

34th Annual Meeting of the Western Field Ornithologists  
*Boise, Idaho • 10–13 September 2009*

**Science Program**

*11 and 12 September 2009 • Oxford Suites*

**Schedule of Scientific Presentations and Panels**

***Friday, 11 September 2009***

*Morning Session – East Room*

- 10:30–10:35. Introduction and Announcements, Debbie Van Dooremolen and Cat Waters.  
10:35–10:55. TROST, CHARLES H. **A short history of field ornithology in Idaho.**  
11:00–12:00. Current Trends and Future Directions in Western Field Ornithology Panel, moderator Ted Floyd.

*Afternoon Session – East Room*

- 1:00–1:15. TROST, CHARLES, SHIRLEY STURTS, JAY CARLISLE, DARREN CLARK, LISA HARDY, HARRY KRUEGER, STACY PETERSON, CHARLES SWIFT, DAVE TROCHLELL, DOUG WARD, and CLIFF WEISSE. **History and recent activity of the Idaho Bird Records Committee.**
- 1:15–1:30. CARLISLE, JAY D. **Comparison of autumn stopover ecology between two stopover sites in southern Idaho.**
- 1:30–1:45. KALTENECKER, GREGORY S., JAY D. CARLISLE, and MARC J. BECHARD. **Fifteen years of raptor banding during fall migration in southwest Idaho.**
- 1:45–2:00. STUBER, MATTHEW J., JACK M. STENGER, and JAY D. CARLISLE. **Flammulated Owl survey results from three study areas in southern Idaho in 2009.**
- 2:00–2:15. TROST, CHARLES H. **Primogeniture and competition in young male Black-billed Magpies.**
- 2:15–2:30. **Break.**
- 2:30–2:45. OWEN, DANA and JULIE HEATH. **The effects of investigator disturbance on American Kestrels: A study of incubation behavior and nesting success.**
- 2:45–3:00. STRASSER, ERIN H., JULIE A. HEATH, LINA BARDO, and DAVID M. BIRD. **A proposed method to index size and body condition in American Kestrels.**
- 3:00–3:15. BOUSMAN, WILLIAM. **Understanding temporal bird distributions using cumulative statistics.**
- 3:15–3:30. BLAKESLEY, JENNIFER A. and DAVID J. HANNI. **Monitoring bird populations using distance, removal and occupancy modeling of point count data.**
- 3:30–4:00. **Break.**
- 4:00–5:30. Photo Identification Panel, moderator Ed Harper.

*Saturday, 12 September 2009*

*Afternoon Session – East Room*

- 12:30–12:35. Introduction and Announcements, Debbie Van Dooremolen and Cat Waters.
- 12:35–12:50. MALEC, MARY and CHERYL ELMORE. **Off-season observations of a Peregrine Falcon nesting territory reveal a series of falcons occupying the territory in the absence of the resident falcon.**
- 12:50–1:05. HAZEN, KELLY. **Eleven years of reading arctic white geese neck collars in eastern Oregon.**
- 1:05–1:20. GILL, ROBERT, LEE TIBBITTS, DAN RUTHRAUFF, CHRIS HARWOOD, DAN MULCAHY, SARAH WARNOCK, NATHAN SENNER, and NILS WARNOCK. **Southward migration of Whimbrels from Alaska: Another leisurely flight across the northeast Pacific Ocean.**
- 1:20–1:35. FLOYD, TED. **Nocturnal land bird migration over eastern Boulder County, Colorado, July–November 2007–2009.**
- 1:35–1:50. FROEHLICH, DANIEL and PAUL TAILLIE. **Moist meadows support molting passerines in August in Washington’s Cascade Mountains.**
- 1:50–2:05. KRUEPER, DAVID and CAROL BEARDMORE. **Population trends of nightjars in the West: Surveys and a call to action.**
- 2:05–2:20. **Break.**
- 2:20–2:35. HINOJOSA-HUERTA, OSVEL, EDWARD P. GLENN, PAMELA L. NAGLER, and KAMEL DIDAN. **The effect of drought on birds and riparian vegetation along the Colorado River, Mexico.**
- 2:35–2:50. GONZÁLEZ-BERNAL, MARCO ANTONIO, JOSÉ ALFREDO CASTILLO-GUERRERO, GUILLERMO FERNÁNDEZ-ACEVES, MARIO CASTRO LEAL, and OSVEL HINOJOSA-HUERTA. **Distribution, abundance, and breeding status of the Mexican Duck in coastal Sonora and Sinaloa, Mexico.**
- 2:50–3:05. BEARDMORE, CAROL and DAVID KRUEPER. **A summary of the distribution and status of the Sierra Madre Sparrow in Durango and Distrito Federal, Mexico.**
- 3:05–3:20. Special Announcement on the WFO Field Expedition to the Sierra de Alamos y Río Cuchujaqui Biosphere Reserve, Carol Beardmore.
- 3:20–4:00. **Break.**
- 4:00–5:30. Sound Identification Panel, moderator Nathan Pieplow.

