

37th Annual Conference of the Western Field Ornithologists  
*Petaluma, CA • 26–30 September 2012*

**Science Program**

*28 and 29 September 2012 • Sheraton Sonoma County-Petaluma*

**Schedule of Presentations and Panels**

***Friday, 28 September 2012***

*Afternoon Session – Great Blue Heron Ballroom*

- 12:15–12:20. Welcoming Remarks by WFO President Dave Shuford.
- 12:20–12:50. Opening Presentation by Peter Pyle. **Discovering and conserving Bryan's Shearwater (*Puffinus bryani*).** (See Featured Speakers)
- 12:50–1:05. JARAMILLO, ALVARO. **Occurrence and identification of the Vega Gull (*Larus [argentatus] vegae*) in northern California.**
- 1:05–1:20. ABLE, KENNETH P., ALAN BARRON, LARRY SANSONE, JON L. DUNN, and KEVIN E. OMLAND. **First occurrence of an Atlantic Common Eider (*Somateria mollissima dresseri*) in the Pacific Ocean.**
- 1:20–1:35. GARRETT, KIMBALL L. and GUY McCASKIE. **Update from the California Bird Records Committee.**
- 1:35–1:50. RUDESILL, RUTH and BETTY BURRIDGE. **Progress of the second Breeding Bird Atlas to identify changes in breeding bird species diversity in Sonoma County, California.**
- 1:50–2:05. **Break.**
- 2:05–2:20. SULLIVAN, BRIAN L. **Common Black-Hawk migration phenology in southeast Arizona.**
- 2:20–2:35. SULLIVAN, BRIAN L. and KIMBALL L. GARRETT\*. **Tracking population size and geographical spread of Nutmeg Mannikins in California with eBird data.**
- 2:35–2:50. SALAS, LEO, DOUGLAS MOODY, THOMAS FONSECA, SHERIE MICHAILE, MICHAEL FITZGIBBON, and GRANT BALLARD. **Scale up your data! Data curation, visualization and analysis tools at the California Avian Data Center.**
- 2:50–3:05. JONGSOMJIT, DENNIS, SAM VELOZ, NATHAN ELLIOTT, JENNIFER DUBERSTEIN, CAROL BEARDMORE, GEOFF GEUPEL, and GRANT BALLARD. **Using citizen science bird data to improve conservation decisions throughout the West.**
- 3:05–3:20. STRUM, KHARA, MATTHEW REITER, CATHERINE HICKEY, and GARY PAGE. **The Pacific Flyway Shorebird Survey.**
- 3:20–3:35. IGLECIA, MONICA, MICHAEL HARDY, JENNIFER DHUNDALE, KAREN VELAS, DAN SKALOS, and RODD KELSEY\*. **A preliminary look at shorebird use and nesting success in rice fields and wetlands of the Sacramento Valley.**
- 3:35–4:00. **Break.**
- 4:00–5:30. Photo Identification: Expert Panel, moderator Ed Harper.

**Saturday, 29 September 2012**

*Afternoon Session – Great Blue Heron Ballroom*

- 12:15–12:20. Welcoming Remarks by WFO President Dave Shuford.
- 12:20–12:35. WEINSTEIN, ANNA, ROB DOSTER, LINDA TROCKI, RON LEVALLEY, and TRISHA DISTLER. **Black Oystercatcher in California.**
- 12:35–12:50. BUI, THUY-VY D., JOHN Y. TAKEKAWA, KYLE A. SPRAGENS, KAREN M. THORNE, KEVIN J. BUFFINGTON, and DANIKA C. TSAO. **Potential effects of extreme climatic events on California Black Rail (*Laterallus jamaicensis coturniculus*) breeding habitat.**
- 12:50–1:05. TINGLEY, MORGAN W., RODNEY B. SIEGEL\*, and ROBERT L. WILKERSON. **Assessing the effects of post-fire forest management on Black-backed Woodpecker occupancy in California.**
- 1:05–1:20. RECHEL, JENNIFER L. **Evaluating multiple diversity measures for avian communities in a Mediterranean ecosystem, California: A 16-year field study.**
- 1:20–1:35. HARGROVE, LORI and PHILIP UNITT. **Breeding biology and causes of decline of the Gray Vireo (*Vireo vicinior*) in California.**
- 1:35–1:50. MEESE, ROBERT. **Chronic reproductive failures in the colonial Tricolored Blackbird.**
- 1:50–2:05. **Break.**
- 2:05–2:20. SIMMONS, STEVE, JIM DUNN, and NANCY SAGE. **American Kestrels: An overview of a 10-year nest box project in eastern Merced County.**
- 2:20–2:35. BELL, DOUGLAS A., MARA SOLOMON, SHELLEY C. BURANEK, WILLIAM I. BOARMAN, AMY L. FESNOCK, and GAVIN EMMONS. **Prairie Falcon (*Falco mexicanus*) home range and habitat use in the Inner Coast Ranges of California, with implications for conservation and land management.**
- 2:35–2:50. POOL, DUANE, ALBERTO MACIAS DUARTE, ARVIND PANJABI, GREG LEVANDOSKY, and MARY GUSTAFSON\*. **Habitat use and capacity estimates for wintering grassland birds in the Chihuahuan Desert.**
- 2:50–3:05. RUTH, JANET. **Breeding ecology of the Arizona Grasshopper Sparrow (*Ammodramus savannarum ammoregus*).**
- 3:05–3:20. LUNDBLAD, CARL and COURTNEY CONWAY. **What makes a migrant: Migratory patterns and their causes within a Sky Island.**
- 3:20–3:35. KRUEPER, DAVID. **Status and conservation needs of Bendire’s Thrasher.**
- 3:35–4:00. **Break.**
- 4:00–5:30. Sound Identification: Team Challenge, moderators Nathan Pieplow and Monica Malone.

*Banquet and Evening Program – Great Blue Heron Ballroom*

- 6:30–9:30. Keynote Address by Russell Bradley. **The Farallon Islands: Four decades of research and conservation.** (See Featured Speakers)

\* presenting (when not lead author)

## Featured Speakers

*Science Sessions Day 1 – Opening Presentation*  
*Friday, 28 September. 12:15 p.m. Great Blue Heron Ballroom.*

PYLE, PETER. **Discovering and conserving Bryan's Shearwater (*Puffinus bryani*).** *The Institute for Bird Populations, P.O. Box 1346, Point Reyes Station, CA 94956; ppyle@birdpop.org.*

A new species of Procellariiform, Bryan's Shearwater (*Puffinus bryani*), was described by Pyle, A. J. Welch, and R. C. Fleischer in 2011 based on a specimen collected by Binion Amerson in February 1963 on Midway Atoll, Northwestern Hawaiian Islands. It had been misidentified as a Little Shearwater (*P. assimilis*) but genetically appears closer to a clade including the Newell's Shearwater (*P. newelli*) of the Southeastern Hawaiian Islands. During the winters of 1990-1991 and 1991-1992, a second Bryan's Shearwater was discovered calling in a rock crevice near the northeast corner of Sand Island, Midway by Reginald David and Bruce Eilerts, and photographed, videotaped, and audiotaped. These two records likely represented prospecting individuals, and the locations of source colonies of Bryan's Shearwaters have, until recently, remained unknown. During the 1970-2000s there have also been several reports of Little Shearwaters in the North Pacific that may or may not have represented misidentified Bryan's Shearwaters. Updated information on seasonality, breeding habitat requirements, and vocalizations of Bryan's Shearwaters based on the 1963 and 1991 records will be presented, potential at-sea records in the North Pacific will be reviewed, and updates on possible source colonies and their conservation will be presented, including recent attempts to locate them with remote audio-recording devices designed by researchers at University of California, Santa Cruz. Bryan's Shearwaters are undoubtedly rare and may need targeted conservation actions to increase their population size. Ideas will be presented on the potential breeding and foraging ranges, breeding habitat, and next conservation steps to protect this newly discovered seabird.

