Shared Birds of Ashland and Guanajuato:

Conserving our Natural and Cultural Heritage

The sister cities of Ashland, Oregon and Guanajuato, Mexico are connected by our unique cultural heritages. Since 1969, both cities have helped each other maintain vitality by promoting the benefits that our cultures and art bring to our communities. Ashland and Guanajuato are also connected by migratory birds. Many bird species that breed in the Bioregion that surrounds Ashland migrate to winter in the mountains around Guanajuato.

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This brochure celebrates the migratory birds that Ashland and Guanajuato share. By meeting opportunities to conserve the habitats of our shared birds, together we can protect the health of the ecosystems that surround and sustain us.

View of the Soda Mountain Wilderness's Jenny Creek valley in the Cascade-Siskiyou National Monument. The Monument was established in 2000 by President Clinton to protect the biological diversity of the Klamath-Siskiyou Bioregion.
Photo © Pepper Trail

Canaries in the Coal Mine: Birds as Indicators of Our Well Being

Birds are an important part of our heritage and they serve as bellwethers of our ecological, cultural, and economic wellbeing (State of the Birds, 2009). Because birds respond quickly to changes in the environment they are important indicators of ecosystem health. Throughout history birds have been celebrated by human cultures as important icons. Birds are economically important. Over 45 billion bird watchers generate more than $8o billion in revenues and more than 65,000 jobs annually. Bird tourism is growing in popularity throughout North America, providing opportunities for community and economic development. In the northern forests of North America, birds provide natural pest control services that are valued at over $5 billion annually. Birds provide similar benefits for farmers who use bird-friendly agricultural practices in the tropics.

North America's bird populations are declining, a warning sign that the ecosystems on which we all depend are in failing health (State of the Birds, 2009). However, there is evidence that conservation science can result in management actions that reverse declines. With growing attention on birds as indicators of our overall wellbeing, bird conservation is becoming a tool for working towards a more sustainable future.

Migratory Birds

Many North American birds are long-distant migrants. These migrants make annual movements between breeding and winter grounds, usually moving north and south between areas of different latitude. They breed in the northern temperate habitats during the summer, and then migrate to southern tropical habitats where they spend the winter. Even some of our smallest birds, including warblers and hummingbirds, migrate thousands of miles each year. Migratory bird populations are among those in decline, because of the threats they face during the summer and winter, and along their migratory pathways (Berlanga et al, 2010).

Endemic Species

Some of North America's most at-risk birds are endemic species. Endemics are only found in very specific geographic areas that are usually quite small. These species have very restricted ranges and are often non-migratory. They also tend to be habitat specialists and are vulnerable to changes in their environments.

The Red-headed Tanager is endemic to the mountains of western Mexico and inhabits the pine-oak forests of the Sierra Madre Oriental that surround Guanajuato. These forests provide habitat for 70% of the bird species of greatest concern and represent the greatest need for immediate conservation due to habitat loss (Berlanga et al, 2010). Photo © Jim Livaudais

Birds Connecting Bioregions

A bioregion is an area that has natural boundaries defined by ecological communities with characteristic geology, flora, fauna, and environmental conditions. Bird species connect bioregions through their migrations. For

example, many species that breed in Klamath-Siskiyou Bioregion of southern Oregon and northern California migrate to winter in Mexico's Sierra Madre Oriental and Occidental.

Klamath-Siskiyou Bioregion:
Mixed Conifer-Hardwood Forests

The Klamath-Siskiyou Bioregion, located in southern Oregon and northern California, is defined by the convergence of the Cascade Mountains from the north, the Sierra Nevada from the south, the Coast Range, and the east-west running Klamath and Siskiyou Mountains. This region includes the Umpqua, Rogue, and Klamath River watersheds. Due to its complex geology and climate, the Bioregion is among the most biologically diverse in the world. The Bioregion contains a wide variety of habitat types, including a mix of conifer and hardwood forests. These diverse habitats support a plethora of species, including endemic plants and animals that are found nowhere else in the World. As with many western forests the ecological integrity of this area is put at risk from unsustainable natural resource extraction and the resilience of the region's ecosystems is compromised by the interruption of natural disturbances, such as fire and flooding (Rich et al 2004).

