

**38th Annual Conference of the Western Field Ornithologists
A Joint Conference with Washington Ornithological Society**

Hosted by Black Hills Audubon Society

Olympia, WA • 22–25 August 2013

Science Program

23 and 24 August 2013 • Red Lion Hotel-Olympia

Schedule of Presentations and Identification Challenges

Friday, 23 August 2013

Afternoon Session – Spruce Ballroom

- 12:15–12:20. Welcoming Remarks by WFO President Ed Pandolfino.
- 12:20–12:50. Opening Presentation by Dennis Paulson. **Changing world, changing birds.** (See Featured Speakers)
- 12:50–1:05. WOLF, ADRIAN, SCOTT PEARSON, HANNAH ANDERSON, and ADAM MARTIN*. **South Puget Sound Streaked Horned Lark genetic rescue project.**
- 1:05–1:20. GORBET, ASHLI. **Site fidelity and territory dynamics in Black-throated Gray Warbler (*Setophaga nigrescens*).**
- 1:20–1:35. KOZLOVSKY, DOVID, L. SCOTT JOHNSON, FELICIA NAPOLILLO, RACHEL HEBERT, and ALLISON ALLEN. **Variation in incubation effort during egg-laying in Mountain Bluebirds and its association with hatching asynchrony.**
- 1:35–1:50. WATSON, JAMES. **Ferruginous Hawk: Range-wide status and limiting factors.**
- 1:50–2:05. **Break.**
- 2:05–2:20. ROBINSON, W. DOUGLAS. **A benchmark survey of Oregon's birds: The Oregon2020 project.**
- 2:20–2:35. LEIST, AMY and DAWN FLETCHER. **Testing assumptions of an avian double-sampling area search method on riparian birds of the Lower Colorado River: Summary of a 3-year study.**
- 2:35–2:50. PANDOLFINO, EDWARD and EDWARD C. BEEDY. **Recent avian population trends in the Sierra Nevada.**
- 2:50–3:05. HOLMGREN, AMANDA L., JAMES F. SARACCO, RODNEY B. SIEGEL, R. L. WILKERSON, and ROBERT C. KUNTZ II. **Eight years of landbird population monitoring at national parks in the North Coast and Cascades Network.**
- 3:05–4:00. **Break.**
- 4:00–5:30. Sound Identification: Team Challenge, moderators Nathan Pieplow and M. Monica Malone.

Saturday, 24 August 2013

Afternoon Session – Spruce Ballroom

- 12:15–12:20. Welcoming Remarks by WFO President Ed Pandolfino.
- 12:20–12:35. MORLAN, JOSEPH and GUY McCASKIE. **Update from the California Bird Records Committee.**
- 12:35–12:50. HUG, LISA. **Common Black-Hawk nesting in Northern California.**
- 12:50–1:05. SCHROEDER, MICHAEL, FRED ZWICKEL, GEORGE BARROWCLOUGH, and JONAS LAI. **Phenotypic variation across the range of Sooty and Dusky Grouse in western North America.**
- 1:05–1:20. HUNN, EUGENE S. and DAVID BEAUDETTE. **Sympatry of *pugetensis* and *gambelii* White-crowned Sparrows (*Zonotrichia leucophrys*) in the Cascade Mountains of Washington State.**
- 1:20–1:35. **Break.**
- 1:35–1:50. PARRISH, JULIA K., JANE DOLLIVER, CHARLES WRIGHT, and ELIZABETH MACK. **Fifteen years of beached bird surveys in the Pacific Northwest: Defining what's normal.**
- 1:50–2:05. STRUM, KHARA, MATTHEW REITER, and CATHERINE HICKEY. **The Pacific Flyway Shorebird Survey.**
- 2:05–2:20. MILLER, AILEEN and CATHERINE DE RIVERA. **Site selection by migratory shorebirds in Oregon estuaries over broad and fine spatial scales.**
- 2:20–2:35. GILL, JR., ROBERT, LEE TIBBITTS, DAN RUTHRAUFF, CHRIS HARWOOD, and NILS WARNOCK. **The migration and staging ecology of Whimbrels nesting in Alaska.**
- 2:35–2:50. GILL, JR., ROBERT, DAVID C. DOUGLAS, COLLEEN M. HANDEL, T. LEE TIBBITTS, GARY L. HUFFORD, and THEUNIS PIERSMA. **Hemispheric-scale wind selection facilitates Bar-tailed Godwit circum-migration of the Pacific.**
- 2:50–4:00. **Break.**
- 4:00–5:30. Photo Identification: Expert Panel, moderator Ed Harper.

Banquet and Evening Program – Fir Ballroom

- 6:30–9:30. Keynote Address by John Marzluff. **Gifts of the crow.** (See Featured Speakers)

* presenting (when not lead author)

Featured Speakers

Science Sessions Day 1 – Opening Presentation
Friday, 23 August. 12:15 p.m. Spruce Ballroom.

PAULSON, DENNIS. **Changing world, changing birds.** 1724 N.E. 98th Street, Seattle, WA 98115;
dennispaulson@comcast.net.