**Peter Pyle** has been working for the Institute for Bird Populations (IBP) since 1996. During the late 1970's and early 1980s he worked seasonally on the Hawaii and other Pacific Forest Bird Surveys, for the Point Reyes Bird Observatory (PRBO), on at-sea surveys, and for other banding projects while also travelling and birding until money ran out. In 1985 Peter became a biologist on the Farallon Islands, a post he held until 2003, where his research focused on all aspects of the island and surrounding marine ecosystem. In 1996-2003 Peter split time between PRBO and IBP, and since 2003 he has been a full-time biologist at IBP, doing scientific research, writing reports, and conducting banding workshops. Peter is also a research associate at the California Academy of Sciences in San Francisco and the Bishop Museum in Honolulu. Peter has authored or co-authored over 100 peer-reviewed papers, four books, and an on-line monograph of the birds of Hawaii. Among banders he is best known for his Identification Guide to North American Birds, Parts 1 and 2, which includes detailed criteria for ageing and sexing all North American birds in the hand and the field. In 2011 he had the fortune of describing a new bird species, Bryan's Shearwater, and naming it after his grandfather.

*Keynote Address*  
*Saturday, 29 September. 6:30 p.m. Great Blue Heron Ballroom.*

BRADLEY, RUSS. **The Farallon Islands: Four decades of research and conservation.** *PRBO Conservation Science, 3820 Cypress Dr. #11, Petaluma, CA 94954; rbradley@prbo.org.*

Russ will take the audience through the history of the Farallon Islands and explain what makes the area so productive. He will lead a virtual tour of Farallon wildlife and discuss some of the research and conservation work PRBO has conducted since 1968. The Farallon National Wildlife Refuge houses the largest seabird colony in the

contiguous United States, over 300,000 seabirds of 13 species, but is also an important site for feeding white sharks and breeding and resting seals and sea lions (five different species). The island also is home to an endemic subspecies of salamander and an endemic cricket.

**Russ Bradley** is the Farallon Program Manager for PRBO's California Current Division. Originally from Vancouver Island, British Columbia, Canada, he has been a marine biologist ever since his parents first threw him in the ocean at age five. He completed his bachelor's and master's degrees in Biology from Simon Fraser University in Vancouver. His master's thesis focused on the breeding ecology of radio tagged Marbled Murrelets in coastal British Columbia. The summer of 2012 was his 12th field season on the Farallones, where he has spent over 1400 days and nights working with PRBO's long term studies. He has over 20 peer reviewed scientific publications.

## Abstracts of Scientific Presentations

ABLE, KENNETH P.<sup>1</sup>, ALAN BARRON<sup>2</sup>, LARRY SANSONE<sup>3</sup>, JON L. DUNN<sup>4</sup>, and KEVIN E. OMLAND<sup>5</sup>. **First occurrence of an Atlantic Common Eider (*Somateria mollissima dresseri*) in the Pacific Ocean.** <sup>1</sup>Bob's Creek Ranch, 535-000 Little Valley Rd., McArthur, CA 96056; kennethpable@gmail.com. <sup>2</sup>1125 Oregon St., #20, Crescent City, CA 95531; flockfinder@yahoo.com. <sup>3</sup>3016 Hollyridge Dr., Los Angeles, CA 90068; catbird2@pacbell.net. <sup>4</sup>52 Nevada St., Bishop, CA 93514; cerwa@earthlink.net. <sup>5</sup>Department of Biological Sciences, University of Maryland Baltimore County, Baltimore, MD 21250; omland@umbc.edu.

On 20 November, 2011, A.B. discovered an adult female Common Eider (*Somateria mollissima*) in the harbor at Crescent City, Del Norte County, California. On 26 November, K.P.A. and J.L.D. observed the bird and L.S. obtained excellent photos. The bird was in fresh plumage and intensely rusty-brown in color, very unlike females of *S. m. v-nigrum*, the expected subspecies anywhere in the Pacific Ocean. Common Eider has a circumpolar distribution with 6-7 recognized subspecies. The identification of females to subspecies is based on overall plumage coloration and bill characters, especially the shape and size of the frontal processes that extend posteriorly up onto the head toward the eyes, and the relative proportions of these processes to the rest of the bill. *S.m. v-nigrum* females and those of the Hudson Bay population (*S.m. sedentaria*) are characteristically gray-brown in color. Females of Atlantic *dresseri* and *borealis* of northern and eastern Canada are browner. *Dresseri* is typically reddish-brown and the most brightly colored female eiders are of this subspecies. In plumage, the Crescent City eider was typical of a richly-colored female *dresseri*. The Crescent City bird possessed long, broad and conspicuously rounded frontal processes that extended well up onto the forehead, unlike those of *v-nigrum*, typical *borealis*, and Old World *mollissima*, which have short, attenuated and acutely pointed frontal processes. When ratios of diagnostic bill measurements obtained from the photographs of the Crescent City bird were compared with those calculated from published data on specimens, they fell outside the range of those for *borealis* and *borealis x dresseri* intergrades. Female *sedentaria* have bill morphology more similar to *dresseri*, but are apparently always grayish-brown or grayish-buff in coloration. We conclude that this eider represented a typical female *dresseri*. We will discuss various scenarios for the origin of this bird.

BELL, DOUGLAS A.<sup>1</sup>, MARA SOLOMON<sup>2</sup>, SHELLEY C. BURANEK<sup>3</sup>, WILLIAM I. BOARMAN<sup>4</sup>, AMY L. FESNOCK<sup>5</sup>, and GAVIN EMMONS<sup>6</sup>. **Prairie Falcon (*Falco mexicanus*) home range and habitat use in the Inner Coast Ranges of California, with implications for conservation and land management.** <sup>1</sup>East Bay Regional Park District, 2950 Peralta Oaks Ct., Oakland, CA 94605; dbell@ebparks.org. <sup>2</sup>California State University East Bay, Hayward, CA. <sup>3</sup>California State University Sacramento, CA. <sup>4</sup>Conservation Science Research & Consulting, Spring Valley, CA. <sup>5</sup>Bureau of Land Management, Sacramento, CA. <sup>6</sup>Pinnacles National Monument, Paicines, CA.

The Prairie Falcon (*Falco mexicanus*) is locally distributed throughout the Inner Coast Ranges of California, yet compared to the southern California deserts and the Great Basin, little is known about its home range and habitat use in the region. Obtaining this information is vital for assessing the long-term population sustainability of the Prairie Falcon, in part, because the Inner Coast Ranges are being altered by increasing urbanization, renewable energy development and changing agricultural practices. Using radio-telemetry, we compared home range size and habitat use by Prairie Falcons nesting in two areas, the Pinnacles National Monument (PINN) and the San Francisco East Bay Area. Additionally, for falcons nesting at the PINN, we compared use of the following habitat categories: agriculture, chaparral, conifer, floodplain, grassland, oak, scrub, urban and water. With sexes pooled, scrub and floodplain were used more than expected. With sexes separate, females used grassland, and males used agriculture and scrub, more than expected. Logistic regression revealed that grassland, slope, elevation and distance to nest were important parameters for falcon locations. For falcons nesting at the PINN, the majority of all telemetry locations away from nest sites were west of PINN, in Monterey County, even though apparently suitable habitat

exists in San Benito County east of the PINN. Results will be discussed in light of conservation and land management practices.