The migratory Rufous Hummingbird is one example of a bird that depends on western forests for their breeding grounds and Mexican pine-oak forests for wintering habitats. Photo © Jim Livaudais

Sierra Madre Oriental: Pine-oak & Cloud Forests

The Sierra Madre Oriental is a mountain range in Mexico that is characterized by pine-oak forests. The tropical cloud forests of Central America also reach their northern range in the Sierra Madre Oriental. These habitats, like those of the Klamath-Siskiyou Bioregion, are home to a biologically diverse community of plants and animals, including many endemic species. Habitat loss due to timber harvesting, firewood cutting, and clearing for agriculture threatens the area's biodiversity (Berlanga et al, 2010).

The pine-oak forests of Mexico support large numbers of wintering migrants as well as some of the most at-risk endemic species of North America. These Mexican resident birds are threatened by habitat loss from unsustainable timber extraction and land clearing for agriculture and livestock grazing. Photo © Martjan Lammertink

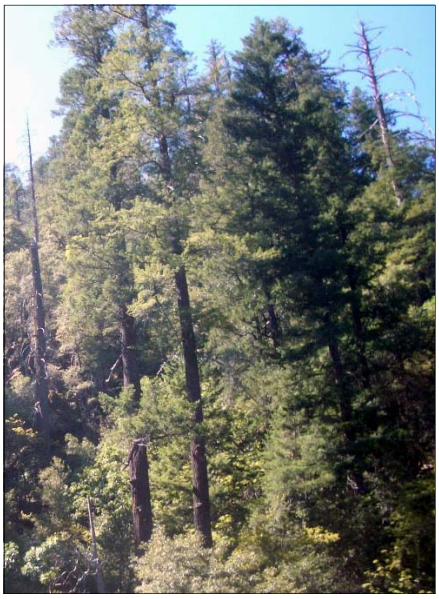
Birds Connecting Cultures

Ashland, Oregon and Guanajuato, Mexico, are located within two ecologically important regions – the Klamath-Siskiyou Bioregion and the Sierra Madre Oriental. These cities have also been sister cities since 1969. Like the mountain habitats that surround them, these two cities are linked by the migratory birds that

breed in the mixed-conifer forests of the Klamath-Siskiyou Bioregion and migrate to winter in the pine-oak and cloud forests of the Sierra Madre Oriental. The same birds that breed during the summer in the forests that surround Ashland can be seen in habitats around the city of Guanajuato during the winter. In addition to sharing migratory birds, these sister cities share cultural bonds that, like birds, also transcend borders and languages.

Both cities are vibrant cultural centers, with tourist-based economies. Ashland is the home of the Oregon Shakespeare Festival that attracts an audience of over 200 thousand annually. Guanajuato hosts the Festival Internacional Cervantino. In 2010 nearly 100 thousand tourists visited Guanajuato to participate in the in this festival, which is one of Latin America's most important cultural events.

The communities that form the heart of these cities depend on their cultural attractions for their economic stability. Like their shared birds, these communities also depend on the long-term ecological health of their two bioregions. In western Mexico, the pine-oak and cloud forests are threatened by the clearing of land for persistence farming and charcoal. In the Klamath-Siskiyou Bioregion, forest communities have been put at risk by unsustainable timber harvest practices and fire suppression. In both areas Land managers are challenged with stewardship responsibilities to maintain habitats for migratory and resident birds and provide a sustainable source of natural resources.



The mixed conifer hardwood forests of the Klamath-Siskiyou Bioregion are home to a large diversity of flora and fauna, and provide natural resources that make up an importance part of the economy of southern Oregon and northern California.

Hermit Warblers found in the mature conifer forests surrounding Ashland are indicators of forest health. In the winter months, these tiny warblers are found in mixed-flocks with at-risk western Mexican resident species in the habitats around Guanajuato (Berlanga et al, 2010). Photo © Jim Livaudais

