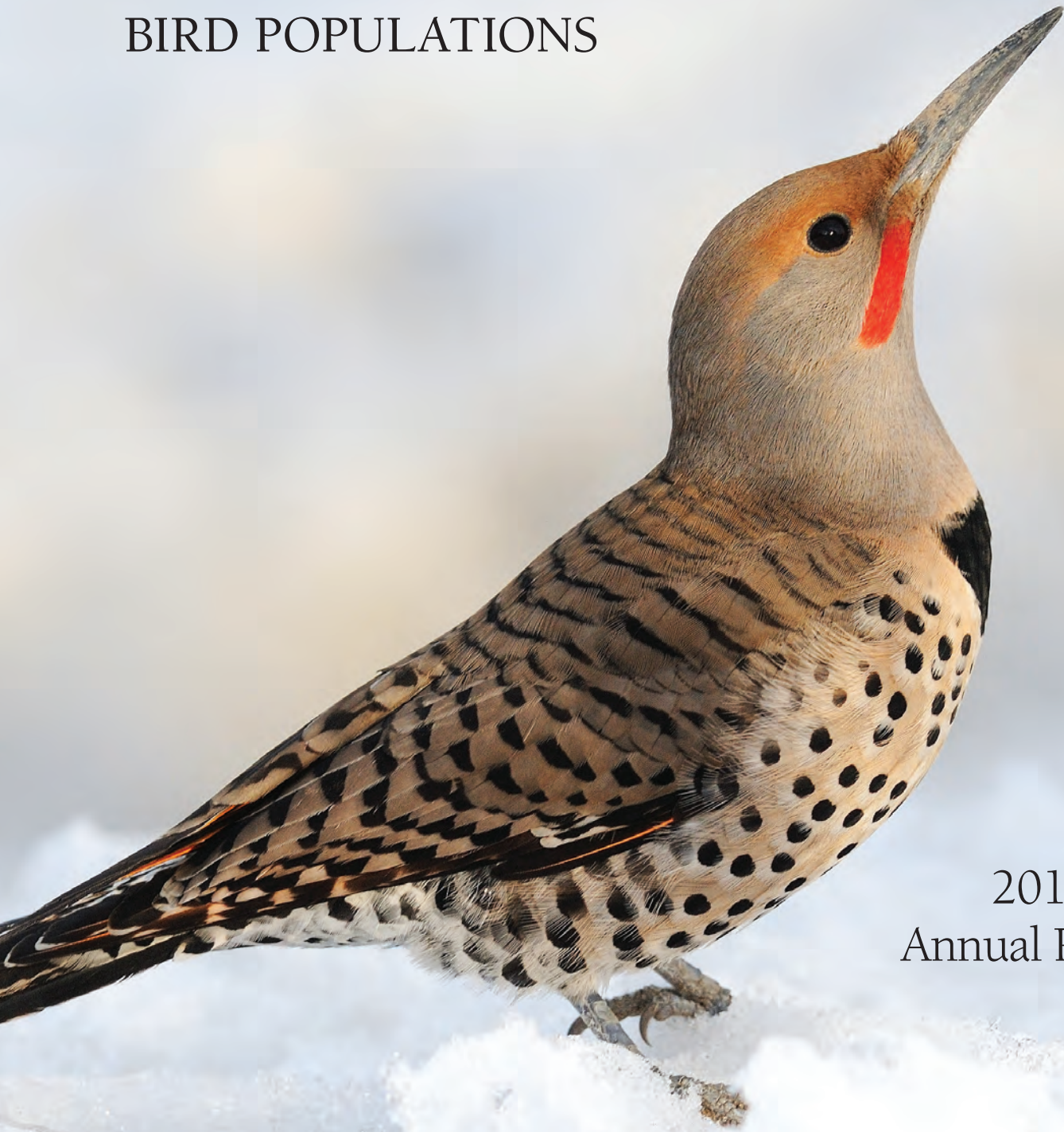




The
INSTITUTE for
BIRD POPULATIONS



2017
Annual Report



The INSTITUTE for
BIRD POPULATIONS
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The IBP staff. Back row, left to right: Lauren Helton, David DeSante, Helen Loffland, Peter Pyle, Rodney Siegel, Ron Taylor, Deborah Mills, Steven Albert. Front row, left to right: Chris Ray, Mandy Holmgren, Jim Saracco, Morgan Tingley, Bob Wilkerson, Danielle Kaschube. Not pictured: Jerry Cole, Lynn Schofield, Kim Kayano, Rachel Blakey.

The Institute for Bird Populations studies the abundance, vital rates, and ecology of bird populations to enable scientifically sound conservation of birds and their habitats.

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IBP Needs Your Support!

We rely on support from people like you to continue our work. Please consider a tax-deductible contribution, and multiplying the impact by encouraging friends and family to support IBP. Use the donation envelope included in this report, donate through birdpop.org, or send a check to IBP, P.O. Box 1346, Point Reyes Station, CA 94956.