BUI, THUY-VY D.<sup>1</sup>, JOHN Y. TAKEKAWA<sup>1</sup>, KYLE A. SPRAGENS<sup>2</sup>, KAREN M. THORNE<sup>3</sup>, KEVIN J. BUFFINGTON<sup>1</sup>, and DANIKA C. TSAO<sup>4</sup>. **Potential effects of extreme climatic events on California Black Rail (*Laterallus jamaicensis coturniculus*) breeding habitat.** <sup>1</sup>U.S. Geological Survey, Western Ecological Research Center, San Francisco Bay Estuary Field Station, 505 Azuar Dr., Vallejo, CA 94592; [tbui@usgs.gov](mailto:tbui@usgs.gov). <sup>2</sup>U.S. Fish and Wildlife Service, Yukon Delta National Wildlife Refuge, 807 Chief Eddie Hoffman Rd., P.O. Box 346, Bethel, AK 99559. <sup>3</sup>U.S. Geological Survey, Western Ecological Research Center, 3020 State University Dr. East, Modoc Hall, Ste. 2007, Sacramento, CA 95819. <sup>4</sup> California Department of Water Resources, Division of Environmental Sciences, 3500 Industrial Blvd., West Sacramento, CA 95691.

Coastal salt marshes are projected to be disproportionately impacted by climate change, including increased storm frequency and intensity. The San Francisco Bay estuary is one of the largest remaining tidal marsh complexes in California and contains important habitat for federal and state-listed wildlife species. Our objective was to evaluate the potential impact of storms on California Black Rail (*Laterallus jamaicensis coturniculus*) breeding habitat. In 2005-2006, we calculated home ranges of individual rails through radio-telemetry. In 2010, we conducted elevation and vegetation surveys in these same areas to characterize rail habitat. Water-level loggers were deployed to capture local hydrograph information and then hindcasted to 2005-2006 to create site-specific tidal datums. By combining tidal information, habitat data, and rail home ranges, we were able to measure inundation risk of rail habitat during the breeding season. We found the frequency of stormy days in April to be increasing in our study area over the past few decades ( $R^2=0.22$ ), indicating that storm frequency and overall tide levels may continue to rise during times of rail nesting efforts. A storm in April 2006 was of sufficient intensity to inundate dominant marsh vegetation by an additional 20%, reducing overall availability of the marsh to rails, increasing the frequency of tide levels above mean rail nest height, and potentially elevating predation risk when compared to the previous year. Water level monitoring in 2010 and 2011 at three additional sites indicate that there was a 7-fold increase in the percent of habitat inundated during the March 2011 storm compared to periods of non-storm high water. In the face of changing climate patterns and resulting increased inundation of coastal salt marsh habitats, land managers will need to take into consideration availability of adjacent upland refugia during the breeding season when developing conservation strategies for threatened salt marsh species.

GARRETT, KIMBALL L.<sup>1</sup> and GUY McCASKIE<sup>2</sup>. **Update from the California Bird Records Committee.**

<sup>1</sup>Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007; [kgarrett@nhm.org](mailto:kgarrett@nhm.org).

<sup>2</sup>P.O. Box 275, Imperial Beach, CA 91933-0275; [guymcc@pacbell.net](mailto:guymcc@pacbell.net).

In the past year the California Bird Records Committee (CBRC) has accepted first state records of Common Ringed Plover, Common Snipe, and Northern Gannet; the AOU's recent split of "Xantus's Murrelet" also adds a new species to the state list. These changes bring the list to 648 species. Provisionally accepted are first state records of Taiga/Tundra Bean-Goose and Common Crane, but each of these records will be further addressed at the 2013 CBRC meeting. The goose represents an addition at the "species-pair" level, with scant precedent for the California state list. Although the crane received seven accept votes (the threshold for acceptance on natural origin grounds) further assessment has been requested. Other significant accepted records include those of a widely seen Falcated Duck, a Common Eider not of the "expected" north Pacific subspecies *v-nigrum*, a Great-winged Petrel, two White-chinned Petrels, and exceptional southerly records of Gyrfalcon (in Riverside and Inyo Counties, likely involving the same individual) and Common Redpoll. Analyses by members Nelson, Pyle and Johnson have clarified the number of individual Black Vultures and Crested Caracaras represented by the numerous accepted records of each. Two species (Trumpeter Swan, Yellow-throated Warbler) were removed from the review list. The current state list and review list are maintained on the CBRC web site by J. Morlan, and he and J. Tietz have

maintained the on-line database of records. The CBRC report, dealing mainly with 2010 records, will be published shortly in *Western Birds* 43(3).

HARGROVE, LORI and PHILIP UNITT. **Breeding biology and causes of decline of the Gray Vireo (*Vireo vicinior*) in California.** *San Diego Natural History Museum, Department of Birds and Mammals, 1788 El Prado, San Diego, CA 92101; lhargrove@sdnhm.org, punitt@sdnhm.org.*

Since 1940, California populations of the Gray Vireo (*Vireo vicinior*) have collapsed, presumably because of parasitism by the Brown-headed Cowbird (*Molothrus ater*), which invaded the vireo's California range about 1915. The vireo is nearly extirpated from the San Jacinto Mountains, a former stronghold. Therefore, in 2012 we studied the Gray Vireo's nest success in two regions of San Diego County, sites of the largest populations known in California. We monitored 30 territories and located a total of 67 nests, 54 (79%) found during construction or egg-laying. We checked nests at intervals of 2–5 days and deployed video cameras on 20. The rate of nest failure was extremely high: only eight nests fledged any young. Renesting after failure was universal, with one pair attempting at least six nests. One pair, the earliest to fledge young, double brooded. Of the 59 failed nests, we confirmed seven parasitized by cowbirds, all abandoned before hatching. Twenty-two failed during construction or egg-laying before eggs could be confirmed, but depredation was suspected for many. The remaining 29 nests clearly failed because of depredation, 26 during incubation, and 3 during brooding. The Western Scrub-Jay (*Aphelocoma californica*) was the most frequent predator, prevalent in all Gray Vireo territories and actively searching for nests while scolded by the vireos. Video cameras confirmed outcomes for 15 nests: 3 successful, 2 parasitized, and 10 depredated, 7 by Western Scrub-Jays. As calculated from exposure days, the total nest survival probability was only 5%, probably insufficient to sustain the population. The population in northern San Diego County has decreased substantially from that recorded in 1997–2001 for the San Diego County Bird Atlas, with only six territories located in 2012. The leading role of the scrub jay rather than the cowbird in depressing nest success currently will make recovering the Gray Vireo more challenging than recovering the Least Bell's Vireo (*Vireo bellii pusillus*).