*Banquet and Evening Program – Idaho Room*

- 6:45–10:00. Keynote Address by Dr. Craig Benkman. **The South Hills Crossbill: Its origin and prospects.**

## Abstracts of Scientific Presentations

BEARDMORE, CAROL<sup>1</sup> and DAVID KRUEPER<sup>2</sup>. **A summary of the distribution and status of the Sierra Madre Sparrow in Durango and Distrito Federal, Mexico.** <sup>1</sup>*Sonoran Joint Venture, U.S. Fish and Wildlife Service, 2321 W. Royal Palm Rd. Suite 103, Phoenix, AZ 85021; carol\_beardmore@fws.gov.* <sup>2</sup>*Migratory Bird Office, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, NM 88710; dave\_krueper@fws.gov.*

The Sierra Madre Sparrow (*Xenospiza baileyi*) is known only from a few sites: the Sierra Madre Occidental (Durango and Jalisco) and the Transverse Volcanic Belt (Distrito Federal) in Mexico. Its habitat is subalpine bunchgrass grasslands interspersed within pine forests. The Sierra Madre Sparrow is categorized as Endangered by the IUCN Red List and as Immediate Action Needed by Partners in Flight, and is a high conservation and research priority. The population in Distrito Federal is probably viable, while the viability of the Durango population is in question. Threats have been largely addressed at one site in the Distrito Federal location but are ongoing and severe at the Durango location. Threats in general include livestock production, inappropriate fire management, tree planting, agricultural encroachment, and urban expansion of Mexico City. On recent trips to Mexico the authors visited an extant site in each location. We will discuss habitat requirements and threats, current conservation measures on communal lands at the southern site, and potential partnerships and options for protecting the northernmost population.

BLAKESLEY, JENNIFER A. and DAVID J. HANNI. **Monitoring bird populations using distance, removal and occupancy modeling of point count data.** *Rocky Mountain Bird Observatory, P.O. Box 1232, Brighton, CO 80601; jennifer.blakesley@rmbo.org.*

Rocky Mountain Bird Observatory conducted landbird monitoring throughout Colorado from 1998 to 2009. Objectives included providing estimates of population status and trend for all regularly occurring breeding species in Colorado. In 2008-2009 we implemented a spatially balanced sampling design with Bird Conservation Regions as the primary level of stratification. Sampling units were 1-km<sup>2</sup> grids, each containing 16 evenly-spaced points. We surveyed birds at each point using distance and removal sampling methods. We estimated detection probability and density of abundant species using distance and removal modeling. We estimated detection probability and occupancy rates of uncommon species using occupancy modeling. Here we summarize the advantages and limitations of our sampling and analysis methods and provide recommendations for broad-scale bird monitoring programs.

BOUSMAN, WILLIAM. **Understanding temporal bird distributions using cumulative statistics.** *321 Arlington Way, Menlo Park, CA 94025; barlowi@earthlink.net.*

The temporal distribution of birds, whether of migrants, residents, or some combination, is sometimes examined graphically by showing numbers of birds for a fixed time interval. The interval (bin size) used for such distributions depends upon both the quantity and frequency of the data. The use of a graphical approach that uses cumulative statistics provides a different means of assessing temporal distributions. By *cumulative statistics* I mean that over a time period, such as a year, you show the cumulative number of birds recorded for each time increment (usually one day) as you proceed through the year. The proposed talk will examine the cumulative statistics approach by using examples from a single banding station on Coyote Creek in Santa Clara County, California, as well as a 30-year observational data set based on records from the Santa Clara County notebooks. The utility of the approach will be shown through examples of migrants, residents, and species with mixed characteristics. In addition, comparisons will be shown between banding data (small area) and observational data (large area) that are based on different protocols. The method also provides a means of combining multiple years of data, and examples will be shown where data are too sparse to characterize temporal distributions on a yearly basis, but are more easily understood on a multiple-year basis.

CARLISLE, JAY D. **Comparison of autumn stopover ecology between two stopover sites in southern Idaho.** *Idaho Bird Observatory, Boise State University, Department of Biological Sciences, 1910 University Drive, Boise, ID 83725; jaycarlisle@boisestate.edu.*

I compare stopover performance of autumn landbird migrants between stopover sites in a montane deciduous shrubland and a riparian oasis in southern Idaho during 2005 and 2006. In most species, recapture proportions were

higher at the riparian oasis whereas minimum stopover duration and mass change showed generally comparable values between sites, with several species having divergent values. In particular, whereas Ruby-crowned Kinglets and Yellow Warblers showed slightly higher mass gain at the montane site, Dusky Flycatchers, MacGillivray's Warblers, and Dark-eyed Juncos all showed substantially higher mass gain at the riparian oasis. While such differences might reflect stopover site quality for individual species, these differences might also be explained by the differential occurrence of breeding and/or wintering individuals of certain species between sites.

FLOYD, TED. **Nocturnal land bird migration over eastern Boulder County, Colorado, July–November 2007–2009.** *American Birding Association, 4945 North 30th Street–Suite 200, Colorado Springs, Colorado 80026; [tfloyd@aba.org](mailto:tfloyd@aba.org).*

During the past three “autumns” (mid-July through early November), I have been listening to and quantitatively documenting the passage of land birds on nocturnal migration over Greenlee Preserve, Boulder County, Colorado (39.997° N, –105.114° W). Although there is a good quantitative record of nocturnal migration for eastern North America, there has been little if any formal study in the West. Thus, I have been interested in determining whether assumptions and results from eastern North America apply to my observations from Colorado. Detectable nocturnal migration of land birds over Colorado is well underway by late July, with peak intensity between late August and late September. In the East, nocturnal migration is shifted later in the season. Throughout the entire July–November study period, most detectable and identifiable nocturnal migrants over Colorado are suspected or known to be medium-distance migrants. In contrast, the detectable flight over eastern North America contains a heavy component of long-distance migrants. A large portion of the early-season (late July–early September) nocturnal flight over Colorado consists of species known or assumed to be molt-migrants. The extent of nocturnal migration by possible molt-migrants in the East is currently unresolved but under investigation. It is essential to treat my data from Colorado as preliminary. The nocturnal flight calls of several common western bird species are poorly known or simply unknown, and the generality of my results has not been established. More data are needed from elsewhere in the West, and robust sample sizes of flight calls need to be audio-recorded and spectrographically analyzed. Nonetheless, one conclusion can be firmly stated at the present time: Nocturnal migration is eminently detectable in western North America. This fascinating phenomenon deserves further attention from western field ornithologists.