On the cover: In a paper published this year, IBP analyzed ten years of point count data in national parks in the Pacific Northwest, partly to assess the role of annual variation in weather in driving population change. Northern Flicker was one of the few species whose population declined in some areas. See page 10 for details. Photo: Rob McKay

Right: IBP is using new tracking technology to study fine-scale movements of Northern Goshawks in California. Photo: Martha de Jong-Lantink



A Message from IBP's Executive Director

IBP is not a large organization, but our work is ambitious, our projects diverse, and our reach broad – spanning North America, the Neotropics, and several Pacific islands. The common thread connecting our initiatives is a desire to better understand avian biology and conserve bird populations. Climate change and other pressing threats make this work urgent and sometimes daunting, but the concern of vast numbers of people and the shared vision of our many partners make the challenges surmountable.

In 2017 IBP's intrepid scientists ventured to Alaskan marshes, Canadian boreal forest, dense woods of Maine, pine forests of North Carolina, snow-covered California mountains, steamy Nicaraguan rainforests, and the remote Manu'a Islands of American Samoa. We developed innovative mathematical models to better understand bird population dynamics; we published new criteria for determining age and sex of little-studied Polynesian birds; we began or finished writing conservation strategies for three imperiled species in California; we tested a new method to promote recolonization of restored meadows by endangered Willow Flycatchers; we deployed new tracking technology to study fine-scale habitat use by Spotted Owls and Northern Goshawks; and we taught bird-banding classes across North and Central America. In a few cases, our work even addressed non-avian species – we published findings with important conservation implications for humpback whales in Alaska, pikas in the Rocky Mountains, bats in Australia, and bumble bees in California.

I haven't even come close to summarizing here all the initiatives undertaken by our energetic and talented staff this year! If you love birds and treasure the natural world like we do, I hope you will consider partnering with us – by collaborating, volunteering, or donating essential funds to continue our work.

Rodney Siegel, Ph.D.



The MAPS & MoSI Programs

Considering the habitat needs of birds throughout their full annual cycle is often essential for effective conservation. To help fulfill this need, IBP established and still coordinates two long-running, collaborative bird banding programs: the Monitoring Avian Productivity and Survivorship (MAPS) Program, which monitors avian demographics during summer across the U.S. and Canada, and the Monitoring Overwinter Survival (MoSI) Program, which studies North American migrants and Neotropical resident birds in the northern Neotropics during winter. Both programs collect mark-recapture data to study avian “vital rates”, like productivity and survivorship, that drive declines or increases in bird populations.

Gray Catbird

Photo: Andy Reago & Chrissy McClaren

The MAPS and MoSI Network

Although IBP coordinates the MAPS and MoSI programs and curates the data, the vast majority of stations are run by independent researchers, land managers, and citizen-scientists. With more than 1,400 past and current stations (about 400 are active at any one time), MAPS and MoSI constitute the longest-running and geographically most extensive network of its kind in the hemisphere.

Integrated Population Modeling Leverages MAPS Vital Rates and Count Data

The core strength of the MAPS Program is its ability to provide crucial information about avian “vital rates” like productivity and survivorship, which can provide deep insight into causes of changes in populations (see www.VitalRatesofNorthAmericanLandbirds.org). MAPS station operators catch birds in mist nets and determine their age, sex, and reproductive status; mark them with leg bands; and track whether they are recaptured in the future. While this approach has many strengths, it will always be constrained to sites where arrays of nets can be operated year after year. Point counts, such as those used in the North American Breeding Bird Survey, are less useful for generating strong inferences about vital rates, but can be implemented much more broadly across the landscape.

Recent advances in developing integrated population models that leverage the strengths of both count and vital rate data show great promise in broadening

what our monitoring efforts can tell us about bird populations and increasing the precision of our inferences. In a study published in *Ecological Applications*, IBP scientists and colleagues at USGS Patuxent Wildlife Research Center developed a model that combines avian count data from the Breeding Bird Survey with vital rates data from the MAPS Program. The model was applied to 17 years of data for Gray Catbird and Wood Thrush in New England and the mid-Atlantic coast region, revealing that the Gray Catbird population was relatively stable, while the Wood Thrush population fell by nearly half.

A benefit of using the integrated population model was the ability to estimate recruitment, the stage of the life cycle at which juveniles survive to adulthood and become part of the breeding population, and which is a key vital rate that often drives population change. Annual growth rates for both species correlated more with recruitment than with adult survival, and the relationship for Wood Thrush was stronger than for Gray Catbird.

More recently, IBP has teamed with the USGS National Climate Change and Wildlife Science Center in an effort that will extend our integrated population models to include remote-sensed habitat and climate variables. Using Wilson’s Warbler across the western United States as a test case, we are assessing how these variables drive vital rates and population trends, and then using the results to predict future Wilson’s Warbler populations based on projected climate and habitat covariates under different carbon emissions and land-use scenarios.