We all know the world is changing, and birds are responding to it in many ways. Many species seem more or less stable in number, but many others are declining, while still others are increasing. From the best data available, it is clear that these population changes vary geographically, but I will concentrate on the situation in Washington State. It seems that bird species are either winners or losers, depending on whether or not they can adapt to our presence. Many of our commonest birds clearly benefit from the habitat, food and housing that we provide them. Others have suffered declines from habitat destruction, loss of nest sites, and diminution of food resources. Some raptors and seabirds declined greatly by the middle of the last century but have since rebounded. I will discuss these different types of changes, providing local examples.

Dennis Paulson received his Ph.D. in Zoology from the University of Miami. He then taught biology and natural history at three universities and numerous adult-education venues for 45 years. One of his primary goals as a biologist has been to blend the science of biology with the study and appreciation of nature. His special research interests are birds and dragonflies, and he has observed and photographed them all over the world. As well as books and papers on shorebirds and other birds, he has written over 50 papers on the Odonata, and his most recent works are a pair of comprehensive field guides to North American dragonflies and damselflies. Dennis retired seven years ago from his position as the Director of the Slater Museum of Natural History at the University of Puget Sound, as no one had told him that retirement meant working more as well as earning less.

Keynote Address
Saturday, 24 August. 6:30 p.m. Fir Ballroom.

MARZLUFF, JOHN. **Gifts of the crow.** *University of Washington, School of Environmental and Forest Sciences, UW Box 352100, Seattle, WA 98195; corvid@uw.edu.*

Drawing from his long-term research on the intelligence and startling abilities of corvids—crows, ravens, and jays—John Marzluff tells amazing stories of these brilliant birds, shining a light on their fascinating characteristics and behaviors. Crows gather around their dead, warn of impending doom, recognize people, commit murder of other crows, lure fish and birds to their death, drink beer, turn on lights to stay warm, design and use tools, use cars as nutcrackers, windsurf and sled to play, and work in tandem to get soft cheese out of a can. Their marvelous brains allow them to think, plan, and reconsider their actions. The ongoing connection between humans and crows—a cultural co-evolution—has shaped both species for millions of years. And the characteristics of crows that allow this symbiotic relationship are language, delinquency, frolic, passion, wrath, risk-taking, and awareness—seven traits that humans find strangely familiar.

John Marzluff, Ph.D., is the James Ridgeway Professor of Wildlife Science at the University of Washington. His research has been the focus of articles in the *New York Times*, *National Geographic*, *Audubon*, *Boys' Life*, *The Seattle Times*, and *National Wildlife*. PBS's NATURE featured his raven research in its production, "Ravens," and his crow research in the film documentary, "A Murder of Crows."

Abstracts of Scientific Presentations

GILL, JR., ROBERT¹, DAVID C. DOUGLAS², COLLEEN M. HANDEL¹, T. LEE TIBBITTS¹, GARY L. HUFFORD³, and THEUNIS PIERSMA⁴. **Hemispheric-scale wind selection facilitates Bar-tailed Godwit circum-migration of the Pacific.** ¹USGS Alaska Science Center and Pacific Shorebird Migration Project, 4210 University Drive, Anchorage, AK 99503; rgill@usgs.gov. ²USGS Alaska Science Center, 250 Egan Drive, Juneau, AK 99801; ddouglas@usgs.gov. ³National Oceanic and Atmospheric Administration, National Weather Service, 222 W. 7th Avenue, Anchorage, AK 99513 (Present address: 17734 Kantishna, Eagle River, AK 99577); garylh@outlook.com. ⁴Chair in Global Flyway Ecology, Animal Ecology Group, Centre for Ecological and Evolutionary Studies, University of Groningen, P.O. Box 11103, 9700 CC Groningen, The Netherlands, and Department of Marine Ecology, NIOZ Royal Netherlands Institute for Sea Research, P.O. Box 59, 1790 AB Den Burg, Texel, The Netherlands; theunis@nioz.nl.

The annual 29,000-km-long migration of the Bar-tailed Godwit (*Limosa lapponica baueri*) across the Pacific Ocean traverses what is arguably the most complex and seasonally structured atmospheric setting on Earth. Faced with marked variation in wind regimes and storm conditions across oceanic migration corridors, individuals must make critical decisions about when and where to fly during nonstop flights of a week's duration or longer. Ideally, their decisions will affect wind profitability and thus reduce energetic costs of migration; poor decisions or unpredictable weather events will risk survival. We used satellite telemetry to track the annual migration of 24 individual Bar-tailed Godwits and analyzed their flight performance relative to wind conditions during three major migration segments between nonbreeding grounds in New Zealand and breeding grounds in Alaska. Birds selected departure dates when atmospheric conditions conferred the greatest wind assistance both at departure and throughout their flights, suggesting a cognitive mechanism related to atmospheric linkages (teleconnections) that was heretofore unknown among migratory birds. Godwits exhibited adaptive flexibility in their response not only to cues related to seasonal changes in macro-meteorology, such as spatial shifting of storm tracks and temporal periods of cyclogenesis (storm formation), but also to cues associated with individual storms, especially at departure sites. Godwits also showed limits to their response behaviors, especially relative to rapidly developing storms while *en route*. Our results provide new insights into the highly adaptive orientation performance of extreme endurance migratory birds.