IGLECIA, MONICA<sup>1</sup>, MICHAEL HARDY<sup>1</sup>, JENNIFER DHUNDALE<sup>1</sup>, KAREN VELAS<sup>1</sup>, DAN SKALOS<sup>2</sup>, and RODD KELSEY<sup>1\*</sup>. **A preliminary look at shorebird use and nesting success in rice fields and wetlands of the Sacramento Valley.** <sup>1</sup>*Audubon California 765 University Ave., Sacramento, CA 95825; rkelsey@audubon.org.*

<sup>2</sup>*PRBO Conservation Science 3820 Cypress Dr. #11 Petaluma, CA 94954.*

With the loss of over 95% of the natural wetlands in the Central Valley of California, the importance of rice fields as nesting habitat for wetland-dependent birds is potentially very high. Surveys show that 37%, 74%, and 47% of California's breeding population of American Avocet (*Recurvirostra americana*), Black-necked Stilt (*Himantopus mexicanus*), and Black Tern (*Chlidonias niger*) occur in the Sacramento Valley and that  $\geq 90\%$  of these are observed within rice fields. In collaboration with the rice industry, we developed a suite of practices designed to enhance rice fields for shorebirds that are compatible with rice farming. Modifying internal rice field levees and installing islands in fields may create more favorable habitat for nesting avocets and stilts. Via partnership with the Natural Resource Conservation Service through the Waterbird Habitat Enhancement Program, growers are modifying their field levees in ways predicted to benefit nesting shorebirds. This creates an opportunity to complete a thorough study of the benefits (or costs) of these practices to improve the program in the future. In this 3-year study, we are investigating the value of modified rice fields for shorebird nesting, with a focus on American Avocets, Black-necked Stilts, Killdeer (*Charadrius vociferous*), and Black Tern and comparing the nesting success on rice fields to that of wetland habitats. During spring 2012, we surveyed the abundance and nest success of breeding shorebirds on 9,700 acres of rice fields and 3,300 acres of wetlands in Glenn and Colusa County, California. During year one of the study, we found a total of 142 shorebird nests. 11%, 60%, 28%, and 73% of avocet, stilt, Killdeer, and tern nests hatched. Our results suggest that breeding shorebirds could benefit

from habitat enhancement on rice fields, as well as wetlands, and that the timing of flooding on both rice farms and wetlands could have a large influence on habitat value.

JARAMILLO, ALVARO. **Occurrence and identification of the Vega Gull (*Larus [argentatus] vegae*) in northern California.** *San Francisco Bay Bird Observatory. 524 Valley Way, Milpitas, CA 95035; ajaramillo@sfbbo.org.*

Very little is known about the presence and identification of the Asian Vega Gull (*Larus [argentatus] vegae*) in California, given that it is currently treated as a subspecies of the Herring Gull and thus is not a California Bird Records Committee review species. Species status for this form is likely in the future, and when a change occurs, we will be ill equipped to identify or even assess its level of abundance in the state. Currently there is nothing published on this form in California. Through several years of careful observation of a large winter gull flock in Half Moon Bay, San Mateo County, California I have been able to find several individual gulls which I have identified as Vega Gulls. During diligent searches for Vega Gull in Half Moon Bay, I have found that the first cycle plumages are the ones that are most commonly encountered, suggesting that they are either more common or easier to identify. Only one adult was found. All birds considered were photographed for analysis. Contrary to expectations it is not the Herring Gull which may cause the main identification issues, but Thayer's Gull as they share many similar features in both adult and first cycle age classes. A suggested set of identification criteria and a conservative identification threshold are offered, which I suggest birders use in order to initially obtain a clear pattern of occurrence and distribution. This taxon may be occurring at a rate similar to that of the Slaty-backed Gull in California, that is to say that it is annual and likely in a range of 1-10 per year once we begin looking for it in earnest.

JONGSOMJIT, DENNIS<sup>1</sup>, SAM VELOZ<sup>1</sup>, NATHAN ELLIOTT<sup>1</sup>, JENNIFER DUBERSTEIN<sup>2</sup>, CAROL BEARDMORE<sup>3</sup>, GEOFF GEUPEL<sup>1</sup>, and GRANT BALLARD<sup>1</sup>. **Using citizen science bird data to improve conservation decisions throughout the West.** <sup>1</sup>*PRBO Conservation Science, 3820 Cypress Dr. #11, Petaluma, CA 94954; djongsomjit@prbo.org.* <sup>2</sup>*Fish and Wildlife Service –Sonoran Joint Venture, 738 N. 5th Ave., Ste. 102, Tucson, AZ 85705.* <sup>3</sup>*Fish and Wildlife Service –Sonoran Joint Venture, 2321 W. Royal Palm Rd., Ste. 103, Phoenix, AZ 85021.*

Information on the distribution of birds and the potential effects of climate change on bird communities can help guide effective conservation and inform land management decisions. Estimating the distribution of birds at a regional level involves developing models of the correlation between bird observations and environmental variables such as temperature and vegetation. These models assume that a set of observations adequately sample the range of suitable conditions where a species can persist. A lack of data can result in biased estimates of suitable habitat both currently and when examining future conditions. To help create better models, efforts have been made to amass data from various monitoring projects into centralized databases such as the California Avian Data Center, a regional node of the Avian Knowledge Network. However, when we apply these models at large scales, having enough observational data to build good models may be problematic. This is where citizen science projects, such as eBird, can play an important role in improving models. Thousands of citizen scientists have contributed millions of bird observations via eBird. Citizen scientists can readily cover vast geographic areas including places seldom visited by professionals. We present examples of our efforts to model the distribution of birds throughout the desert southwest including northern Mexico. We examine the benefits of using avian data from both professional monitoring and citizen science programs to model responses to future climate change. We demonstrate how citizen science data can fill in the gaps when professional monitoring data are unavailable or inadequate. We show that in many cases models from citizen science data may be superior to models constructed using monitoring programs with poor spatial coverage.



KRUEPER, DAVID. **Status and conservation needs of Bendire's Thrasher.** *Assistant Nongame Bird Coordinator, U.S. Fish and Wildlife Service, P.O. Box 1306 (MBO), 500 Gold Ave., Albuquerque, NM 87103-1306; dave\_krueper@fws.gov.*

The Bendire's Thrasher (*Toxostoma bendirei*) is a relatively little known species native to the American Southwest and northwestern Mexico. It was the last thrasher species described for mainland North America. In the 140 years following its discovery, little definitive knowledge has been gained regarding the status, population trends, and conservation needs of the species. It is believed to be a short-distance migrant in the northern portion of its breeding range and a probable year-round resident in the southern portion of its distribution, but little is known of annual and seasonal movements, particularly within Mexico. Breeding Bird Survey data have shown alarming declines in its overall population since the early 1960s. National Audubon Society Christmas Bird Count data have shown a similar strong decline in the number of over-wintering individuals. Threats, although poorly understood, include climate change, inappropriate grazing practices, exotic/invasive plants, urban development, agricultural conversion, disturbance, large-scale wildfire events, and possible competition with the congener Curve-billed Thrasher (*Toxostoma curvirostre*). Research is needed to determine winter range and seasonal movements, site fidelity, population size and trends, and management impacts. The U.S. Fish and Wildlife Service has identified it as a Bird of Conservation Concern as well as a Focal Species, programs that identify those species with the highest conservation need and which direct attention to and identify problems with declining populations to prevent future listings. A species assessment and conservation plan has been initiated, which is intended to identify gaps in knowledge as well as to direct conservation efforts into the future, and will be the focus of this presentation.