Crew Leader
Kurt Ongman collects data on
a Chipping Sparrow captured at a
MAPS station in Yosemite National Park.
Photo: Graham Montgomery

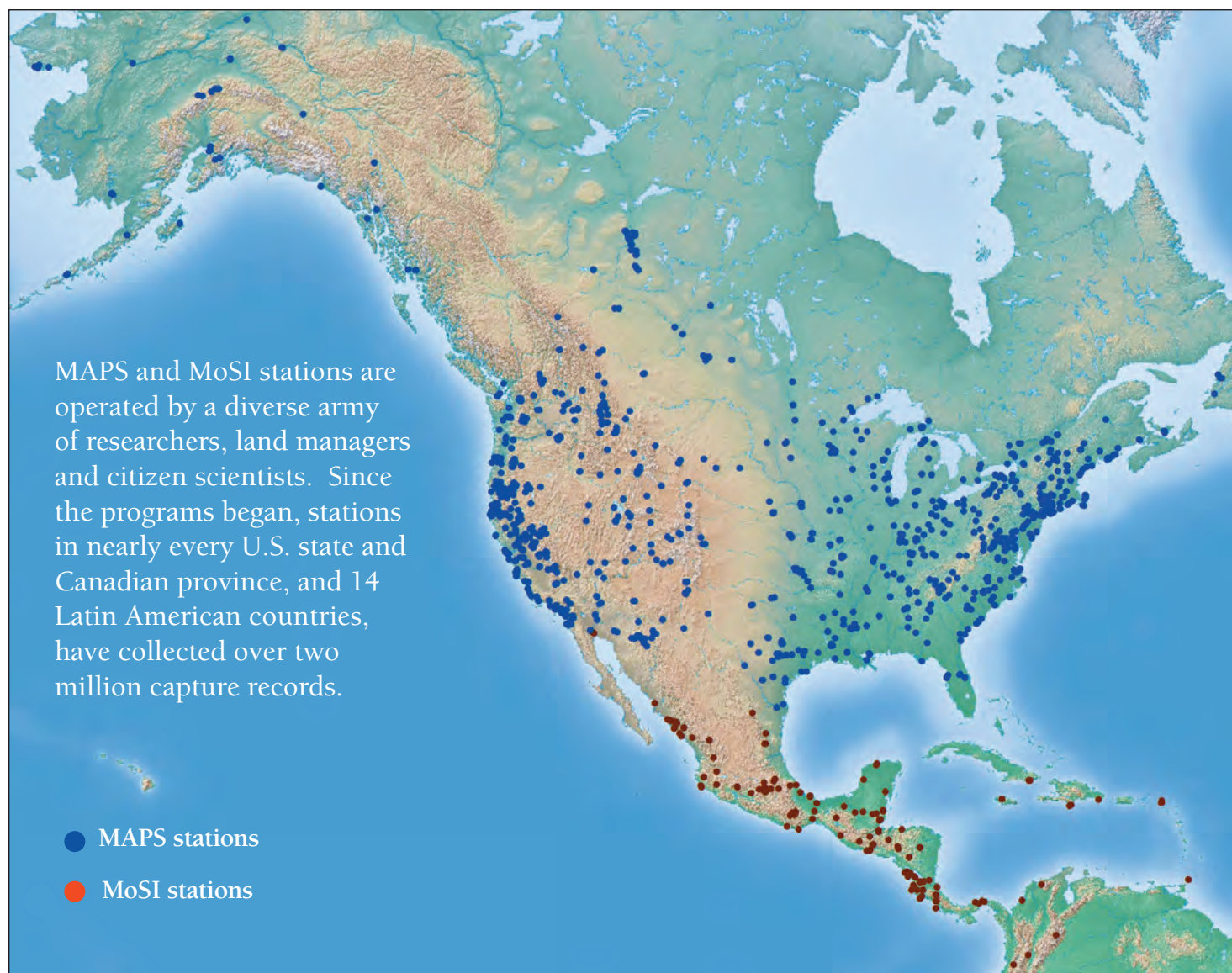
Enhancing Capacity for MoSI, Ornithology, and Bird Conservation in Latin America

In recent years, we've talked with many MoSI station operators about ways that IBP can support their efforts. We've gotten some thoughtful and creative responses, and have recently taken concrete steps in at least three important areas.

Bird Banding Equipment: For some well-qualified bird banders in Latin America and the Caribbean, the cost of start-up equipment can be an obstacle to participation in the MoSI program. In 2017, IBP partnered with March Conservation Fund to initiate a program of small grants to qualifying MoSI stations. To date, we have donated needed banding materials to 14 stations in Mexico, Guatemala, Nicaragua, Jamaica, and Ecuador.

In-country Training: Over the past two years, we've had the opportunity to partner with two other non-profits, Paso Pacifico and the Southern Sierra Research Station, to establish new MoSI stations in Nicaragua and provide in-country training or banding refresher instruction to more than 20 bird banders and researchers. These efforts are described in more detail on page 7.

Fellowship Opportunity: In 2017, IBP and our colleagues at the Southern Sierra Research Station (SSRS) initiated a new program, The International Fellowship in Bird Survey Techniques. This program offers an opportunity for a Latin American biologist participating in the MoSI Program to come to the U.S. to study bird survey techniques with practitioners in California, where many of the birds that they study in the winter months nest.



This year, Heydi Herrera Rosales from Nicaragua was the first fellowship recipient. Heydi has an M.S. in Wildlife Conservation and Management from the Universidad Nacional de Heredia in Costa Rica,



and works as a contract biologist for the Wildlife Conservation Society in northeastern Nicaragua, where she studies the birds and other fauna of Bosawas Biosphere Reserve and Cerro Saslaya

National Park. Heydi spent several weeks at the SSRS field station at the southern tip of the Sierra Nevada, where she assisted studies on Willow Flycatcher, Flammulated Owl, and Yellow-billed Cuckoo.