GILL, JR., ROBERT¹, LEE TIBBITTS¹, DAN RUTHRAUFF¹, CHRIS HARWOOD², and NILS WARNOCK³. **The migration and staging ecology of Whimbrels nesting in Alaska.** ¹USGS Alaska Science Center and Pacific Shorebird Migration Project, 4210 University Drive, Anchorage, AK 99503; rgill@usgs.gov. ²Department of Biology and Wildlife, University of Alaska, Fairbanks, AK 99775; cmharwood@alaska.edu. ³Audubon Alaska, 441 W. 5th Avenue, Suite 300, Anchorage, AK 99501; nwarnock@audubon.org.

In 2009 and 2010 we deployed satellite transmitters on Whimbrels (*Numenius phaeopus*) to compare the movement ecology of individuals nesting in Alaska north (n = 16) and south (n = 12) of the Rocky Mountain Cordillera (Brooks Range), a prominent ecological barrier to migratory movements. Following nesting, birds from both cohorts moved 700-1,200 km to coastal western Alaska where they staged for 3-4 weeks before embarking on southward migration. Initial flights from Alaska were nonstop across the northeast Pacific to landfall at sites from northern California south to central Mexico, and averaged 5,300 km \pm 1,200 SD. Among all birds there was no correlation between number of days staging and distance traveled. There was no difference between the two cohorts in mean initial flight distance (~5,300 km), flight speed (~56 km/h), or latitude of initial landfall (27-31° N). After staging for several weeks most birds with functioning transmitters from both cohorts (11/16 and 8/11) made subsequent long flights farther south, which averaged 4,100 km \pm 2,600 SD. The resulting nonbreeding distribution spanned 11,000 km of Pacific coastline among 12 different countries between south-central Mexico and southern Chile. Northward migration began in March and also involved a 2-stage flight, with the second often directly to nesting areas. The 2009 and 2010 cohorts migrated under markedly different El Niño/La Niña-Southern Oscillation conditions that allowed us to evaluate movements under different wind regimes. The longevity of solar-powered

transmitters has allowed us to assess inter-annual (2010-2013) movements of individuals at multiple geographic scales.

GORBET, ASHLI. Site fidelity and territory dynamics in Black-throated Gray Warbler (*Setophaga nigrescens*). *Rio Grande Bird Research, Inc., P.O. Box 6557, Albuquerque, NM 87107-6557; flycatchergirl@gmail.com.*

Site fidelity to breeding grounds has been documented for multiple species of migrant North American Wood-Warblers in the family Parulidae. The Black-throated Gray Warbler (*Setophaga nigrescens*), particularly its breeding biology, has been little studied and information on site fidelity and territory dynamics is lacking for this species. In 2010, I launched a study in Otero Canyon, Manzanita Mountains, Bernalillo County, NM to investigate various aspects of the species' breeding biology. I mist-netted and color-banded adult male Black-throated Gray Warblers with unique color combinations, then released and followed marked birds through the breeding season. Each time a color-banded individual was observed, its location was marked using a handheld Garmin GPS. At the beginning of each subsequent season, I attempted to relocate marked individuals from the previous season(s) through thorough searching within the study area. I monitored all returning color-banded birds throughout all subsequent seasons in which they were detected using the same method employed during their initial banding year. Waypoints for all years of the study were imported into ArcGIS 10 and maps were generated showing territories for each year and each individual. A total of eight adult male Black-throated Gray Warblers that held territories in Otero Canyon were banded between 2010 and 2012. Of these, six (75%) returned to hold territories for at least one subsequent breeding season. Three individuals, all originally banded in 2010, have returned in each season of the project, including 2013, with these birds present at the site for at least their fourth breeding season. This presents the first evidence for site fidelity in Black-throated Gray Warbler.

HOLMGREN, AMANDA L.¹, JAMES F. SARACCO¹, RODNEY B. SIEGEL¹, R. L. WILKERSON¹, and ROBERT C. KUNTZ II². Eight years of landbird population monitoring at national parks in the North Coast and Cascades Network. ¹*The Institute for Bird Populations, P.O. Box 1346, Point Reyes Station, CA 94956; mholmgren@birdpop.org.* ²*North Cascades National Park Complex, 810 Highway 20, Sedro-Woolley, WA 98284; robert_kuntz@nps.gov.*

National parks in the Pacific Northwest play vital roles as both refuges for bird species dependent on late-successional forest conditions, and as reference sites for assessing the effects of climate change and land use changes on bird populations throughout the larger Pacific Northwest region. We developed a comprehensive, multi-species, long-term monitoring protocol for national parks in the North Coast and Cascades Network, including three large wilderness parks (Mount Rainier, North Cascades, and Olympic) and two smaller historical parks (Lewis and Clark, San Juan Island), and have implemented the protocol every year since 2005. The monitoring program, which incorporates approximately 1,000 mostly off-trail point counts every spring/summer, is designed to 1) detect trends in the population density of as many landbird species (including passerines, near passerines, and galliformes) as possible throughout the five parks, 2) collect and interpret information on habitat associations and distribution of bird species within the parks, and 3) track changes in breeding season distributions over time. Here we describe the monitoring program and present population trends from the first eight years of monitoring (2005-2012).