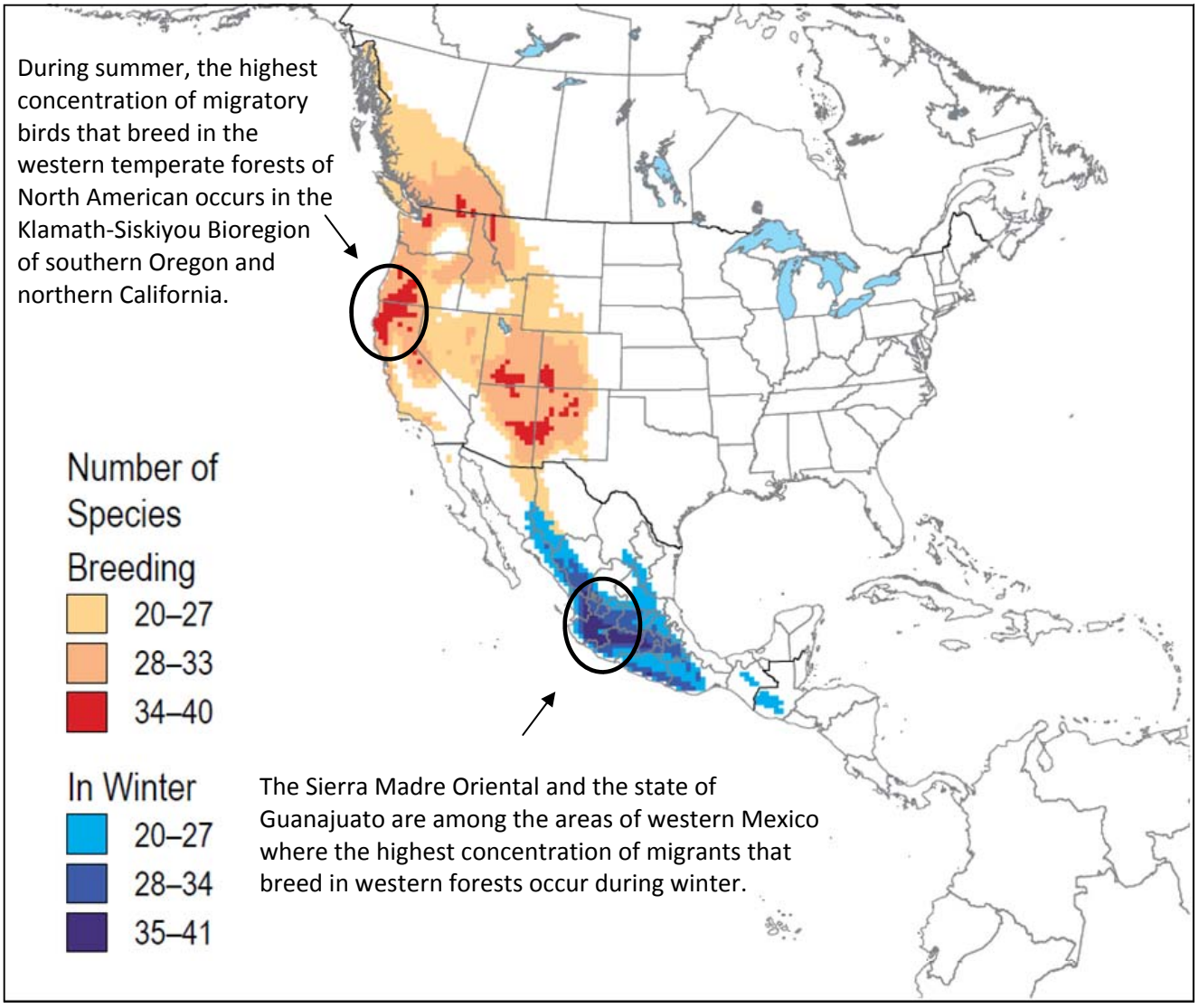
Saving Our Shared Birds

Many of the migratory birds that breed in North America's western forests winter in Mexico's pine-oak and tropical cloud forests. These Mexican forests also provide year-round habitat for some of the birds in North America that are at most risk of extinction. Many of these at-risk species are resident endemics and their population declines reflect the rapid loss of Mexican pine-oak and tropical cloud forests. The conservation of Mexican forest habitats and the at-risk, year-round resident birds that live there will have far reaching benefits for the conservation of migratory birds that breed in the North and winter in the tropics.