She then moved to Yosemite National Park, where she spent several weeks with IBP's MAPS crew and had the opportunity to polish her skills at identifying molt limits and determining age class of adult birds. Heydi also participated in a presentation to the Yosemite Conservancy and Yosemite natural resource staff about connections between the birds of California and the Neotropics.

“One great aspect has been getting to know the nesting habitats of the birds that I see in the winter. I also met so many great colleagues, all who had a keen desire to share their knowledge and experiences. Field biologists everywhere, it seems, always find a reason to be happy, even when having to overcome challenges.”

- Heydi Herrera Rosales, M.S.

Heydi Herrera Rosales banding a Black-headed Grosbeak in Yosemite National Park.

Country Spotlight: The MoSI Program Expands in Nicaragua

Nicaragua has a rich history of participation in the MoSI Program. The active and capable Nicaraguan *anilladores*, some of whom have been banding birds for decades, engage in a variety of research projects associated with universities and non-profit conservation organizations. The MoSI Program has eight active stations in Nicaragua during winter 2017-18, three of which have been operating since the MoSI Program began in 2002.



IBP conducted bird banding and MoSI operations training in Nicaragua as part of our program expansion efforts. Left to right, Heydi Herrera Rosales, Oscar Bermúdez, IBP Biologist Lauren Helton, and Luis Diaz.



*Painted Bunting
Photo: Adobe Stock*

Painted Bunting, one of the many species of Neotropical migrants that winter in Nicaragua, and a regular visitor to several MoSI stations.

The site provides mature primary riparian forest and other habitats for North American wintering species like Northern Waterthrush and Painted Bunting, and Neotropical residents such as Long-tailed Manakin. We also coordinated training for 20 Nicaraguan banders, and helped long-time cooperator Reserva Quelantaro with two MoSI pulses.

Working with our colleagues at Paso Pacifico, a non-profit based in Managua, we established a new MoSI station, Reserva Mono Bayo, in the south of the country.

IBP's Sierra Nevada Bird Observatory

IBP's Sierra Nevada Bird Observatory studies and conserves birds and their habitats in California's Sierra Nevada mountains (and occasionally beyond). We partner with federal and state agencies, private industry, university researchers, and other NGOs to address conservation challenges with cutting-edge science and forward-looking conservation planning.

Photo: Patrick Poendl

Science to Support Bird-friendly Forest Management

Our projects in the Sierra Nevada are often designed to yield guidance for bird-friendly forest management, and are pursued in partnership with public and private land managers to help insure that our findings are useful for on-the-ground habitat management.

In 2017, much of this research focused on the conservation of owls and raptors. In the northern Sierra Nevada, IBP is partnering with the US Forest Service and others to study space-use and habitat selection in California Spotted Owls and Northern Goshawks, with emphasis on the responses of each species to forest management activities such as controlled burning and forest thinning. We are deploying cutting-edge tracking technology that is producing fine-scale data on movements of focal individuals, and will yield results to help the Forest Service manage habitat for these species in the future. In the central Sierra Nevada we are working with a private timber company to assess habitat selection by California Spotted Owls nesting on commercial timberlands.

Further south, IBP is partnering with Yosemite National Park and the US Forest Service to study the effects of the 2013 Rim Fire on California Spotted Owls and Great Gray Owls. We are combining field surveys with LIDAR and other remote-sensed habitat data to understand the circumstances under which these two imperiled owl species can persist after their habitat is burned.

Other ongoing research focuses on conservation of Black-backed Woodpeckers. With partners at the US Forest Service and University of Connecticut we are studying aspects of Black-backed Woodpecker ecology including occupancy patterns in burned and drought-killed forests, nesting ecology, habitat selection by fledglings, juvenile dispersal, and prey dynamics.



California Spotted Owl

Photo: Emily Brouwer

Protecting Sierra Nevada Pollinators

Bumble bees are declining across many regions in the Northern Hemisphere, indicating a need to manage, protect, and enhance their habitats. Like birds, they are also charismatic, relatively easy to identify, and provide opportunities to study many species simultaneously with a single survey protocol. As part of our Protecting Sierra Nevada Pollinators program (which encompasses hummingbirds as well as pollinator insects), IBP recently initiated multiple



studies of bumble bee ecology in the Sierra Nevada in partnership with the US Forest Service and others.

In 2017, we published our first scientific paper stemming from this work in *The Journal of Wildlife Management*, where it was featured on the cover of the August issue. Using non-lethal sampling of nearly 2,500 bumble bees,

we assessed the importance of post-fire chaparral to bumble bees and determined the relative frequency at which the bees foraged on dozens of woody and herbaceous plant species. Based on our results, we provide specific land management recommendations for incorporating bumble bee habitat needs into post-fire forest restoration.



Other ongoing IBP pollinator projects include assessing the effects of herbicide applications and other shrub control efforts on bumble bees in burned areas, and evaluating the importance of different riparian habitat features to bumble bees. We expect both these projects to yield specific recommendations to help land managers create, maintain, and enhance bumble bee habitat.