FROEHLICH, DANIEL and PAUL TAILLIE. **Moist meadows support molting passerines in August in Washington's Cascade Mountains.** *Puget Sound Bird Observatory, 5501 17th Ave NE, Seattle, WA 98105; [president@pugetsoundbirds.org](mailto:president@pugetsoundbirds.org).*

From 2003 to 2009, members of the newly incorporated Puget Sound Bird Observatory, in collaboration with Seattle Audubon's BirdWatch youth program, collected data on molting birds in high-elevation meadows in Washington's Cascade Mountains in Yakima County. The project, integrated with PSBO's bander training program, has banded over 1,100 landbirds of 60 species in a suite of seven meadows ranging in elevation from 890 m (2,925 ft) to 1,400 m (4,600 ft) in the Rimrock area. Data taken on the birds captured include detailed information on flight feather molt and the extent of replacement over the whole body. Over the years, banding has started as early as 4 August and continued as late as 30 August. Most of the birds captured are hatch-years and most of these are undergoing their pre-formative molt. Among the few adults captured, more than half are undergoing complete fall molts, with variation by species. Molt timing also showed variability among species, although annual seasonal variation partially obscured these trends. Complete adult molts showed signs of temporal compression, as indicated in flight-impairing levels of overlap of molting remiges. Our results suggest that montane meadows in Washington may play an important role in this energetically costly life history stage for a number of western species. Continuing investigations are addressing individual birds' usage of the meadows and the relationship between bird molt and biological variables such as food availability, as well as physiological variables such as meadow moisture and climate change impacts. This project exemplifies the qualities PSBO pursues in its projects by combining bander training of adults and teens with the collection of data on bird molt important to both conservation and land management.

GILL, ROBERT<sup>1</sup>, LEE TIBBITTS<sup>1</sup>, DAN RUTHRAUFF<sup>1</sup>, CHRIS HARWOOD<sup>2</sup>, DAN MULCAHY<sup>1</sup>, SARAH WARNOCK<sup>3</sup>, NATHAN SENNER<sup>4</sup>, and NILS WARNOCK<sup>5</sup>. **Southward migration of Whimbrels from Alaska: Another leisurely flight across the northeast Pacific Ocean.** <sup>1</sup>*USGS Alaska Science Center, 4210 University Drive, Anchorage, AK 99508; [robert\\_gill@usgs.gov](mailto:robert_gill@usgs.gov).* <sup>2</sup>*U.S. Fish and Wildlife Service, Kanuti NWR, Fairbanks, AK.*

<sup>3</sup>Pacific Shorebird Migration Program, Davis, CA. <sup>4</sup>Cornell University, Ithaca, NY. <sup>5</sup>Wildlife Health Center, School of Veterinary Medicine, University of California, Davis.

Between 8–10 June 2009, 15 Whimbrels (*Numenius phaeopus*) were captured on their nests during late incubation on a roughly 20-km<sup>2</sup> area of recently burned upland tundra on Kanuti NWR in north-central Alaska. A battery-powered PTT (satellite transmitter) was surgically implanted in each and was programmed to report through the southward migration period. Eight of the PTTs were modified with external temperature sensors to report ambient air temperature as a proxy for flight altitude. No birds abandoned nesting following the implant procedure, and 14 of 15 produced chicks. Following nesting, all birds flew to staging areas in western and southwestern Alaska where they resided for about three weeks (range 2–5 weeks) before initiating their southward flights. As of 11 August, two are suspected of having been killed by avian predators in Alaska and one had lost power in its PTT battery, while 12 had completed initial flights across the northeastern Pacific Ocean. These flights were nonstop, averaging about 4,600 km (range 3,700–6,500) with 10 of 12 occurring within a narrow, 400-km-wide corridor. Initial landfall for most birds occurred along the Pacific coast from southern California to southern Mexico, but as of 11 August some birds had continued to move as far south as Guatemala and Nicaragua. A Whimbrel satellite-tagged in 2006 was eventually tracked to coastal Colombia. Winds, at the start and en route, figured prominently in both departure decisions and routes taken.

GONZÁLEZ-BERNAL, MARCO ANTONIO<sup>1</sup>, JOSÉ ALFREDO CASTILLO-GUERRERO<sup>2</sup>, GUILLERMO FERNÁNDEZ-ACEVES<sup>3</sup>, MARIO CASTRO LEAL<sup>4</sup>, and OSVEL HINOJOSA-HUERTA<sup>1</sup>. **Distribution, abundance, and breeding status of the Mexican Duck in coastal Sonora and Sinaloa, Mexico.** <sup>1</sup>*Pronatura Noroeste, Ave. Jalisco 903, San Luis Río Colorado, Sonora, México 83440; chara50@hotmail.com, osvelhh@gmail.com.* <sup>2</sup>*Centro de Investigación Científica y Educación Superior de Ensenada. Ensenada, Baja California, México; alfredocas@gmail.com.* <sup>3</sup>*Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, Mazatlán, Sinaloa, México; gfernandez@ola.icmyl.unam.mx.* <sup>4</sup>*Escuela de Biología, Universidad Autónoma de Sinaloa, Culiacán, Sinaloa, México.*