LUNDBLAD, CARL<sup>1</sup> and COURTNEY CONWAY<sup>2</sup>. **What makes a migrant: Migratory patterns and their causes within a Sky Island.** <sup>1</sup>*Arizona Cooperative Fish and Wildlife Research Unit, School of Natural Resources and the Environment, University of Arizona, 1311 E. 4th St., BSE 325, P.O. Box 210043, Tucson, AZ 85721; clundblad@email.arizona.edu.* <sup>2</sup>*USGS Idaho Cooperative Fish and Wildlife Research Unit, College of Natural Resources, University of Idaho, P.O. Box 441141, Moscow, ID 83844; cconway@uidaho.edu.*

All efforts to predict adaptation to climate change assume coming changes in species' distributions. However, we currently know little about the patterns and causes of seasonal movements in most animals. Species exhibiting partial or differential migration patterns provide opportunities to test which factors mediate intraspecific variation in migratory decisions within populations. Yellow-eyed Juncos (*Junco phaeonotus*) make facultative short-distance migrations along elevational gradients in the Sky Island mountain ranges of southern Arizona. In 2011 and 2012, we color-banded 850 juncos on their breeding grounds at five sites spanning the elevational extent of the species' breeding range in the Santa Catalina Mountains of Arizona. We surveyed each site for banded juncos every two weeks from late-September 2011 through mid-February 2012. Among all juncos banded as adults in 2011, and excluding those individuals not seen the following spring, we detected 64% of males and 45% of females at least once during this period. This difference suggests that junco migration is female-biased in our system ( $\chi^2=3.16$ ,  $P=0.059$ ). All major hypotheses proposed to explain partial migration predict the observed differences in migratory tendency among sex classes. We tested explicit predictions of each hypothesis in order to gain insight into the relative importance of each mechanism which could explain why some juncos migrate downslope and why others do not. We found that, among males, residents were slightly larger than migrants suggesting that migratory status could be related to differential ability to withstand thermal extremes or food-limitation. Nests of resident individuals succeeded 59% of the time while those of migrants succeeded at a rate of 44%. Residents initiated nests an average of 2.5 days earlier than migrants, but nestling growth rate was not related to migratory status. Residents and migrants did not differ in response to simulated territorial incursions intended to measure interspecific aggression.

MEESE, ROBERT. **Chronic reproductive failures in the colonial Tricolored Blackbird.** *Department of Environmental Science and Policy, University of California, One Shields Ave., Davis, CA 95616; rjmeese@ucdavis.edu.*

I studied Tricolored Blackbirds (*Agelaius tricolor*) in California's Central Valley during six breeding seasons from 2006 through 2011 and documented fates of nesting attempts, reproductive success of colonies, and relative abundance of insect prey in foraging areas. I found widespread and chronic reproductive failures except in cases of relatively high insect abundance. My observations suggest that the productivity of Tricolored Blackbird colonies is food-limited and that relatively high reproductive success occurs at few colonies and is primarily a function of unusually high insect abundance. Conservation actions must stress both secure breeding substrates and surrounding secure, productive foraging substrates.

POOL, DUANE<sup>1</sup>, ALBERTO MACIAS DUARTE<sup>1</sup>, ARVIND PANJABI<sup>1</sup>, GREG LEVANDOSKY<sup>1</sup>, and MARY GUSTAFSON<sup>2\*</sup>. **Habitat use and capacity estimates for wintering grassland birds in the Chihuahuan Desert.** <sup>1</sup>*Rocky Mountain Bird Observatory, 230 Cherry St. #150, Fort Collins, CO 80521; duane.pool@rmbo.org, alberto.macias@rmbo.org, arvind.panjabi@rmbo.org, greg.levandosky@rmbo.org.* <sup>2</sup>*Rio Grande Joint Venture, American Bird Conservancy, 4211 Rio Grande Ln., Mission, TX 78572; mgustafson@abcbirds.org.*

Recent research has allowed advances in evaluating habitat needs and developing conservation strategies for wintering grassland birds. We used data from line-transects at 1159 grassland sites to estimate wintering bird densities and characterize vegetation in 15 Grassland Priority Conservation Areas (GPCAs) in the Chihuahuan Desert from 2009-2011. We used Bayesian hierarchical models to examine relationships between vegetation structure and bird density for five high-priority grassland species and estimate current capacity for each species in each GPCA based on available habitat conditions. Sprague's Pipit (*Anthus spragueii*) and Baird's Sparrow (*Ammodramus bairdii*) densities showed similar responses to grass cover (GC), grass height (GH), shrub cover (SC) and forb height (FH), whereas Chestnut-collared Longspur (*Calcarius ornatus*) density was affected by SC, FH and shrub height (SH). Lark Bunting (*Calamospiza melanocorys*) and Loggerhead Shrike (*Lanius ludovicianus*) densities were both influenced by SH, and Loggerhead Shrike was weakly affected by GC and SC. We present the first available wintering habitat capacity estimates for Chihuahuan Desert GPCAs for these five species. Habitat relationships and spatially-explicit capacity estimates provide a starting point for strategic habitat conservation and management for these five grassland bird species in their core wintering grounds. Conservation efforts should aim to engage private ranchers, communities, range managers, and educators, especially in Mexico, and assist them in implementing best management practices for birds and livestock.

RECHEL, JENNIFER L. **Evaluating multiple diversity measures for avian communities in a Mediterranean ecosystem, California: A 16-year field study.** *USDA Forest Service, Pacific Southwest Research Station, Conservation and Biodiversity Program, 4955 Canyon Crest Dr., Riverside, CA 92507; jrechel@fs.fed.us.*

Assessing multiple diversity methods is important to gauge changes over time in species abundances and distributions, especially in the globally unique Mediterranean ecosystem. The assessment of avian diversity is important to determine how ecosystems function and to investigate links between biodiversity loss and ecosystem services, and the drivers and mechanisms of avian biodiversity. Appropriate field data collection methods are critical to assess individual and community interactions. Data were collected on two study sites in the Mediterranean ecosystem in southern California for 16 years from 1997-2012 (as part of a 25-year study) and were analyzed by resident and migrant status. Three dominant habitat types were surveyed: chaparral, oak woodlands, and conifer forests. Two study sites totaling 194 bird counting stations were surveyed along transects twice a year. Bird counting stations were located 500 m apart and were surveyed 30 minutes after sunrise and ending before 1000 hours. Two observers recorded all birds seen and heard within 5 and 10 minute intervals and in visual and audio categories. To estimate detection probability, birds were recorded in distance categories: close (<25 m), near (25 m

– <75 m), and far (75 m – 150 m). Community measures included species richness, density, relative abundance,  $\alpha$  diversity, and evenness, with additional analysis of  $\beta$  and  $\gamma$  diversity, species accumulation curves, cumulative distribution function plots, and species time curves. Species diversity measures were generally consistent among vegetation types. Overall, the Shannon Diversity Index and species richness estimates were the most appropriate descriptors. However, there were more differences among the evenness and density measures, especially for migrants. Current and future avian community studies should focus on multiple diversity and community measures to obtain a better assessment of avian communities using long-term data sets where available.