Bee illustrations by
Lauren Helton.

Top: *Bombus melanopygus*
Left: *Bombus vosnesenskii*

Willow Flycatcher Conservation Efforts Gain Steam

In 2017, IBP and partners expanded our efforts to study and conserve California's endangered Willow Flycatchers. One focus was completing a 2-year experiment to test whether deploying automatic broadcast units playing Willow Flycatcher vocalizations throughout the breeding season could encourage Willow Flycatchers to recolonize restored montane meadows. We are now preparing a manuscript detailing the promising results. We are also monitoring Willow Flycatcher occupancy patterns after hydrologic restoration along the Little Truckee River – a project that will likely yield important lessons for similar restoration projects throughout the larger region.

The other focus of our work has been conservation planning. We are partnering with the California Department of Fish and Wildlife and others to develop a comprehensive statewide conservation strategy for Willow Flycatchers. We are working with species experts and land managers to identify conservation actions needed to protect the species and its habitat across the state, with particular emphasis on grazing management, meadow restoration, and reservoir management.



IBP Biologist Helen Loffland
observes Willow Flycatcher
behavior in a flooded meadow.
Photo: Skyla Loffland

Climate Change and Bird Populations in National Parks

Photo: Courtesy of US Forest Service

National parks provide great natural laboratories, where human land-use changes are often minimal, and the effects of climate change and other broad-scale ecological processes may be easier to observe. For over a decade, IBP has been collaborating with the National Park Service and the US Geological Survey to monitor bird populations with point counts at nine national parks across California, Oregon, and Washington.

In a paper published in August in *Ecosphere*, we developed a Bayesian framework for analyzing avian point count data, and applied it to ten years of data from Mount Rainier, North Cascades, and Olympic National Parks. The study assesses the role of annual variation in precipitation and temperature in driving population change, and reveals that populations of most of the 39 species evaluated were stable or increasing between 2005 and 2014. A handful of species, however, were notable exceptions to the pattern of stability: we detected declines of Northern Flicker, Olive-sided Flycatcher, Clark's Nutcracker, Mountain Chickadee, and Dark-eyed Junco in one or more parks.

Further to the south, recent annual weather variation in Sierra Nevada national parks - Devils Postpile, Kings Canyon, Sequoia, and Yosemite - has been extreme. After five years of drought, the spring 2017 snowpack was among the largest ever recorded, posing substantial challenges to our field crew. Deep snow lingered well into summer, and once it began melting, streams that in past years had been easy to ford became uncrossable. But our crew persisted and collected data that should reveal much about how bird populations respond to extreme weather fluctuations.

How Has Historic Drought Affected Birds on National Forest Lands?

Elsewhere in the Sierra Nevada, we launched a new initiative this year to study the effects of widespread tree mortality on birds. Prolonged drought has killed an estimated 100 million trees across the region in recent years, and this extensive die-off will likely have consequences for bird populations. IBP scientists are working with the US Forest Service to assess the consequences for species such as Black-backed Woodpecker that forage on dead and dying trees (and might therefore benefit), as well as numerous other bird species that may not find needed food and shelter in stands where most of the trees have died.

The goal of our work is to provide managers with recommendations to inform difficult decisions about retention and harvest of dead trees and forest restoration.

Mountain Chickadee
Photo: David Mitchell

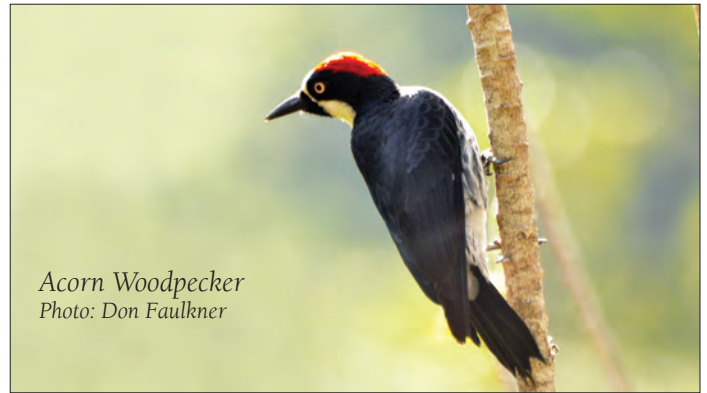


Sneak Preview: Monitoring and Management of Bird Populations in California's State Vehicular Recreation Areas

In the latest example of how IBP scientists use bird monitoring data and statistical modeling to help land managers conserve birds and their habitats, IBP is teaming up with the National Audubon Society and California Department of Parks and Recreation to examine birds as indicators of habitat conditions and disturbance effects in California's State Vehicular Recreation Areas, which provide off-highway vehicle recreation opportunities.

The project will compile and analyze bird monitoring data and remotely-sensed habitat data to assess the effects of park activities and infrastructure on bird

populations, and will develop recommendations for improving the effectiveness of bird monitoring across the park system. Most importantly, the project will provide park managers with tools and information for enhancing the value of California's State Vehicular Recreation Areas for birds.



Acorn Woodpecker
Photo: Don Faulkner

IBP and partners are helping to monitor and conserve populations of bird species like Acorn Woodpecker in California's State Vehicular Recreation Areas.