Full Life-cycle Stewardship:
Shared Conservation for Our Shared Birds

The Forests of southern Oregon and northern California host the highest number of the West Coast's migratory forest birds. During the winter, these forest migrants concentrate in the pine-oak and cloud forests of western Mexico. They share their wintering habitats with year-round Mexican residents, many of which are highly threatened. Thus, the protection and restoration of Mexican pine-oak and cloud forests is a Continental bird conservation priority, because it will benefit at-risk tropical endemics as well as declining migrants (Berlanga et al, 2010).

A healthy future for migratory forest birds in the western United States will require full life-cycle conservation at a hemispheric scale. A full life-cycle approach to migratory bird conservation includes habitat protection, ecosystem restoration, and sustainable natural resource management throughout the breeding, wintering, and migratory stop-over habitats that are used by these birds.

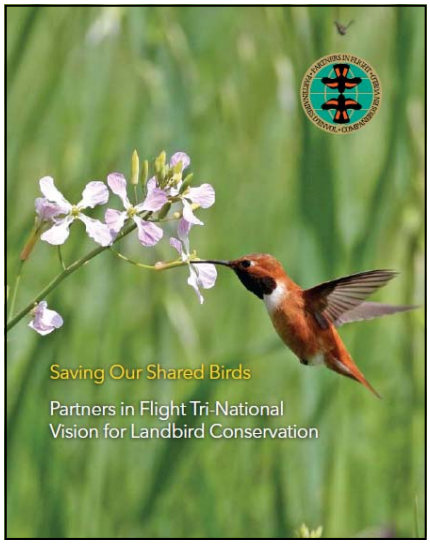


*Birds that breed in the temperate forests of the western United State and Canada winter in western Mexico. The strong linkage between these two disjunct areas illustrates how the conservation of North America's shared birds depends on increased international cooperation (*map courtesy of Partners in Flight*; Berlanga et al, 2010).*

Priorities for International Bird Conservation

Partners in Flight identified six priority areas to effectively advance bird conservation in North America (Berlanga et al, 2010).

1. Protect and recover species at greatest risk—*Protect Mexican pine-oak and cloud forest habitats thereby benefiting resident and migratory birds through a collaboration between government, industry, academia, and non-governmental organizations.*
2. Conserve habitats and ecosystem functions—*Manage for healthy and resilient ecosystems through the restoration of disturbance regimes, including fire and flood, to maintain a diverse vegetation community.*
3. Reduce bird mortality—*Keep cats indoors. Outdoor and feral cats kill 100s of millions of birds each year. Keeping your cat indoors is not only better for birds, it will result in a healthier pet.*
4. Expand our knowledge base for conservation—*Work to provide the best and most current applied ecological research and long-term monitoring results to land managers and decision makers.*
5. Engage people in conservation action—*Promote the use of citizen science. Work to educate students, community members, land managers, and industry on the importance of birds as ecological indicators that serve as a lens through which we can understand and measure the health of our environments, economies, and quality of life.*
6. Increase the power of international partnerships—*Develop international networks and collaborations to monitor birds, share data, and train biologists throughout the Americas and the ranges of our migratory birds.*



Saving Our Shared Birds: Partners in Flight Tri-National Vision for Landbird Conservation outlines a comprehensive plan for landbird conservation in Canada, the United States, and Mexico covering the complete range of many of our migratory birds. This plan identifies priorities for conservation, education, and implementation. To view the full report, visit: www.savingoursharedbirds.org

Focal Species: Mature Mixed Conifer-Hardwood, Pine-Oak, and Cloud Forests

Focal species are associated with important habitats and ecosystem attributes, thereby serving as indicators of ecosystem conditions. Focal species are often used in monitoring to understand how well we are managing our ecosystems and natural resources. In the watershed that surrounds Ashland focal bird species are being used to measure the effectiveness of efforts to restore the health and resilience of our forests.

The Hermit Warbler is a conifer forest focal species that is abundant in the Ashland Watershed. As a habitat specialist, Hermit Warblers are dependent on old growth and mature forests during the breeding season. Hermit Warblers migrate to spend their winters in the mountains of western Mexico, where they share habitats with at risk birds that are endemic to the pine-oak and cloud forests of that region.