The Mexican Duck (*Anas platyrhynchos diazi* or *A. diazi*) has declined and is federally protected as Threatened in Mexico, with an estimated population of 10,000 pairs. Historically, the range of this duck was considered the highlands of central and northern Mexico, but some recent records suggested that it might be moving to coastal areas. To determine the distribution, abundance, and breeding status of the Mexican Duck in the coastal plains of northwestern Mexico, we conducted field work in 2007 and 2008, searching an area of over 47,000 km<sup>2</sup>, through multiple habitat types. We detected a total of 343 ducks in Sonora and 840 in Sinaloa, especially in the region of coastal northern Sinaloa and southern Sonora, although pairs and breeding behavior were observed as far north as the coastal valley of Hermosillo and as far south as Ensenada Pabellones. Over 90% of all records were in agricultural areas or in their vicinity, particularly in wheat and potato fields, and associated with irrigation canals and drains. Breeding behavior was observed at 29 localities throughout the area, and we observed females with a total of 21 ducklings between March and May. The Mexican Duck has recently colonized and established a breeding population in the coastal plains of Sonora and Sinaloa, apparently as a response to habitat changes and agricultural development in the region, and probably from individuals moving from the highlands of Chihuahua and Durango.

HAZEN, KELLY. **Eleven years of reading arctic white geese neck collars in eastern Oregon.** *P.O. Box 143, Hines, OR 97738; bkhazen@centurytel.net.*

Each spring, 200,000 arctic white geese travel through eastern Oregon to rest and feed during their northward migration. The migration takes them from the wildlife refuges in central California to nesting grounds in the Canadian Arctic. For the past 11 years I have recorded over 1,300 neck collars on Lesser Snow Geese (*Chen caerulescens*) and Ross's Geese (*Chen rossii*). When I successfully read a neck collar, I record the date, goose species, collar color, and the number/letter combination on the collar. Collar color along with the goose species indicate the region in the Canadian Arctic where the goose was collared. I have submitted the data to the banding agencies at the Canadian Wildlife Service and the U.S. Geological Survey Bird Banding Laboratory. These agencies use banding data to monitor habitat use, estimate rates of adult survival, and monitor migration timing and migration patterns. The current literature and common belief is that the majority of geese migrating through eastern Oregon are Snow Geese, and that blue-phase Ross's Geese are rare. My records indicate the majority of geese are Ross's Geese and that blue-phase Ross's Geese can be observed daily during the migration period. One out of five birds that I record are "repeat" birds that I have seen in previous years. When I see a "repeat" bird, I know its sex, age, and in some cases, where and when it has been seen elsewhere. Most of the arctic white geese seen in eastern Oregon

spend the winter in California's Sacramento Valley. But a few have migrated from as far as Texas, Louisiana, and New Mexico. In addition, I frequently see the same bird on the same day year after year. I have documented mated pairs, geese over 19 years old, and family groups traveling together.

HINOJOSA-HUERTA, OSVEL<sup>1</sup>, EDWARD P. GLENN<sup>2</sup>, PAMELA L. NAGLER<sup>3</sup>, and KAMEL DIDAN<sup>4</sup>. **The effect of drought on birds and riparian vegetation along the Colorado River, Mexico.** <sup>1</sup>*Pronatura Noroeste, Avenida Primera 1114, La Paz, Baja California Sur, México, 23050; osvelh@gmail.com.* <sup>2</sup>*Environmental Research Laboratory, University of Arizona, 2601 East Airport Drive, Tucson, AZ 85706; eglenn@ag.arizona.edu.* <sup>3</sup>*U.S. Geological Survey, Sonoran Desert Research Station, Biological Sciences East 115, University of Arizona, Tucson, AZ 85721; pnagler@ag.arizona.edu.* <sup>4</sup>*Institute for the Study of Planet Earth, Electrical and Computing Engineering 104, University of Arizona, Tucson, AZ 85721; kamel@ag.arizona.edu.*

The Colorado River delta has experienced a recovery of riparian vegetation and birds in response to flows that have reached the area in the last 30 years. However, precipitation in the basin has been below average, diminishing flows since 2002. To determine the trends of birds and their habitats along the Colorado River in Mexico, we conducted variable-distance point counts and evaluated habitat characteristics at 136 sites, from 2002 to 2007. The vegetation density had a downward trend, with a decrease of 29%. The percent cover of trees had a decrease of 28%, and open water had a decrease of 80%. Both cottonwood and willow decreased, 42% and 76% respectively, and salt cedar increased 17%. Bird abundance remained without a significant trend, and species richness had a decrease of 1.82% per year. The community composition changed and species had different responses: 28 species had a significant downward trend and 21 had a significant upward trend. Declining species included Song Sparrow (-16.26% per year), Verdin (-5.05%), Common Yellowthroat (-9.52%), Cactus Wren (-18.84%), and Brown-headed Cowbird (-16.64%). Breeding waterbirds also declined, particularly Black-necked Stilt (-10.83%), Snowy Egret (-15.36%), and Killdeer (-9.55%). The species with upward trend included birds related to agricultural development and/or exotic species, in particular Red-winged Blackbird, Mourning Dove, European Starling, Cattle Egret, and House Finch. The drought resulted in a drastic reduction of flows, causing an important reduction of habitat quality, which in turn was related to a population decline of riparian-dependent birds. Under the current reservoir conditions, and the model predictions under climate change scenarios, the situation in the river might extend into the future and deteriorate, endangering the viability of riparian birds in the Colorado River in Mexico. In order to reverse the trends, water has to be allocated for restoration.