A View from the Field: Reflections of a Seasonal Technician

Matt Lerow, Black-backed Woodpecker Crew Leader

Kek! Snarl! The resonant drum of a Black-backed Woodpecker echoes across the landscape. The dawn chorus in full swing, my co-workers and I have already hiked to the top of a mountain peak in pursuit of this glorious bird. Though there were moments, numerous moments, when "glorious" would not have been my choice descriptor, this bird and the pursuit of it have undoubtedly changed me for the better.

From the beginning, I felt a connection with the mountains, the birds and the burnt landscape. I was able to spend five field seasons hiking through Sierra Nevada burnt forests where my coworkers and I collected data on Black-backed Woodpecker nesting, foraging behavior and home range. Three field seasons working as a crew leader were invaluable in developing my ability to organize and effectively lead others to reach project goals.



My work with IBP has kindled a growing interest in fire-adapted ecosystems and the important role that woodpeckers often play in them. This enthusiasm, paired with my experience with Black-backed Woodpeckers has led to my current work managing for Red-cockaded Woodpeckers in Central Florida.

Former IBP Crew Leader Matt Lerow holds a brood of Red-cockaded Woodpecker nestlings that he is about to fit with leg bands and then return to their nest.

Matt fine-tuned his ornithology skills during five summers on IBP's Black-backed Woodpecker crew, and now works as a Biological Scientist for the Florida Fish & Wildlife Commission.



Black-backed Woodpecker illustration by Lynn Schofield.



The
Pacific
Islands
Program

Pacific Kingfisher
Photo: Casey Weissburg

Studying Bird Populations in American Samoa and the Northern Mariana Islands

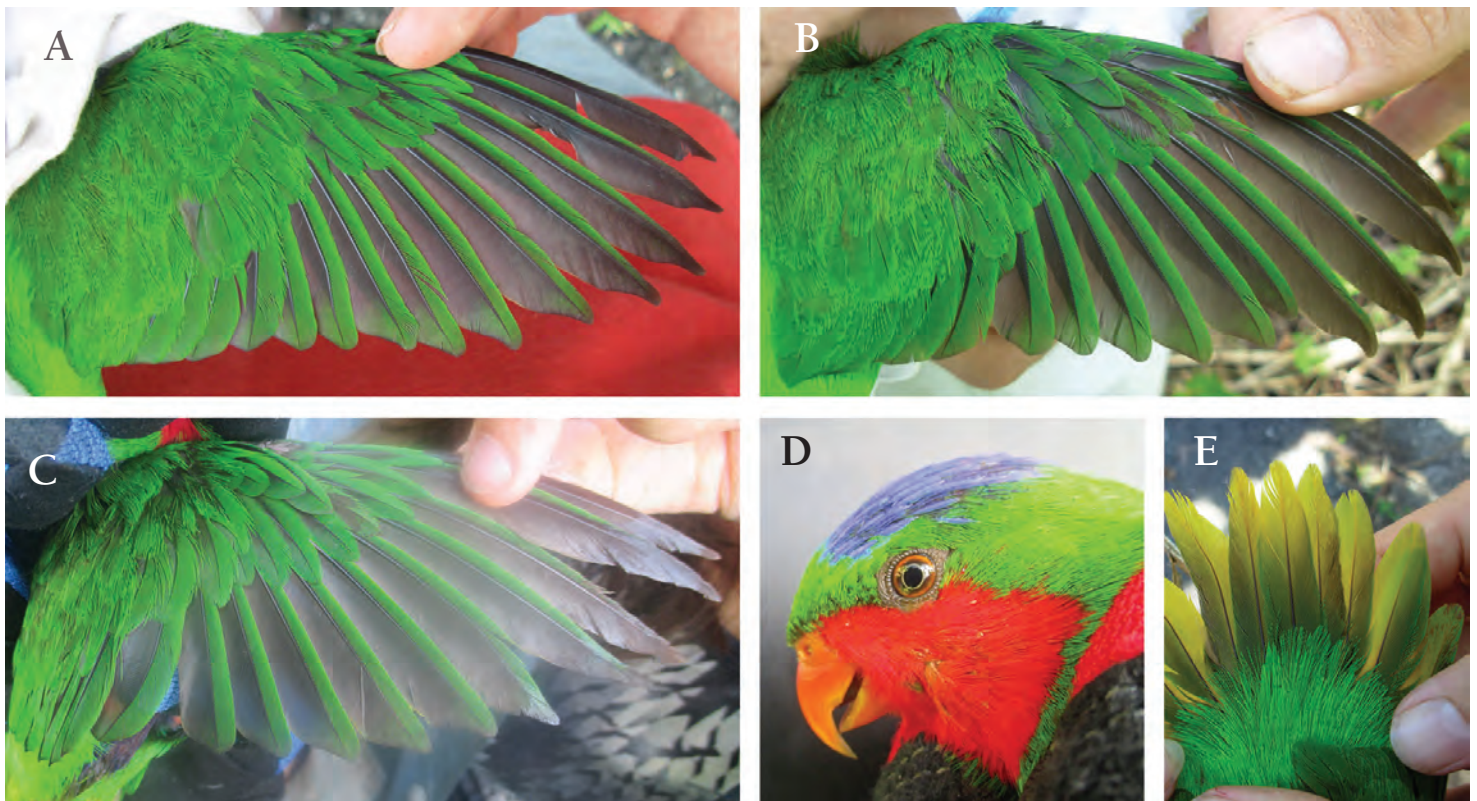
IBP has been monitoring the vital rates of landbirds in American Samoa since 2012, when we partnered with the American Samoa Department of Marine and Wildlife Resources to establish six banding stations on the island of Tutuila. We added six stations to the Island of Ta'u in 2013, and six more to Ofu and Olosega islands in 2015.