**RUDESILL, RUTH and BETTY BURRIDGE. Progress of the second Breeding Bird Atlas to identify changes in breeding bird species diversity in Sonoma County, California.** *Madrone Audubon Society, P. O. Box 1911, Santa Rosa, CA 95402; ruthier@sonic.net, bburridge@sbcglobal.net.*

Sonoma County is one of the most species-rich counties in America due to its habitat diversity and geography. To date, 439 species have been recorded in the county, of which 176 have been confirmed breeding. In 2011, Madrone Audubon Society implemented a second Breeding Bird Atlas (BBA) study. The purpose is to atlas Sonoma County's breeding birds during the years 2011-2015, and compare the results with data gathered during 1986-1991 and published in the 1995 BBA, with emphasis on the changes in diversity and land use of the breeding birds. Besides documenting as many breeding species as possible, the study will identify the species that need the most help, e.g. the Burrowing Owl (*Athene cunicularia*). The same grids for study blocks are being used as in the first atlas. There are 200 study blocks in the 2011 atlas, five more than in the earlier atlas, with the additions being partial blocks. Each block is assigned to a person or group. Standardized Breeding Criteria Codes are recorded as well as dates. Data are entered by the atlaser or area coordinator and reviewed seasonally. The USGS provides the database for data entry and analysis on their website. In the original BBA, 146 bird species were Confirmed breeding, with another 13 Possible or Probable. The new atlas already has 110 species Confirmed through its first one and a half field seasons, including two new species: Sora (*Porzana carolina*) and Swainson's Hawk (*Buteo swainsoni*). Sonoma County has gone through major changes since 1991. Increased urbanization and agriculture have raised concerns for bird species diversity. But there has also been more land preserved and protected through land trusts and our Open Space District, with many individuals working to preserve land in concert with these organizations. We are rich in talented atlasers who have increased access to remote and private land areas of Sonoma County, so significant new breeding areas are now available for study.

**RUTH, JANET. Breeding ecology of the Arizona Grasshopper Sparrow (*Ammodramus savannarum ammolegus*).** *USGS Arid Lands Field Station, Biology Department MSC03 2020, University of New Mexico, Albuquerque, NM 87131; janet\_ruth@usgs.gov.*

The Arizona Grasshopper Sparrow (*Ammodramus savannarum ammolegus*) is a subspecies that breeds in grasslands of southeastern Arizona, southwestern New Mexico, northern Sonora, and probably northern Chihuahua, Mexico. It is a subspecies of conservation concern for Partners in Flight and the U.S. Fish and Wildlife Service. Yet much remains unknown about this subspecies' breeding ecology and population dynamics. This ongoing project is being conducted on two sites in the grasslands of southeastern Arizona. The objectives of the study are to document territory size, breeding behavior and success, habitat associations, and resident status of the subspecies in order to better understand its conservation needs and demography, and to compare it with other Grasshopper Sparrow subspecies. The methods employed include flush territory mapping, mist-netting, color-banding, nest searching and monitoring, and habitat measurements. Data collection for this project is not yet complete, so results are preliminary. Using 95% Kernel Density Estimates (KDE), territory sizes on the two sites in 2009 and 2010 ranged from 0.45 ha to 0.88 ha. A total of 74 territorial males have been captured, color-banded, and their territories mapped and measured over two years. In 2011, 12 birds color-banded in 2010 were re-found during the breeding season. In addition, supplemental field work in January 2011 and 2012 has resulted in the documentation of two and

three color-banded individuals respectively, remaining on or near their breeding territories during the winter. In 2011, we succeeded in developing a nest-finding protocol and found and monitored 37 nests; two additional years of field work are planned. Ultimately, information about territorial habitat and nest habitat and productivity will be useful in assessing the status of this subspecies and informing grassland management practices.

SALAS, LEO, DOUGLAS MOODY, THOMAS FONSECA, SHERIE MICHAILE, MICHAEL FITZGIBBON, and GRANT BALLARD. **Scale up your data! Data curation, visualization and analysis tools at the California Avian Data Center.** *PRBO Conservation Science, 3820 Cypress Dr. #11, Petaluma, CA 94954; lsalas@prbo.org.*

Ideally, conservation actions and monitoring programs should be framed within the adaptive management paradigm. Ongoing climate change imposes a new challenge to natural resource managers and decision-makers, because monitoring and conservation actions must now be considered within a larger spatial and temporal context in order to ensure population or habitat resilience (or increase their capacity to adapt to changes). Multi-institution collaboration and data sharing is required, and the participation of citizen scientists in data collection is becoming increasingly important. The California Avian Data Center (CADC) provides tools to field ornithologists for curating, editing and analyzing data. We describe the projects and tools in CADC that collect citizen science data, the tools for visualizing these, and the potential questions that these data may help answer.

SIMMONS, STEVE<sup>1</sup>, JIM DUNN<sup>2</sup>, and NANCY SAGE<sup>3</sup>. **American Kestrels: An overview of a 10-year nest box project in eastern Merced County.** <sup>1</sup>2499 5th Ave., Merced, CA 95340; [simwoodduk@aol.com](mailto:simwoodduk@aol.com). <sup>2</sup>2957 Shasta Way, West Sacramento, CA 95691; [jim@avian-images.com](mailto:jim@avian-images.com). <sup>3</sup>8556 Treasure Ave., Stockton, CA 95212; [sagenanter@aol.com](mailto:sagenanter@aol.com).

The American Kestrel (*Falco sparverius*) is a small, common falcon for which there is evidence of long-term, gradual but sustained population declines throughout most regions of the U.S. We report in detail on a 10-year (2003-2012) nest box and banding project focused on the American Kestrel and carried out on a large cattle ranch in eastern Merced County, California. We describe the riparian and upland grassland habitats on the ranch, and the location of boxes within these habitats. We describe the history of our project and the methods and specifics of data collection including the software tools used. We provide detailed annual statistics showing the overall growth of the kestrel population over the 10-year span of the project. As examples, we show growth in the adult base from 4 kestrels captured in 2003 to more than 120 in the most recent year for which we have data, and growth in fledged kestrels from 34 to 289. This last data point from 2012 represents a 22.5% increase over our previous best year. Using a software interface with Google Earth we provide an interesting graphical view of the year-over-year nesting habits of some of the kestrels.

STRUM, KHARA, MATTHEW REITER, CATHERINE HICKEY, and GARY PAGE. **The Pacific Flyway Shorebird Survey.** *PRBO Conservation Science, 3820 Cypress Dr. #11, Petaluma, CA 94954; kstrum@prbo.org.*

Population trends of shorebirds are poorly understood but populations in North America are thought to be declining. Many site-specific shorebird surveys exist on the Pacific Coast but have limited utility to estimate overall population trends without linking these programs using consistent methods. Over the last three years, we developed, coordinated, and launched the first phase of the Pacific Flyway Shorebird Survey. The Pacific Flyway Shorebird Survey (PFSS) is an annual, multi-partner effort that integrates both ongoing and newly established monitoring programs to estimate population trends and evaluate habitat use for Pacific Flyway shorebirds. The California Avian Data Center provides a platform for centralizing data including an online data entry portal and data summary tools. Considerable development of the PFSS occurred along California's central and southern coasts as well as in its interior wetland and agricultural habitats and in coastal northern Baja, Mexico in 2011 and 2012. More than 200 citizen scientists participated in this emerging effort, and data on over 700,000 birds were entered and are maintained in the California Avian Data Center. We conducted volunteer trainings to prepare volunteers for the

rigors of following a protocol and collecting standardized data. The first two years of the PFSS have been a success, due in large part to the dedication of Citizen Scientists. If this success is sustained, the PFSS will provide a foundation to guide the conservation of shorebirds in California and the Pacific Flyway amid rapid environmental change.