KALTENECKER, GREGORY S.<sup>1</sup>, JAY D. CARLISLE<sup>1</sup>, and MARC J. BECHARD<sup>2</sup>. **Fifteen years of raptor banding during fall migration in southwest Idaho.** <sup>1</sup>*Idaho Bird Observatory, Department of Biology, Boise State University, 1910 University Dr., Boise, ID 83725; gregorykaltenecker@boisestate.edu.* <sup>2</sup>*Department of Biology, Boise State University, 1910 University Dr., Boise, ID 83725.*

Since 1993 the Idaho Bird Observatory has banded over 14,000 raptors of 15 different species during fall migration in southwest Idaho. Sharp-shinned Hawks (*Accipiter striatus*), Cooper's Hawks (*A. cooperii*), American Kestrels (*Falco sparverius*), and Red-tailed Hawks (*Buteo jamaicensis*) are the most common raptors banded. To date, we have received over 100 band recoveries from eight different raptor species. General breeding areas, migration corridors, and wintering areas have been identified for several western raptor species. Causes of death differ between raptors recovered in the United States and Canada and those recovered in Mexico. Migration strategies through the intermountain West differ between *Accipiters* and Red-tailed Hawks. Through banding, the Idaho Bird Observatory has successfully identified the general breeding ranges and specific wintering areas of the raptors it monitors during fall migration, perhaps increasing the value of its long-term population monitoring data.

KRUEPER, DAVID<sup>1</sup> and CAROL BEARDMORE<sup>2</sup>. **Population trends of nightjars in the West: Surveys and a call to action.** <sup>1</sup>*U.S. Fish and Wildlife Service, Migratory Bird Office, 500 Gold Ave, P.O. Box 1306, Albuquerque, NM 87103; dave\_krueper@fws.gov.* <sup>2</sup>*Sonoran Joint Venture, U.S. Fish and Wildlife Service, 2321 W. Royal Palm Rd. Suite 103, Phoenix, AZ 85021; carol\_beardmore@fws.gov.*

Beyond distribution and migration information, relatively little is known about population status, trends, and abundance of most species of nightjars in the western United States. Nationally and within the West, Breeding Bird Survey data show that Common Nighthawk (*Chordeiles minor*) and Whip-poor-will (*Caprimulgus vociferus*) have shown noticeable declines since 1966, while Common Poorwill (*Phalaenoptilus nuttallii*) and Lesser Nighthawk (*Chordeiles acutipennis*) have shown stable or slightly increasing population trends from 1966 to 2007. Reviewing

the status of caprimulgid populations in the western states within the context of the larger regional and national picture may help us understand why these populations are showing such marked declines. A national survey protocol has been developed which seeks to address this gap in information, and volunteers have completed several years of surveys, primarily within the southeastern United States. We will outline the nightjar survey protocol and discuss the need and the logistics of establishing western nightjar surveys. Because trends of night birds in many western states are either unknown or based on limited data, running appropriate night surveys is a laudable effort, but this should not be done without first determining the efficacy of that monitoring effort.

**MALEC, MARY and CHERYL ELMORE. Off-season observations of a Peregrine Falcon nesting territory reveal a series of falcons occupying the territory in the absence of the resident falcon.** *1110 53rd Street, Oakland, CA 94608; malecm@gmail.com.*

At the conclusion of a successful 2008 season in a Peregrine Falcon breeding territory (FWS Site Number CA089), we elected to continue observations at least monthly throughout the fall and winter of 2008. Our objective was to establish whether or not the resident pair of Peregrine Falcons remained in the territory. The resident tiercel is banded, having been taken off a bridge in Long Beach, CA, in 1996. Photos taken in 2005, 2006 and 2007 show this tiercel in the territory, although it is not known when he settled here. The breeding female, with malar stripes (Falcon A), was also shown in photographs as being present in 2005-2007. Our observations were made for periods of 3-6 hours using a spotting scope from an area 300 ft below the nest cliff or (in the non-breeding period) from the area above the nest cliff at a distance of about 25 yd. On 8 October, the resident tiercel and falcon were both seen. On 11 November, monitoring showed the tiercel present, Falcon A absent, and a banded falcon (Falcon B) present. The band number was partially read (XX/Z), but reading was not adequate to positively identify this falcon. Falcon B had a full dark helmet, yellow talons, and a pale yellow cere. On 10 and 16 December, monitoring showed a full-hooded female (Falcon C) with bright yellow cere, yellow talons, and no bands. On 28 February, 2009, a falcon with malar stripes was seen copulating with the tiercel. This falcon continues to be present and is the breeding falcon for 2009. Subsequent observations and comparison photos show this to be Falcon A. All falcons were observed in cooperative hunting, cooperative territorial defense, and sitting on outcroppings or in trees with the tiercel.

**OWEN, DANA<sup>1</sup> and JULIE HEATH<sup>2</sup>. The effects of investigator disturbance on American Kestrels: A study of incubation behavior and nesting success.** <sup>1</sup>*Boise State University, Biology Department, 1910 University Drive, Boise, ID 83725-1515; danaowen@u.boisestate.edu.* <sup>2</sup>*Boise State University, Raptor Research Center, 1910 University Drive, Boise, ID 83725-1516.*

Empirical evidence shows that avian incubation behavior and nesting success can be negatively affected by human disturbances such as noise and pollution from urbanization or tourism near breeding areas. Additionally, the few studies conducted on the effects of investigator disturbance have indicated a resulting decrease in nest attendance, increase in daily chick loss, and reduced hatching success. For researchers engaging in field studies involving capture and invasive handling of raptors, American Kestrels (*Falco sparverius*) are often the preferred subject due to their accessible, easily controlled nest box populations, as well as their small body size. We hypothesized that investigator disturbance negatively affects incubation behavior and nesting success, and predicted that increasing frequencies of investigator disturbance will affect American Kestrel nest attendance. We also predicted that increased investigator disturbance will decrease nesting success. We used a disturbance protocol with three levels of nest visit frequencies. At each visit we collected morphometric measurements and prevented the female from returning to its nest for approximately 15 minutes. Kestrel nest attendance was monitored with iButton temperature data loggers to record incubation on- and off-bouts, and we assessed nesting success based on the presence of 25-day-old nestlings. These results will provide insight into the effects of investigator disturbance on American Kestrel incubation behavior and nest success, and will inform researchers about effects of different study methods.

