecostudies, and Bird Studies Canada, in close collaboration with the U.S. Forest Service International Programs and Canadian public and private partners. Collaborators also include conservation partners on the island of Hispaniola, which is believed to support up to 90 percent of the species' global population in winter.

The full conservation plan and trilingual, non-technical summaries are available on the [IBTCG website](http://www.bicknellsthrush.org). For more information, visit [www.bicknellsthrush.org](http://www.bicknellsthrush.org).