SULLIVAN, BRIAN L. **Common Black-Hawk migration phenology in southeast Arizona.** *Cornell Lab of Ornithology, 159 Sapsucker Woods Rd., Ithaca, NY 14850; bls42@cornell.edu.*

The Common Black-Hawk (*Buteogallus anthracinus*) is an enigmatic raptor of neotropical distribution whose breeding range extends north into the United States only in the desert Southwest (Arizona, New Mexico, Utah, and Texas). In the northern portion of its range it is migratory, vacating the Southwest during winter, but little is known of its migration ecology. Anecdotal reports of migrating Common Black-Hawks from the Tubac area prompted a concerted hawk watch effort from that location on 19 March 2008, and in 1.5 hours of observation 42 migrating Common Black-Hawks were counted. A grassroots effort to count Common Black-Hawks at this location has developed since, and locals now report daily observations from the Tubac vicinity to eBird during the March migration period. Annual counts have reached more than 100 birds, a significant proportion of the total U.S. population. All March migrants have been adults. Using eBird to gather and archive these data, broad temporal migration patterns quickly become evident. Common Black-Hawks arrive in southeast Arizona in early March, with a spring migration peak around 15 March. Fall migration is more protracted and less pronounced, but the peak appears to be in mid-September, though no single site is yet known to concentrate migrants in fall. Riparian corridors such as the Santa Cruz River are important to breeding raptors in the desert Southwest, yet more focused study is needed to determine exactly how relatively scarce species such as Common Black-Hawk, Zone-tailed Hawk (*Buteo albonotatus*), and Gray Hawk (*B. plagiatus*) rely on this habitat during migration.

SULLIVAN, BRIAN L.<sup>1</sup> and KIMBALL L. GARRETT<sup>2\*</sup>. **Tracking population size and geographical spread of Nutmeg Mannikins in California with eBird data.** <sup>1</sup>*Cornell Lab of Ornithology, 159 Sapsucker Woods Rd., Ithaca, NY 14850; bls42@cornell.edu.* <sup>2</sup>*Natural History Museum of Los Angeles County, 900 Exposition Blvd., Los Angeles, CA 90007; kgarrett@nhm.org.*

eBird has become a powerful tool for analyzing geographical range, seasonal patterns, and population sizes of birds, particularly in areas such as California where rates of checklist submission are extremely high. Given the desire to monitor populations of potentially invasive non-native bird species, the wealth of eBird data on such species has much potential application. We review eBird data on the Nutmeg Mannikin (*Lonchura punctulata*), introduced from the Indian sub-continent in or prior to the 1980s; we analyze population size, geographical distribution, and seasonal patterns of frequency in California. Nutmeg Mannikins are now widespread from Santa Barbara to San Diego Counties and inland to the San Bernardino/Riverside area; small populations are found in San Luis Obispo County and the southern San Francisco Bay area, and a few sightings in the Central Valley suggest potential establishment there. The maximum reported flock size was 200, and there are over 50 reports of flocks of  $\geq 50$  birds. A clear peak in frequency in September and October is likely due to flocking behavior and habitat use at that season. We also discuss some biases and limitations of the eBird data set for monitoring introduced species.

TINGLEY, MORGAN W.<sup>1,2</sup>, RODNEY B. SIEGEL<sup>1\*</sup>, and ROBERT L. WILKERSON<sup>1</sup>. **Assessing the effects of post-fire forest management on Black-backed Woodpecker occupancy in California.** <sup>1</sup>*The Institute for Bird Populations, P.O. Box 1346, Point Reyes Station, CA 94956; rsiegel@birdpop.org.* <sup>2</sup>*Woodrow Wilson School, Princeton University, Princeton, NJ 08544.*

The Black-backed Woodpecker (*Picoides arcticus*) is a management indicator species for post-fire forests in western North America and is at the center of a conflict over post-fire management choices on public lands. We collected woodpecker occurrence data over two years within 67 different recent fire areas in national forests of the

Sierra Nevada and southern Cascade mountains in California. Hierarchical occupancy models were developed within a Bayesian framework to explore the relationship between occupancy and post-fire snag removal conducted as part of salvage logging or for other management purposes. Initially, direct effects of post-fire snag removal on Black-backed Woodpecker occurrence were obscured by a high degree of overlap between environmental characteristics of sites chosen for management activities involving snag removal and the sites occupied by woodpeckers. However, negative effects of post-fire snag removal were demonstrated through a significant, positive relationship between woodpecker occurrence and the abundance of snags. The finding that both woodpeckers and management activities that remove snags preferentially select sites with the same characteristics underscores the need for thoughtful post-fire forest management that retains habitat elements necessary for Black-backed Woodpeckers. It also provides a cautionary note that overlap in environmental space between management actions and habitat selection by wildlife may obscure deleterious effects of management activities.

WEINSTEIN, ANNA<sup>1</sup>, ROB DOSTER<sup>2</sup>, LINDA TROCKI<sup>1</sup>, RON LEVALLEY<sup>3</sup>, and TRISHA DISTLER<sup>1</sup>. **Black Oystercatcher in California.** <sup>1</sup>*Audubon California, 4225 Hollis St., Emeryville, CA 94608; aweinstein@audubon.org.* <sup>2</sup>*USFWS, Pacific Southwest Region (8), Division of Migratory Birds, 752 County Rd. 99W, Willows, CA 95988.* <sup>3</sup>*Mad River Biologists, 417 2nd St., Ste. 201, Eureka, CA 95501.*

Black Oystercatcher (*Haematopus bachmani*) is a special status species in the U.S., Canada and Mexico due to small global population size, low overall reproductive success, and complete dependence on rocky intertidal shorelines. Despite high conservation priority, there is very little baseline demographic information for the species in California. In June 2011, we undertook the first directed survey of Black Oystercatchers in California, using protocols developed by agency biologists in Oregon and endorsed by the Black Oystercatcher International Working Group. We identified suitable survey areas using a combination of Christmas Bird Count and eBird reports, supplemented by shoreline habitat type maps provided by the state of California. More than 160 people participated from state and federal agencies, Audubon chapters, and bird clubs. Approximately 10% of the state's coastline, representing 17% of rocky intertidal habitat, was surveyed. All told, 1,336 oystercatchers and 171 nests were observed on the mainland and the Channel Islands, in 13 of 15 of California's coastal counties. The total count was well above the previous state population estimate of <1,000 birds. The majority of nests occurred on offshore rocks or islets separated from the mainland. This survey has generated critical baseline information needed to shape conservation planning, and will allow for enhanced conservation activities.

\* presenting (when not lead author)

## Presenter Biographies

**Ken Able** is a retired professional ornithologist who taught and conducted research on bird migration and navigation for 32 years at the University at Albany, SUNY. He has been birding since childhood. In 2003, he and his wife retired to a ranch in northwestern Lassen County, CA. He is currently serving on WFO's board of directors.

**Douglas Bell** is the East Bay Regional Park District's wildlife program manager. He is a research associate in the Department of Ornithology and Mammalogy, California Academy of Sciences and an adjunct faculty member in Biology at CSU, Sacramento. His current research involving Golden Eagles aims to improve risk mapping and potentially reduce impacts of wind turbines in the Altamont Pass area.

**Thuy-Vy Bui** received her B.S. in Wildlife Biology from UC Davis and completed her M.S. on the effects of nest predation by Common Ravens on Greater Sage-Grouse at the University of Washington. She now works for the U.S. Geological Survey's Western Ecological Research Center and studies the effects of climate change on endangered avian species in the San Francisco Bay area.