**STRASSER, ERIN H.<sup>1</sup>, JULIE A. HEATH<sup>1</sup>, LINA BARDO<sup>2</sup>, and DAVID M. BIRD<sup>2</sup>. A proposed method to index size and body condition in American Kestrels.** <sup>1</sup>*Department of Biological Sciences, Boise State University, Boise, Idaho 83725-1515; erin.strasser@gmail.com.* <sup>2</sup>*Avian Science and Conservation Centre, McGill University, 21, 111 Lakeshore Rd., Ste-Anne-de-Bellevue, Québec, Canada H9X 3V9.*

Ornithologists often collect a variety of morphometric measurements to index the structural size of an organism. Size estimates may be used in conjunction with body mass to obtain indices of an individual's body condition. These

size-corrected mass indices are only relevant if the morphometrics adequately account for size (vs. shape). In a study of adult American Kestrels nesting in southwestern Idaho, we found that many traditional morphometrics are poor indicators of overall kestrel size, and therefore, body condition. Our objectives were to develop a minimally invasive index of structural body size, and subsequently body condition, for American Kestrels using external morphometrics. We measured 12 morphometric features from 238 captive kestrels of known age. An index of structural size was determined using a sex- and age-specific principal components analysis, following the assumption that size increases linearly with mass. In adult male kestrels, the PC1 including the variables culmen, tarsus length, keel length, and bill depth showed a significant relationship with mass ( $r^2 = 0.36$ ,  $p = 0.0019$ ,  $n = 24$ ). In females, size was best explained by culmen, unflattened wing cord, tarsus length, keel length, and bill depth ( $r^2 = 0.38$ ,  $p = 0.0002$ ,  $n = 32$ ). This project demonstrates that researchers should consider early validation of common morphological measurements used to account for size, and that the best size measures may vary by species, sex, or age.

STUBER, MATTHEW J.<sup>1</sup>, JACK M. STENGER<sup>1,2</sup>, and JAY D. CARLISLE<sup>1</sup>. **Flammulated Owl survey results from three study areas in southern Idaho in 2009.** <sup>1</sup>*Idaho Bird Observatory, Boise State University, Department of Biological Sciences, 1910 University Drive, Boise, ID 83725; mjstuber@gmail.com.* <sup>2</sup>*Ohio Wesleyan University, Department of Zoology, 61 South Sandusky St., Delaware, OH 45231.*

In order to improve our current understanding of the distribution and abundance of Flammulated Owls (*Otus flammeolus*) in Idaho, we conducted standardized nocturnal surveys from mid-May to mid-July 2009 across three disjunct study areas in southern Idaho: the Owyhee Mountains in southwestern Idaho, the southern portion of the Sawtooth National Forest (NF) in south-central Idaho, and the Caribou-Targhee NF in eastern Idaho. Within each study area, we randomly generated start points for survey areas and then used a stratified random selection criteria for survey points to ensure that we surveyed all potentially suitable forest types along a given transect. Transects were completed twice during the summer. Each transect ranged from 10 to 14 survey points, depending on road quality and accessibility. We used a 10-minute survey protocol that consisted of alternating silent listening and playback time periods. We examined patterns of detections based on survey date, habitat type, and study area. We found generally high abundance of Flammulated Owls in the Sawtooth NF and low to moderate abundance in the Owyhee Mountains and on the Caribou-Targhee NF. Preliminary results suggest that presence of mature aspen may be an important factor affecting Flammulated Owl presence in all three study areas. In general, owls were detected in higher numbers early in the summer (mid-May to mid-June), with detections tailing off in late June and early July; however, detections on the Sawtooth NF were more consistent between early and late summer. These data will add important information to our state-level and regional understanding of this enigmatic species.

TROST, CHARLES H. **Primogeniture and competition in young male Black-billed Magpies.** *Professor Emeritus of Biological Sciences, Idaho State University, 225 N. Lincoln Ave., Pocatello, Idaho 83204; trostchuck@cableone.net.*

Competition for dominance begins with hatching order in a magpie nest, and their weight ranks continue through fledging. Young males subsequently develop a near-linear dominance relationship with non-sibling males, which is apparently correlated with their weight rank within their natal nest and date of fledging. I followed the dominance relations of six pairs of young brothers in a social winter roost through their first fall using small tail-mounted transmitters. These subtle effects of this sibling dominance affect spacing in foraging flocks, as well as subsequent territorial acquisition by some of the alpha males in their first spring, and dispersal by the beta males and the females.

TROST, CHARLES H. **A short history of field ornithology in Idaho.** *Professor Emeritus of Biological Sciences, Idaho State University, 225 N. Lincoln Ave., Pocatello, Idaho 83204; trostchuck@cableone.net.*

Our understanding of Idaho's ornithology began with people like Lewis, Clark, and Townsend, and subsequently their names were given to several of our birds. Roughly three dozen people have given us the bulk of our avian understanding. Names like C. Hart Merriam, Dale Avery, Pierce Brodtkorb, Malcom Jollie, Earl Larrison, and Thomas Burleigh are among them. Now with graduate degrees offered at all three of our major universities, information is blossoming. Major contributions are being made by the Idaho Bird Observatory out of Boise State University. Some of these insights, as well as further research needs, will be explored.