To study the vital rates of bird populations in these remote Pacific islands, we need to be able to determine the sex and age of individual birds captured. When the project started, we knew virtually nothing about molt patterns and plumage variation by age and sex in birds of American Samoa. Painstaking data collection culminated this year in the publication of a comprehensive manual on molt patterns, age and sex determination, and breeding phenology for 16 species. Because many of these

or closely related species are found throughout the South Pacific basin, the manual will be useful for ornithologists throughout the region.

During winter 2017/2018 we are augmenting our work on Ofu and Olosega with a new project focused on the small population of Tongan Ground Doves that lives there. Our research will assess population size, habitat needs, and conservation threats, with a goal of aiding in the scientifically informed conservation of this federally endangered species.

Elsewhere in the Pacific, we continue to partner with the Northern Mariana Islands Division of Fish and Wildlife to study and monitor bird populations on the island of Saipan. We are preparing a manuscript on the consequences of Typhoon Soudelor, which struck the region in 2015 as a Category 4 storm, to Saipan bird populations. Results, detailed in the manuscript, likely have broader implications for understanding factors that affect resilience and vulnerability of island bird populations to major tropical storms.



Above: A figure from IBP's new manual for determining the molt status, age, and sex of landbirds in American Samoa. These Blue-crowned Lorikeets were captured on the Island of Ta'u in 2014-15. We can identify them as adults in definitive basic plumage by their notched outer primaries (panels A, B, and C), broad and full tail feathers (E), and feather wear indicating bilateral molt patterns among primaries and secondaries, confirming a previous complete molt (first-year birds do not molt flight feathers). The bright yellowish outer iris (D) is also typical of older birds.

Left: IBP is studying population dynamics of Pacific Kingfisher and other Polynesian bird species on several islands in American Samoa.

Peer-Reviewed Publications

As part of our effort to disseminate our scientific findings widely, IBP scientists frequently publish results in peer-reviewed scientific journals. In 2016-17, our staff authored or co-authored the publications listed below. A searchable database listing these and more than 650 other publications and technical reports by current and former IBP staff and partners is available at www.birdpop.org.

Ahrestani, F.S., J.F. Saracco, J.R. Sauer, K.L. Pardieck, and J.A. Royle. 2017. An integrated population model for bird monitoring in North America. *Ecological Applications* 27:916-924.

Albert, S.K., D.F. DeSante, D.R. Kaschube, and J.F. Saracco. 2016. MAPS (Monitoring Avian Productivity and Survivorship) data provide inferences on demographic drivers of population trends for 158 species of North American landbirds. *North American Bird Bander* 41:133-140.

Albert, S., D. DeSante, R. Siegel, D. Kaschube, and J. Saracco. 2016. Monitoring landbirds in national parks: understanding populations, migratory connectivity, and climate change. Pages 11-17 in: S. Weber, editor. Engagement, Education, and Expectations — The Future of Parks and Protected Areas: Proceedings of the 2015 George Wright Society Conference on Parks, Protected Areas, and Cultural Sites. Hancock, Michigan: George Wright Society.

Beatty, W.S., D.C. Kesler, E.B. Webb, L.W. Naylor, A.H. Raedeke, D.D. Humburg, J.M. Colucy, and G.J. Soulliere. 2017. How will predicted land-use change affect waterfowl spring stopover ecology? Inferences from an individual-based model. *The Journal of Applied Ecology* 54:926-934.

Blakey, R.V., R.T. Kingsford, B.S. Law, and J. Stoklosa. 2017. Floodplain habitat is disproportionately important for bats in a large river basin. *Biological Conservation* 215:1-10.

Blakey, R.V., B.S. Law, R.T. Kingsford, and J. Stoklosa. 2017. Terrestrial laser scanning reveals below-canopy bat trait relationships with forest structure. *Remote Sensing of Environment* 198:40-51.

Blakey, R.V., B.S. Law, T.M. Straka, R.T. Kingsford, and D.J. Milne, D.J. *In press*. Importance of wetlands to bats on a dry continent: a review and metaanalysis. Special section in *Hystrix - Italian Journal of Mammalogy*. Out of Forests: Bat Diversity and Ecology in Open Areas. M.J. Ramos Pereira and L.M. Souza Aguiar, editors.

Casas, A., M. Garcia, R.B. Siegel, C. Ramirez, A. Koltunov, and S.L. Ustin. 2016. Burned forest characterization at single-tree level with Airborne Laser Scanning for wildlife habitat assessment. *Remote Sensing of Environment* 175:231-241.