HUG, LISA. Common Black-Hawk nesting in Northern California. *507 N. Main Street, Sebastopol, CA 95472; Lisahug@sonic.net.*

There has been a Common Black-Hawk (*Buteogallus anthracinus*) on private property in the Laguna de Santa Rosa near Santa Rosa, CA off and on since at least 2005. The Laguna de Santa Rosa is a very slow-moving river that flows north from Cotati to the Russian River in Sonoma County. There are wide areas of floodplain lined with valley oaks, western box-elders, and some cottonwood and walnut trees, with a willow understory. On July 21,

2012, a juvenile hawk – presumed to be a hybrid Red-shouldered x Common Black-Hawk – was seen on the property. It was photographed and recorded on July 21, July 29, and August 7, 2012. The bird has not been observed since that lattermost date. If the juvenile was correctly identified, this would represent a first breeding record for Common Black-Hawk in California and most likely the only hybrid Red-shouldered x Common Black-Hawk in existence.

HUNN, EUGENE S.¹ and DAVID BEAUDETTE². **Sympatry of *pugetensis* and *gambelii* White-crowned Sparrows (*Zonotrichia leucophrys*) in the Cascade Mountains of Washington State.** ¹204 Fair Avenue, Petaluma, CA 94952; enhunn323@comcast.net. ²2160 E. Fry Boulevard, PMB 197, Sierra Vista, AZ 85635; dave.beaudette@yahoo.com.

Puget Sound White-crowned Sparrows (*Z. l. pugetensis*) breed throughout the lowlands of western Washington, with just two records in the Cascade Mountains noted prior to 1953 (Jewett et al. *Birds of Washington State* 1953: 648). However, Smith et al. (1997) note that due to logging practices and development “*Z. l. pugetensis* populations have expanded in the last ten years and now occupy sites east of the Cascade crest...” (470), with definite evidence of nesting by 1988 on the eastern slopes of the Cascades in Kittitas County (fide H. Opperman). Gambel’s White-crowned Sparrows (*Z. l. gambelii*) were first recorded nesting in the northern Cascades of Washington in 1957 (Farner 1958) and were recorded nesting in the central Cascades at Stevens and Naches Passes in 1994 and 1996 at elevations above 4,400 feet (Smith et al. 1997: 470, fide D. Beaudette). At this time, Beaudette observed adjacent nests of both subspecies near Naches Pass with pairs true to type. Songs of both subspecies were subsequently recorded in close proximity at this location by Hunn in 2006. More recent reports extend the area of sympatry south and east in Yakima County and indicate that *pugetensis* and *gambelii* continue to nest sympatrically in clear cuts along the Cascade crest with no evidence of interbreeding. This is further evidence that the White-crowned Sparrow as now defined may include at least two species, a Pacific coastal form (*Z. l. pugetensis* with *Z. l. nuttalli*) and one or more montane/boreal forms (*Z. l. leucophrys* and *Z. l. gambelii*, with *Z. l. oriantha* possibly distinct from both).

Jewett, S. A., W. P. Taylor, W. T. Shaw, and J. W. Aldrich. 1953. *Birds of Washington State*. University of Washington Press, Seattle.

Smith, M. R., P. W. Mattocks, Jr., and K. M. Cassidy. 1997. *Breeding Birds of Washington State*. Volume 4 in Washington State Gap Analysis – Final Report (K. M. Cassidy, C. E. Grue, M. R. Smith, and K. M. Dvornich, eds.). Seattle Audubon Society Publications in Zoology No. 1, Seattle.

KOZLOVSKY, DOVID¹, L. SCOTT JOHNSON², FELICIA NAPOLILLO³, RACHEL HEBERT⁴, and ALLISON ALLEN⁵. **Variation in incubation effort during egg-laying in Mountain Bluebirds and its association with hatching asynchrony.** ¹University of Nevada, Reno, 1664 N. Virginia Street, Reno, NV 89557; dkozlovsky@unr.edu. ²Towson University, 8000 York Road, Towson, MD 21252; sjohnson@towson.edu. ³fnapol1@students.towson.edu. ⁴hebert.rachel2@gmail.com. ⁵fliedpiecatcher@gmail.com.

Females in many bird species reportedly begin incubation prior to clutch completion, but the nature of such incubation and the degree to which it varies among females remains undescribed in almost all species. We used continuous recording of nest cup temperatures to document incubation effort during egg-laying at 57 Mountain Bluebird (*Sialia currucoides*) nests in a high-elevation Wyoming population. We then evaluated whether such effort predicted the degree to which eggs in a nest hatch asynchronously. Although substantial egg-heating could begin abruptly late in laying (previously reported as the norm for this species) or even after clutch completion, we found that most (>90%) females began incubation gradually, engaging in a few (usually 1-8), brief (<10 min) bouts of heating on the day that they laid their first or second egg. Thereafter, when the incubation effort increased and by how much, varied markedly among females. The onset of nocturnal incubation also varied substantially; females

began incubating at night after laying either their antepenultimate, penultimate, or last egg and did not always initially incubate through the night. As an index of the total amount of thermal energy applied to eggs during laying, we calculated the cumulative number of degrees by which nest-cup temperatures exceeded the threshold temperature required for embryonic development. This value varied by over 150-fold between nests and explained >50% of the variation in hatching asynchrony. Our results thus provide strong support for the widely held but rarely tested assumption that parent birds can have substantial control over the degree of hatching asynchrony by varying the amount of incubation done prior to clutch completion.