**Kimball Garrett**, a WFO board member and past president, has been a member of the California Bird Records Committee since 1978. He has held his "day job" as ornithology collections manager at the Natural History Museum of Los Angeles County since 1982.

**Mary Gustafson** is the coordinator for the Rio Grande Joint Venture, an international conservation partnership with a mission to conserve the avian communities of the Rio Grande region, and works to promote bird conservation in the Tamaulipan Brushlands and Chihuahuan Desert in Texas and Mexico. Mary lives in Mission, TX and when she's not birding, she's likely off playing with her horses.

**Lori Hargrove** participated in discovering the Gray Vireo's wintering in California in 1999 and developed a survey protocol for the U.S. Forest Service. Awarded her Ph.D. from UC Riverside in 2010, she is currently a postdoctoral researcher at the San Diego Natural History Museum, leading the museum's San Jacinto Centennial Resurvey as well as the study of the Gray Vireo.

**Alvaro Jaramillo** is a biologist and birding tour operator based in Half Moon Bay, CA. He is the author of *Birds of Chile*, and *New World Blackbirds: The Icterids*. He is currently working on various projects on avian taxonomy and distribution, and books on the birds of Patagonia and on North American warblers.

**Dennis Jongsonjitt** works for PRBO Conservation Science as a GIS specialist. He has a B.S. in Wildlife Conservation Biology from UC Davis. He started at PRBO in 2001 as a field biologist doing nest searching, banding, and point counting. His work now focuses on modeling the effects of climate and land-use change on birds and their habitats.

**Rodd Kelsey** is Audubon California's director of bird conservation. Rodd received his Ph.D. from UC Davis in Avian Ecology and Behavior, and has more than 18 years of experience in wildlife conservation and research. He has been working closely with farmers in the Central Valley, testing and implementing alternative management practices to increase the habitat value of farms and ranches.

**Dave Krueper** is the assistant nongame wildlife biologist for Region 2 of the U.S. Fish and Wildlife Service, which oversees management of nearly 700 species of birds from Arizona to Texas. He is a life member of WFO, and served as vice president and president. His interests are the study and photography of birds of the world, with special interest in the Neotropics.

**Carl Lundblad** is an experienced field biologist, active conservationist, and full-time naturalist with extensive experience throughout the desert Southwest and beyond. He is currently finishing a master's program in Wildlife Management and Conservation at the University of Arizona and is looking forward to a time when he can again watch birds recreationally.

**Robert Meese** has for 20 years been a staff research associate in the Department of Environmental Science and Policy at UC Davis. He has worked with numerous state, federal, and international agencies and non-governmental organizations on projects related to wildlife conservation, and has been studying Tricolored Blackbirds for seven years.

**Jennifer Rechel** has been working with birds for 45 years including 22 years in southern California. She has a Ph.D. in Geography from UC Riverside, and has been with the U.S. Forest Service for 24 years. Her interests also include spatial analysis and mapping of fuels and fire effects on bird communities.

**Ruth Rudesill** has a B.S. in Wildlife Management from Humboldt State University, and is the *North American Birds* sub-regional editor for Sonoma County. She has been the compiler of several Christmas Bird Counts, served as the advisor/data editor for the 1995 Sonoma County Breeding Bird Atlas (BBA), and is presently the data coordinator for its 2011 BBA.

**Janet Ruth** is a research ecologist with the U.S. Geological Survey (USGS) at the Arid Lands Field Station of the Fort Collins Science Center. Her current research focuses on grassland bird ecology in the arid Southwest, and bird migration patterns in the US-Mexico borderlands region using weather surveillance radar. She is also the Partners in Flight coordinator for USGS.

**Leo Salas** started working for PRBO Informatics Division in 2007. He has a bachelor's degree from Universidad Simón Bolívar in Venezuela (his native country), and a master's and Ph.D. from the University of Massachusetts. Although he has worked mainly with mammals in his past, Leo has extensive experience with sampling and analysis methods for avian data.

**Rodney Siegel** is executive director of The Institute for Bird Populations (IBP) where he conducts research through IBP's Sierra Nevada Bird Observatory. Research interests include avian ecology in post-fire forests, conservation of meadow birds, long-term population monitoring in national parks, and effects of climate change on montane birds. Rodney obtained his Ph.D. from UC Davis, and his B.A. from Yale.

**Steve Simmons** has worked with cavity nesting birds for nearly four decades, banding and collecting data on nine different species including waterfowl, raptors and passerines. To date, he has banded more than 40,000 birds and fledged nearly 80,000 from his nest boxes in the Central Valley of California. He is currently monitoring 740 nest boxes, including a large American Kestrel project.

**Khara Strum** has been a waterbird ecologist with PRBO Conservation Science since 2009. She has worked on various compatible agricultural projects in the Sacramento Valley and currently coordinates the Pacific Flyway Shorebird Survey in California, Oregon and Washington. Khara received her M.S. from Kansas State University where she studied non-breeding shorebirds using agricultural habitats in the Central Flyway.

**Brian Sullivan** has conducted fieldwork on birds for the past 20 years. Birding travels and field projects have taken him to Central and South America, to Antarctica, the Arctic, and across North America. He is a co-author on the forthcoming *Princeton Guide to North American Birds*. At the Cornell Lab of Ornithology, he is currently a project leader for eBird ([www.ebird.org](http://www.ebird.org)).

**Anna Weinstein** is the seabird program manager for Audubon California. She has an M.S. in Marine Ecology from the Boston University Marine Program. She previously worked as an environmental scientist at the San Francisco Estuary Institute, and was a co-founder of Island Conservation.



## Identification Challenges

**Photos: Expert Panel.** *Friday, 28 September. 4:00–5:30 p.m. Great Blue Heron Ballroom.* Always a favorite and ever popular staple at WFO meetings, a distinguished panel of identification experts will examine and comment on photographs of "mystery" birds. Panelists will analyze photographs of birds and discuss the relevant aspects of each bird and its particular characteristics that lead to an identification. The intent is to provide a real learning experience for audience and panel alike. Panel moderator is **Ed Harper**.

**Ed Harper** is one of the finest birders and bird photographers in the country. His lively talks and programs are always highly informative and full of humor. An educator at heart, he taught mathematics and field ornithology classes at American River College for 34 years before recently retiring to spend more time in the field. An active birder, he travels widely and he and his wife, Susan Scott, lead birding and natural history tours all over the world.

**Sounds: Team Challenge.** *Saturday, 29 September. 4:00–5:30 p.m. Great Blue Heron Ballroom.* **Nathan Pieplow and M. Monica Malone** return with this pub-quiz style challenge to test participants with the amazing sounds that birds make. Start forming your teams\*\* now! The audience will have plenty of opportunity to participate, too, so come ready to use what you know about bird sounds and to learn even more. WFO logo prizes will be awarded to the winning team!

**Nathan Pieplow** is the author of the forthcoming Peterson Field Guide to Bird Sounds. He is the editor of the quarterly journal *Colorado Birds* and an author of the *Colorado Birding Trail*. He teaches writing at the University of Colorado in Boulder.

**M. Monica Malone**, Nathan's fiancée, enjoys reading, writing, and photography, including bird photography.

\*\* Teams can include up to 6 people, but please, no more than two "experts" per team, defined as current or past members of a bird records committee, and/or professional bird tour leaders.