Castillo, J.A., C.W. Epps, M.R. Jeffress, C. Ray, T. J. Rodhouse and D. Schwalm. 2016. Replicated landscape genetic and network analyses reveal wide variation in functional connectivity for American pikas. *Ecological Applications* 26:1660-1676.

DeSante, D.F., J.F. Saracco, and D.R. Kaschube. *In Press*. Estimating population change for landbird species in western North America and inferring demographic drivers of change from a MAPS-based assessment. *Studies of Western Birds* 2.

Foster, K.R., C.M. Godwin, P. Pyle, and J.F. Saracco. 2016. Reclamation and habitat-disturbance effects on landbird abundance and productivity indices in the oil sands region of northeastern Alberta, Canada. *Restoration Ecology* 25:532-538.

Gabriele, C.M., J.L. Neilson, J.M. Straley, C.S. Baker, J.A. Cedarleaf, and J.F. Saracco. 2017. Natural history, population dynamics, and habitat use of humpback whales over 30 years on an Alaska feeding ground. *Ecosphere* 8:e01641.

Guallar, S.X., A. Ruiz-Sánchez, R. Rueda-Hernández, and P. Pyle. 2016. Molt strategies of ten Neotropical passerine species. *The Wilson Journal of Ornithology* 128:543-555.

Lai, P., P. Pyle, K.R. Foster, and C.M. Godwin. 2017. Identifying sparrows in juvenile plumage. *Birding* 49:62-76.

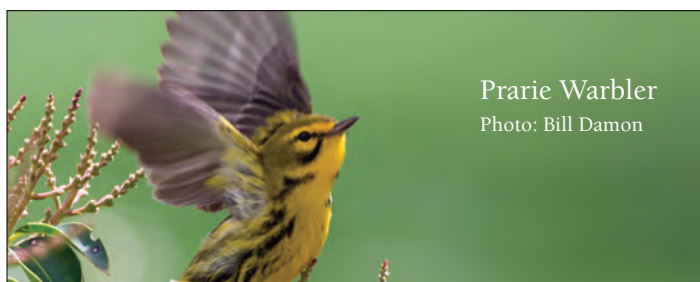
Loffland, H.L., J.S. Polasik, M.W. Tingley, E.A. Elsey, C. Loffland, G. Lebuhn, and R.B. Siegel. 2017. Bumble bee use of post-fire chaparral in the central Sierra Nevada. *The Journal of Wildlife Management* 81:1084-1097.

Nordell, C.J., S. Haché, E.M. Bayne, P.M. Sólymos, K.R. Foster, C.M. Godwin, R. Krikun, P. Pyle, and K.A. Hobson. 2016. Within-site variation in feather stable hydrogen isotope ($\delta^2\text{H}$) values of boreal songbirds: implications for assignment to molt origin. *PLoS ONE* 11:e0163957.

O'Daniels, S.T., D.C. Kesler, J.D. Mihailc, E.B. Webb, and S.J. Wernere. *In Press*. Functional visual sensitivity to ultraviolet wavelengths in the Pileated Woodpecker (*Dryocopus pileatus*), and its influence on foraging substrate selection. *Physiology and Behavior*.

Ortiz-Pulido, R., J.L. Alcántara-Carbajal, H. de la Cueva, J. Martínez-Gómez, P. Escalante Pliego, S.M. de la Parra-Martínez, T.P. Feria Arroyo y S. Albert. 2016. Conservación de aves en México: Una instantánea de 2015. *HUITZIL: Revista Mexicana Ornitológica* 17:234-238.

Polasik, J.S., J.X. Wu, K. Roberts, and R.B. Siegel. 2016. Great Gray Owls nesting in atypical, low-elevation habitat in the Sierra Nevada, California. *The Journal of Raptor Research* 50:194-206.



Prairie Warbler
Photo: Bill Damon



Yellow Warbler

Photo: Budgora

Puckett, E.E., D.C. Kesler, and D.N. Greenwald. 2016. Taxa, petitioning agency, and lawsuits affect time spent awaiting listing under the U.S. Endangered Species Act. *Biological Conservation* 65:201-220.

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Partner Perspective



“To me, IBP represents everything that an NGO should aspire to be: an organization that is able to harness the efforts of many towards a common and critical conservation goal, while guiding those efforts using sound science and a collaborative spirit. I have a long history with IBP and I am willing to bet that I am in the running for their biggest fan! My first experience was in 2000 when, at the age of 23, I was working with Dr. Thomas Smith on migratory connectivity in the Swainson’s Thrush using genetic markers. As a result of our collaboration with IBP, I was able to use feathers collected from MAPS stations to increase the scope of my project and its relevance by an order of magnitude. The experience with IBP at this early stage in my career demonstrated the fundamental power of working together, and I was hooked. Now, almost 20 years later, I am Co-director of the Bird Genoscape Project – an effort to map the migratory flyways of North American passerines by harnessing genomic tools – and I still have

the opportunity to collaborate regularly with IBP. Every project together has been a pleasure, and I look forward to the next two decades of working side by side with IBP, their fantastic staff, and network of collaborators on improving the way migratory bird conservation is done on a hemispheric scale. Go team go!”

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American Bird Conservancy
American Birding Association
American Rivers
Audubon Canyon Ranch, CA
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