LEIST, AMY and DAWN FLETCHER. **Testing assumptions of an avian double-sampling area search method on riparian birds of the Lower Colorado River: Summary of a 3-year study.** *Great Basin Bird Observatory, 1755 E. Plumb Lane, Suite 256, Reno, NV 89502; leist@gbbo.org, fletcher@gbbo.org.*

The Lower Colorado Region (LCR) Riparian Bird Survey Project, part of the LCR's Multi-Species Conservation Program, is assessing the demography of riparian birds occurring along the Lower Colorado River. We are using a double sampling area search method, which allows us to estimate population density and long-term population trends for riparian birds. Using the double sampling method, we are surveying a set of plots with a rapid method and a subset of those plots with a more intensive method. The numbers of territories from the two survey types are then compared to obtain a detection ratio for calculating population size estimates using the program DS (Bart et al. 2010, Bart and Earnst 2002). In 2011 we began fieldwork to test the assumption that unbiased estimates are being obtained in the intensive area search surveys. We now have three years of data to estimate error rates for intensive area searches and determine if there are differences in error rates among species, habitats, or seasons. For our talk, we will report our findings comparing data from 2011-2013. We will also describe improvements to the intensive area search survey methods we have made as a result of this project.

Bart, J., and S.L. Earnst. 2002. Double sampling to estimate density and population trends in birds. *Auk* 119:36-45.

Bart, Jonathon, Dunn, Leah, and Leist, Amy, 2010. A sampling plan for riparian birds of the Lower Colorado River; U.S. Geological Survey Open-File Report 2010.

MILLER, AILEEN and CATHERINE DE RIVERA. **Site selection by migratory shorebirds in Oregon estuaries over broad and fine spatial scales.** *Department of Environmental Science & Management, Portland State University, P.O. BOX 751, Portland, OR 97207; aileenmiller@yahoo.com, derivera@pdx.edu.*

Loss of stop-over sites is a primary threat to shorebird populations on the West Coast of the United States. Research has focused on the largest of these sites; however, smaller estuaries also host thousands of migratory shorebirds. Furthermore, the reasons for stop-over site selection are largely unknown. Estuarine inter-tidal microhabitats are non-uniform, varying in both biotic and abiotic characteristics. In order to identify factors that may predict site selection, we measured shorebird abundance, habitat characteristics, and food resources within two Oregon estuaries during migration. Additionally, we compiled shorebird abundance data from estuaries throughout the Pacific Northwest to identify broader scale predictors of stop-over site usage. Among estuaries, shorebird densities in spring were best predicted by estuary size, as opposed to the amount of any one habitat. During fall migration, the amount of grassland in the surrounding watershed was also a good predictor, pointing to the probable importance of roost sites as well as feeding grounds. The amount of infauna also correlated with the density of shorebirds using a site. Within estuaries, shorebird distribution in the inter-tidal region could not broadly be predicted by prey abundance. However, we found evidence that small tidal channels were used preferentially by shorebirds, and infauna abundance and accessibility along channels were greater than in the surrounding mudflats. Identification of these large-scale and fine-scale factors that influence site quality for migratory shorebirds will assist land and wildlife managers' efforts to protect these species.

MORLAN, JOSEPH¹ and GUY McCASKIE². **Update from the California Bird Records Committee.** ¹1359 Solano Drive, Pacifica, CA 94044; jmorlan@gmail.com. ²P.O. Box 275, Imperial Beach, CA 91933-0275; guymcc@pacbell.net.

In the past year the California Bird Records Committee (CBRC) has accepted first state records of Common Crane (*Grus grus*), Common Cuckoo (*Cuculus canorus*), and Gray Hawk (*Buteo plagiatus*). Also, the species pair Taiga/Tundra Bean-Goose (*Anser fabalis*/*Anser serrirostris*) was accepted as a new species and added to the state list. These changes bring the list to 652 species. Other significant accepted records include second state records of Eastern Whip-poor-will (*Antrostomus vociferus*), White-chinned Petrel, (*Procellaria aequinoctialis*), Wood Sandpiper (*Tringa glareola*) and Red-flanked Bluetail (*Tarsiger cyanurus*), and additional records of Great-winged Petrel (*Pterodroma macroptera*) and Great Shearwater (*Puffinus gravis*). Records of Great Black-backed Gull (*Larus marinus*) and Nutmeg Mannikin (*Lonchura punctulata*) are currently under review, and a proposed split of the Sage Sparrow (*Artemisospiza belli*) may add additional species to the state list. Four species (Yellow-crowned Night-Heron [*Nyctanassa violacea*], Harris's Hawk [*Parabuteo unicinctus*], Lesser Black-backed Gull [*Larus fuscus*], and Parakeet Auklet [*Aethia psittacula*]) have been 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 online database of records. Web publication of the complete *Rare Birds of California* is expected shortly. An annual CBRC report dealing mainly with 2011 records and authored by K. Nelson, S. Rottenborn and S. Terrill will be published in *Western Birds* 44(3).