Hermit Warbler & Connectivity

The life cycle of the Hermit Warbler highlights the connectivity of Ashland's and Guanajuato's birds and communities. Like many of our shared migratory birds that breed in the mixed conifer hardwood forests surrounding Ashland, Hermit Warblers migrate to winter in the pine-oak and cloud forests surrounding Guanajuato. Alarmingly, many of the birds that are year-round residents in Mexican habitats where Hermit Warblers winter are at risk of extinction, an indication that the persistence of Mexican pine-oak and cloud forests is at risk.

Hermit Warbler; Photo © Jim Livaudais

Hermit Warblers and other migratory forest species will benefit from efforts to restore resilient mature forest ecosystems within the Klamath-Siskiyou Bioregion. The health of migratory forest birds will also depend on conservation measures needed to save North America's most threatened species that rely on pine-oak and cloud forest of Mexico. By understanding the environmental issues in the breeding, wintering, and stop over habitats of migratory birds, we can begin to see the interrelated economic and quality of life issues that people in these interconnected regions will need to consider for conservation to be successful.

Birds Eye View of Sustainability

Sustainability involves the long-term maintenance of our well being, and has interrelated environmental, economic, and social dimensions. Migratory birds act as a lens through which we can consider sustainability. Through the migratory flyways and on the wings of our smallest migratory songbirds, our environmental, economic, and social well being are woven together.

As "canaries in the coal mine" birds are indicators of environmental health and the sustainability of our planet's natural resources. As focal species, birds can help to guide ecosystem management practices that will assure our ability to sustain healthy natural resources into the future.

Stable bird populations represent stable ecosystems, which provide stable and sustainable natural resources. Our long-term economic wellbeing depends on maintaining healthy natural resources for generations to come. Thereby birds serve as indicators of the healthy and sustainable natural resource foundations upon which healthy economies are built.

Our quality of life depends on the health of our environments and our economies, thus when the state of our environments and our economies decline, our quality of life declines. Local and international policies that determine how natural resources are used and distributed effect the quality of life for people in all parts of society and thereby influence international issues of social well being. For example, many communities in the Klamath-Siskiyou Bioregion remain economically challenged after decades of unsustainable timber management. Excessive logging of old-growth forests resulted in short-term financial benefits that were not sustained in the region. This focus on unsustainable resource extraction, without attention to the natural processes of disturbance and forest succession, contributed to the decline of many Klamath-Siskiyou Bioregion bird species.

Migratory birds help to define our sense of place, locally and globally. Through the full life-cycle and migration of our shared birds, we see the connectivity of environments, economies, and social well being. Our planet, our prosperity, and our communities depend on the sustainability of environments, economies, and social equities, whether in Ashland or Guanajuato. Bird conservation brings opportunities for our sister cities of Ashland and Guanajuato, and the United States and Mexico, to work together to assure a sustainable future for our communities for generations to come.

With a focus on the Klamath-Siskiyou Bioregion Klamath Bird Observatory carries our model of conservation science throughout the range of our shared birds through international capacity building. Image © Gary Bloomfield

Bird Conservation Across Borders

Klamath Bird Observatory

Klamath Bird Observatory is built upon two decades of conservation science in the Klamath-Siskiyou Bioregion of southern Oregon and northern California. KBO is a non-profit organization dedicated to advancing bird and habitat conservation through science, education, and partnerships. Conducting long-term monitoring and applied research projects, KBO's scientific results help to inform conservation and management decisions. KBO also reaches out to communities to connect people with science and conservation. To learn more about Klamath Bird Observatory visit www.KlamathBird.org.

International Collaboration for Bird Conservation

Klamath Bird Observatory has an award winning international capacity building program. Working with the US Forest Service Wings Across the Americas Program, Southern Oregon University's Office of International Programs, and the Rotary Club of Ashland's World Community Service Committee, KBO offers intensive training opportunities for biologists from Latin America and the Caribbean. This model has resulted in far reaching and sustained success. Our international affiliates bring their acquired skills back to their home countries, offer additional training opportunities for local biologists, and contribute to lasting science-based conservation programs.

Partners in Flight

Partners in Flight (PIF) launched in 1990 in response to growing concerns about bird population declines. PIF is a collaborative effort among government, academia, industry, First Nations and tribes, non-governmental organizations, and individuals to "keep common birds common." PIF works to combine and coordinate bird conservation efforts throughout the hemisphere for stewardship of landbirds and their associated habitats. To learn more about PIF visit www.partnersinflight.org

Citations

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