TROST, CHARLES, SHIRLEY STURTS, JAY CARLISLE, DARREN CLARK, LISA HARDY, HARRY KRUEGER, STACY PETERSON, CHARLES SWIFT, DAVE TROCHLELL, DOUG WARD, and CLIFF WEISSE. **History and recent activity of the Idaho Bird Records Committee.** *Idaho Bird Records Committee; chaetura@gmail.com.*

We will discuss the history and recent activity of the Idaho Bird Records Committee (IBRC), including recent additions to the state checklist, status changes within the checklist, and voting statistics for the past few years. The committee is comprised of seven voting members, two voting alternates, and two non-voting members. The committee utilizes a web-based voting system, and we will describe our use of the Internet to conduct IBRC business. Other topics will include bird identification challenges (such as gull hybrids), as well as some of the challenges facing a records committee in a state with a large land area, small population, and relatively few birders.

## Special Announcement

### **Western Field Ornithologist's Field Expedition to the Sierra de Alamos y Río Cuchujaqui Biosphere Reserve.**

Western Field Ornithologists in cooperation with the Sonoran Joint Venture Binational Bird Conservation Program is coordinating a working field expedition to the Biosphere Reserve near Alamos in southern Sonora, Mexico. The objective of this expedition is to collect data needed by the Reserve staff on the birds of the Biosphere Reserve using the expertise of the members of WFO. This field expedition will be similar to the July 2008 trip to the Sierra de La Laguna Biosphere Reserve that was reported on at the 2008 WFO Conference. Although Alamos is well-known to birders, areas away from the normal birder stops are little known and little quantitative or rigorous baseline data has been collected. The habitats in the Reserve include pine-oak, tropical deciduous forest, and riparian. Birds that are likely to be recorded are: Rufous-bellied Chachalaca, Mexican Parrotlet, Rose-throated Becard, White-striped Woodcreeper, Sinaloa and Happy Wrens, and Crescent-chested Warbler among others. Participants will follow specific methodologies for collecting data and should have some experience with the monitoring protocols we use. This expedition will be strenuous. We will meet in Alamos, have a half-day monitoring protocol training, and travel as a group to the Reserve, where we will camp for about five days. Our daily field work will require strenuous hiking from the base camp. Each participant will be responsible for their own transportation and expenses to and from Alamos and while we are in Alamos. For the expedition from Alamos to the Reserve and back to Alamos we will ask for a fee (likely ~\$400) from each participant to cover the mules and cowboys, transportation, permit fees, food and other expenses. At this time we have not decided on a date; it will likely be in late June or July, 2010 to optimize our data collection. If you are interested in participating, please contact Carol Beardmore at (602) 242-0524 ext. 248 or at Carol\_Beardmore@fws.gov.

## Presenter Biographies

**Carol Beardmore** is the science coordinator for the Sonoran Joint Venture, a bird conservation program of the U.S. Fish and Wildlife Service. She works with partners in northwest Mexico and the southwest U.S. monitoring bird populations, planning conservation projects, and assessing the status of the area's 750 bird species. Carol is on the board of WFO and works with its Field Trips Committee.

**Jennifer Blakesley** is a biometrician at Rocky Mountain Bird Observatory. Her research career has focused on avian-habitat relationships, demography of spotted owls, and population estimation. Jennifer received her Ph.D. in wildlife biology from Colorado State University in 2003.

**William Bousman** is the author of the *Breeding Bird Atlas of Santa Clara County, California* published in 2007, has published a paper in *Western Birds*, and presented papers at the annual meetings of the WFO. He was the president of the board of directors of the Coyote Creek Riparian Station (a banding station) in the 1990s.

**Jay Carlisle** received his B.S. from The Evergreen State College in 1995 and his Ph.D. in biology from the University of South Dakota in 2005. He has worked with the Idaho Bird Observatory for 13 years and helped establish IBO's long-term studies of songbird and owl migration. Research interests include stopover ecology, habitat needs, and conservation of migratory landbirds.

**Ted Floyd** is the editor of *Birding*, senior author of the *Atlas of the Breeding Birds of Nevada* (University of Nevada Press, 2007), and author of the *Smithsonian Field Guide to the Birds of North America* (HarperCollins, 2008). Ted served two terms on the WFO board, and he is an instructor with the ABA's Institute for Field Ornithology.

**Daniel Froehlich** is completing a Ph.D. in biology at the University of Washington. A master bander and NABC-certified banding trainer, he coordinated banding programs for the Institute for Bird Populations. He has banded birds around the world and is cofounder of the Puget Sound Bird Observatory (PSBO) in Washington as well as a conservation center in the Peruvian Amazon (CECCOT).

**Robert Gill** is project leader for shorebird research with the U.S. Geological Survey's Alaska Science Center, and has been leading a research team using satellite telemetry to track long-distance movements of Pacific Basin shorebirds. To date, the team has followed populations of Bristle-thighed Curlews, Long-billed Curlews, Bar-tailed Godwits, and Marbled Godwits.

**Kelly Hazen** has been a serious amateur birder for over 40 years and for the past 16 years has lived in Harney County, the home of Malheur Wildlife Refuge. She began reading neck bands 11 years ago when a friend said "If you see a snow goose with a red neck collar, that means it was banded on Wrangle Island Russia."