PANDOLFINO, EDWARD¹ and EDWARD C. BEEDY². **Recent avian population trends in the Sierra Nevada.** ¹1328 49th Street, Sacramento, CA 95819; erpfromca@aol.com. ²12213 Half Moon Way, Nevada City, CA 95959; tbeedy@comcast.net.

We used data from 44 Breeding Bird Survey routes and 25 Christmas Bird Count circles within the Sierra Nevada range to assess population changes between 1971 and 2010. Of the 117 species analyzed, many more showed positive trends than negative trends. Thirty-seven species showed significant positive trends based on one or both of the two data sources, while 17 showed negative trends. In most cases these trends can be linked directly or indirectly to human alterations to the Sierra Nevada landscape over this period.

PARRISH, JULIA K., JANE DOLLIVER, CHARLES WRIGHT, and ELIZABETH MACK. **Fifteen years of beached bird surveys in the Pacific Northwest: Defining what's normal.** *University of Washington, School of Aquatic and Fishery Sciences, UW Box 355020, Seattle, WA 98195; coasst@uw.edu.*

Seabirds have long been touted as environmental indicators, because of their collective potential to integrate top-down, bottom-up, and anthropogenic signals. Once a baseline is established, beached bird patterns may indicate evidence of climate change/impact, impact of oil pollution, fisheries interactions, or shifts in food webs. The Coastal Observation and Seabird Survey Team (COASST) is a citizen science program that trains local residents to walk their beaches, collecting independently verifiable data on beached marine life. At present over 800 volunteers survey more than 400 sites from Eureka, CA to Kotzebue, AK. Within the Pacific Northwest (California, Oregon, and Washington) outer coast, almost 50% of reported finds are two species: Common Murres (*Uria aalge*) and Northern Fulmars (*Fulmarus glacialis*), occurring by the thousands on beaches in the late summer-fall (July-October) and fall-early winter (October-December), respectively. Wrecks of these birds, defined by anomalously high peaks relative to long-term averages, are common at the "right" and occasionally wrong times of year, for instance during the early spring (February-March). Other species wreck at much lower intensities and over much smaller spatial extents, albeit at orders of magnitude more than their "usual" occurrence. Given this range in space, time, and taxonomy, we used the COASST dataset to examine die-offs as a function of species rarity (indexed by overall occurrence in our dataset), timing (calendar months), location (COASST region), intensity (as a function of the long-

term average), and cause (if known). We suggest that grading wrecks by the intersection of timing and location allows a management-relevant assessment of whether observed wrecks are catastrophes, or just mortality as usual.

ROBINSON, W. DOUGLAS. **A benchmark survey of Oregon's birds: The Oregon2020 project.** *Oak Creek Lab of Biology, Oregon State University, 8840 N.W. Oak Creek Drive, Corvallis, OR 97330; douglas.robinson@oregonstate.edu.*

We live in a pivotal time in history. We are changing the land, the sea, and the climate. Birds respond to such changes. We are the first generation of humans to realize we are partly responsible for climate change, to know that we are massively altering the habitat of Earth's biodiversity, and to have the technological capability to map, measure, instantly share, and electronically archive our observations of nature. The Oregon2020 project recognizes our unique position in history and uses eBird to create a benchmark survey of Oregon's birds. Oregon2020 includes two major sets of bird surveys. One is being done by professionally trained ornithologists using timed stationary counts distributed along every accessible road and in select off-road areas. The other is a large effort to incorporate birders and their enthusiasm and expertise. I will describe this new project, results from our first collaborative effort with birders to survey a relatively under-studied portion of Oregon, and plans for covering the whole state in the next decade. A larger goal is to create a template that will be useful for similar projects to be conducted in other states and countries.

SCHROEDER, MICHAEL¹, FRED ZWICKEL², GEORGE BARROWCLOUGH³, and JONAS LAI³. **Phenotypic variation across the range of Sooty and Dusky Grouse in western North America.** ¹*Washington Department of Fish and Wildlife, P.O. Box 1077, Bridgeport, WA 98813; michael.schroeder@dfw.wa.gov.* ²*Box 81, Manson's Landing, BC V0P 1K0 Canada.* ³*American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024; gfb@amnh.org, jlai@amnh.org.*

In 2006, the American Ornithologists' Union revised the taxonomy of Blue Grouse (*Dendragapus obscurus*) by splitting it into the Sooty Grouse (*D. fuliginosus*) and Dusky Grouse (*D. obscurus*). The Sooty Grouse is typically found in coastal areas and has yellow cervical apteria (unfeathered skin on the sides of the neck). The Dusky Grouse is typically found in interior areas and has red cervical apteria. There is additional variation between the species with respect to tail appearance, behavior, and genetics. In 2006, we examined a photograph of a grouse with red apteria taken in southeastern Alaska, within the range of Sooty Grouse. As a result of this observation we initiated a research project to document the distribution of Sooty and Dusky Grouse by phenotypic characteristics at numerous locations, particularly in British Columbia and southeastern Alaska. Initial results suggest that red apteria are characteristic of Dusky Grouse, but apteria of Sooty Grouse are either red or yellow. Sooty Grouse with yellow apteria are found from California northward through coastal areas of southwestern British Columbia. Sooty Grouse with red apteria are found from Prince Rupert, BC northward to southeastern Alaska. To the best of our knowledge, this represents the first documentation of red apteria in Sooty Grouse. The pattern of geographic variation in phenotypic characteristics of Sooty and Dusky Grouse may be attributable to the past history of glaciation.

STRUM, KHARA, MATTHEW REITER, and CATHERINE HICKEY. **The Pacific Flyway Shorebird Survey.** *Point Blue Conservation Science, 3820 Cypress Drive #11, Petaluma, CA 94954; kstrum@pointblue.org, chickey@pointblue.org, mreiter@pointblue.org.*

Many site-specific shorebird surveys exist on the Pacific Coast of North America but a coordinated monitoring program with consistent methods is needed to measure population trends and to understand the impacts of habitat management decisions. Over the last three years, we developed, coordinated, and launched the Pacific Flyway Shorebird Survey (PFSS; www.prbo.org/pfss), an annual effort to estimate population trends and evaluate habitat use for Pacific Flyway shorebirds. We established standardized survey protocols and held workshops to train over 300 citizen scientists to use these protocols for collection of shorebird and habitat data. Working with almost 50

federal, state, and regional partners, we survey over 45 coastal estuary and interior wetland and agricultural sites (>1000 survey locations) from Canada to Mexico each winter. Data are entered online and stored in the California Avian Data Center (www.prbo.org/cadc). We developed open access data summary applications where survey data can be explored at different spatial levels, by habitat type or by region to better understand the distribution and abundance of shorebirds. The success of the PFSS model is apparent in the expansion of coordinated survey efforts in Central and South America through the Migratory Shorebird Project (<http://www.migratoryshorebirdproject.org>). If this success is sustained, the PFSS will provide a foundation to guide the conservation and management of shorebirds in the Pacific Flyway amid rapid environmental change.

WATSON, JAMES. Ferruginous Hawk: Range-wide status and limiting factors. *Washington Department of Fish and Wildlife, 600 Capitol Way N., Olympia, WA 98501; James.Watson@dfw.wa.gov.*

The Ferruginous Hawk (*Buteo regalis*) is a keystone raptor of native grassland and shrub-steppe ecosystems. A review of current provincial and state listing status suggests the species is experiencing declines in several portions of its range, including its core nesting range in Alberta. An evaluation of Ferruginous Hawk status and trends in Washington, where the species is listed as Threatened, highlights the relationships among factors that are affecting this population and others, including loss of native habitat, prey decline (i.e., ground squirrels and jack rabbits), and direct anthropogenic mortality factors on breeding and wintering areas (i.e., poaching, wind power development, and electrocution). Although cyclic reproduction of Ferruginous Hawks may mirror prey populations in some regions (e.g., Wyoming) and thereby complicate status assessment, recent satellite telemetry studies have not upheld the traditional view of this species as a nomadic nester. Instead, the results of these studies support the need for a review of range-wide status based on actual numbers of nesting pairs in different populations, as opposed to projected estimates inferred from habitat quality.

WOLF, ADRIAN¹, SCOTT PEARSON², HANNAH ANDERSON¹, and ADAM MARTIN^{1*}. South Puget Sound Streaked Horned Lark genetic rescue project. ¹*The Center for Natural Lands Management, 120 Union Avenue S.E. #208, Olympia, WA 98501; awolf@cnlm.org, handerson@cnlm.org, amartin@cnlm.org.* ²*The Washington Department of Fish and Wildlife, 1111 Washington Street S.E., 5th Floor, Olympia, WA 98501; scott.pearson@dfw.wa.gov.*

Hatchability of Streaked Horned Lark (*Eremophila alpestris strigata*) eggs in the Puget Lowlands of Washington is extremely low relative to other grassland nesting birds at the same site and generally. Because genetic factors (inbreeding depression) appear to be a likely explanation, an effort to increase genetic diversity was initiated. In 2011, four 3-egg-clutches were translocated to Puget Sound nests from Corvallis, OR. Eleven of the 12 translocated eggs hatched, nestlings were color banded, and a minimum of five fledglings survived and were observed foraging independently. In 2012, one Oregon translocated nestling returned to 13th Division Prairie as an adult male, but this male did not breed successfully with a female in 2012. This male survived its second winter, and returned to 13th Division in 2013. It successfully paired with an unbanded female, and their first nest attempt produced a 3-egg clutch, which all hatched, and presumably fledged. If the male continues to reproduce successfully and these nestlings survive, the local population of Streaked Horned Lark could be rescued, which could lead to improved fitness and reduced extinction risk. Subsequent monitoring will determine whether the male or other translocated birds return to breed. If this experiment is successful and we can document the mechanism responsible for the success, the method used here could have broader implications to the conservation of birds with small populations throughout the world.

* presenting (when not lead author)

Presenter Biographies

Robert Gill recently retired from USGS after a 40-year-long career -- most of it in Alaska -- where he led a research team studying the conservation biology and movement ecology of shorebirds. He is still actively involved in projects tracking extreme endurance migrants such as Bristle-thighed Curlews, Whimbrels, and Bar-tailed Godwits. He is pretty sure that in retirement he will have to check on these birds at places throughout all phases of their annual cycles.

Ashli Gorbet is an ornithologist and bird bander with Rio Grande Bird Research, Inc. She serves as secretary for the New Mexico Ornithological Society and sits on the steering committee of the New Mexico Burrowing Owl Working Group. In her free time she guides and travels as often as her schedule will allow.

Amanda L. Holmgren earned her B.S. in Environmental Studies from the University of Vermont in 2003. She conducted point counts as an intern working in Mt. Rainier National Park in 2004 and has since been involved in all aspects of bird-monitoring efforts in the North Coast and Cascades Network. She coordinates this work as staff biologist for The Institute for Bird Populations.

Lisa Hug is a biological contractor and freelance naturalist living in Sonoma County, CA. She teaches a variety of birding classes through a multitude of venues including College of Marin, Petaluma Adult School, Point Reyes Field Institute, and Pepperwood Preserve. She has been a co-leader for Shearwater Journeys for about 12 years. She has been birding full time since 1986, after completing several internships with Point Reyes Bird Observatory (PRBO).

Eugene Hunn is professor emeritus, Anthropology, University of Washington, now at home in Petaluma, CA. He was introduced to serious birding at PRBO in 1967 and served the Washington State birding community in a variety of capacities during his 38-year residence there. A thoroughly revised edition of his *Birding in Seattle and King County* (1982) is now available.

Dovid Kozlovsky is a doctoral student of Ecology, Evolution and Conservation Biology at University of Nevada, Reno under the guidance of Vladimir Pravosudov. His research focuses on differences in Mountain Chickadees along an altitudinal gradient. Dovid graduated from Towson University in 2012 with majors in biology, psychology and animal behavior. Dovid's interests include behavioral ecology, animal behavior, and avian ecology.

Amy Leist has managed the Lower Colorado River Riparian Bird Monitoring Project for Great Basin Bird Observatory since 2008. A native of Louisville, KY, Amy earned a B.A. in Biology from Colorado College and an M.S. in Wildlife from Humboldt State University, and enjoyed field jobs in Washington, Hawaii, Alaska, California, Idaho, South Carolina, and Chile.

Adam Martin is a conservation biologist/prairie restoration specialist with the Center for Natural Lands Management who has experience in the fields of botany and ornithology.

Aileen Miller is an ecologist who has been studying birds and other wildlife for the last decade. She spent eight seasons researching penguins in Antarctica, as well as shorter stints working on the Farallon Islands, in Alaska, the Sierra Nevada, and around Portland, OR (her hometown). She recently completed her master's degree research on shorebird habitat on the Oregon coast.

Joseph Morlan has been a member of the California Bird Records Committee since 1981 and currently serves as committee chair. He is also web-master for Western Field Ornithologists and for the California Bird Records Committee. He teaches ornithology at City College of San Francisco.

Edward Pandolfino has devoted his post-retirement years to conservation, birding, and research that connects the two. He co-authored *Birds of the Sierra Nevada: Their Natural History, Status, and Distribution* with Ted Beedy, illustrated by Keith Hansen. He is also a regional editor for northern California for *North American Birds*. He is currently president of Western Field Ornithologists.

Julia K. Parrish is a professor in the School of Aquatic and Fishery Sciences, and in the Biology Department at the University of Washington. She is also the executive director of one of the largest citizen science programs in the Pacific Northwest – the Coastal Observation and Seabird Survey Team (COASST).

W. Douglas Robinson is a professor at Oregon State University and director of Oregon2020. He has surveyed rich bird communities in the Neotropics and North America. He aims to leave a legacy of knowledge describing how birds respond to habitat change, and to encourage citizens to share and understand the value of their daily observations of the world around them.

Michael Schroeder has pursued research and management of grouse since 1981. He joined the Washington Department of Fish and Wildlife in 1992 and has focused most of his research on translocations of Greater Sage-Grouse and Sharp-tailed Grouse, landscape connectivity and genetics of grouse, effects of farm programs, and development of a monitoring and evaluation program for wildlife areas.

Khara Strum has been a waterbird ecologist with PRBO Conservation Science (now known as Point Blue 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.

James Watson is a wildlife research scientist with the Washington Department of Fish and Wildlife and the lead researcher for statewide raptor studies. He has spent the past 40 years studying raptors in the western United States and abroad. His research focus includes raptor population dynamics, migration ecology, and management of raptors in human landscapes.

Identification Challenges

Sounds: Team Challenge. *Friday, 23 August. 4:00–5:30 p.m. Spruce 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 outgoing 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.

Photos: Expert Panel. *Saturday, 24 August. 4:00–5:30 p.m. Spruce 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 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.