**Osvel Hinojosa-Huerta** is the director of the Water and Wetlands Program for Pronatura Noroeste. He obtained his Ph.D. in wildlife ecology from the University of Arizona, and has been working on conservation and research projects in Mexico since 1997. Recently, he has been leading the restoration of the Colorado River delta, including the implementation of strategies to re-establish river flows.

**Gregory Kaltenecker** received his M.S. in raptor biology from Boise State University. He co-founded the Idaho Bird Observatory in 1993 when he and colleagues discovered that the Boise Ridge is a significant raptor migration concentration point and landbird stopover site. Greg's research passion is bird migration, and his lifelong pursuit is to educate the public about birds, science, and conservation.

**David Krueper** is the assistant nongame bird coordinator for Region 2 of the U.S. Fish and Wildlife Service. He has been an avian biologist for 28 years, having also worked for the U.S. Forest Service in Alaska and the Bureau of Land Management in Arizona. He has birded extensively in the New World tropics and has a particular interest in the avifauna of northwestern Mexico.

**Mary Malec** has volunteered as a hawkwatcher with Golden Gate Raptor Observatory since 2005. She continues to monitor this historic site as well as other raptor nesting sites for Santa Cruz Predatory Bird Research Group, East Bay Regional Parks District and Ventana Wilderness Society.

**Dana Owen** earned a B.A. in environmental studies and politics from Ohio Wesleyan University, where she moderated an environmentally-themed house, and headed the Residential Life Committee and Environment and Wildlife Club. She studied wildlife and worked as a naturalist guide in Ecuador and the Galapagos, and interned at Hawk Mountain, prior to entering the raptor biology program at Boise State University.

**Erin Strasser** is a master's student at Boise State University. She currently investigates interactions between human disturbance, the physiological stress response, and reproductive success in American Kestrels. Erin received her B.S. from Northern Arizona University where she studied Pinyon Jay dominance hierarchies under Dr. Russ Balda. She has worked with birds in Australia, Belize, and the western United States

**Matt Stuber** received his B.S. in biology from the University of Wisconsin – La Crosse, and is currently finishing his M.S. in raptor biology at Boise State University. He has several years of raptor research experience and has worked with the Idaho Bird Observatory for three years both trapping raptors during fall migration and conducting Flammulated Owl surveys.

**Charles Swift** has been a member of the Idaho Bird Records Committee since 2006 and the Idaho Christmas Bird Count editor since 2003. He is a proponent of involving birders in science through projects such as the CBC and eBird. Charles has been birding for 35 years and lives in Moscow, Idaho where he explores the avifauna of the Palouse and surrounding mountains.

**Chuck Trost** arrived at Idaho State University in 1968 after earning his Ph.D. from UCLA. To stop the killing of fish-eating birds at hatcheries, he started the Portneuf Valley Audubon Society. Chuck also formed and chairs the

Idaho Bird Records Committee, which maintains the official Idaho bird checklist. His main research focus was a 20-year study of the behavior of Black-billed Magpies.

## Panel Information

**Current Trends and Future Directions in Western Field Ornithology Panel.** *Friday, 11 September. 11:00 a.m. – 12:00 p.m.* In a moderated-panel format, WFO members will discuss recent and projected future changes in the ways in which descriptive field ornithology is practiced in western North America. Discussion will include consideration of such matters as "hot" research topics, the role (if any) of the print media, and the total dominance of the internet. **Ted Floyd** (see Presenter Biographies) will moderate.

**Expert Panel: Photos.** *Friday, 11 September. 4:00–5:30 p.m.* In this ever popular staple of WFO meetings, a panel of identification experts is confronted with photographs of "mystery birds". Panelists will analyze each photograph and discuss relevant identification issues. Can they be stumped? Panel moderator is **Ed Harper**.

**Ed Harper** is one of the finest birders and bird photographers in the country, and his programs are always highly informative and full of humor. An educator at heart, he retired as a teacher from American River College in Sacramento. He now spends almost every free moment in the field and leads wildlife tours all over of the world with his wife Susan.

**Expert Panel: Sounds.** *Saturday, 12 September. 4:00–5:30 p.m.* **Nathan Pieplow** returns again to challenge panel participants with the many amazing sounds that birds make. Is it a chorus of ten different species, each of which the panelists must identify, or is it simply a European Starling with an overdeveloped talent for mimicry? Come see what the experts think!

**Nathan Pieplow** is the editor of the quarterly journal *Colorado Birds*, and is an author of the *Colorado Birding Trail*. He has recorded bird sounds in 19 American and 12 Mexican states. He teaches writing at the University of Colorado in Boulder.

## Keynote Address

by Dr. Craig Benkman

**The South Hills Crossbill: Its origin and prospects.** *Saturday, 12 September. At the Banquet.* While on my way to the 1996 American Ornithologists' Union Meeting in Boise, I visited the South Hills in southern Idaho to collect lodgepole pine cones. To my surprise, the structure of the cones indicated that there would be a large-billed South Hills crossbill coevolving with lodgepole pine. After further study, we have found that this crossbill is not only coevolving with lodgepole pine but it has become reproductively isolated from other Red Crossbills that visit and breed in the South Hills. I will discuss the ecology and evolution of the South Hills and other crossbills, and the processes contributing to reproductive isolation (speciation) between call types of Red Crossbills. We have learned that coevolutionary arms races between crossbills and conifers are an important process contributing to crossbill diversity. Speciation may also occur readily in crossbills. However so might extinction. Recent evidence indicates the South Hills Crossbill may be one of the most endangered bird species in North America. Soon the only sign of a South Hills Crossbill may be in the cones.

**Dr. Craig Benkman** is an evolutionary ecologist whose recent research has focused on the ecology and evolution of interactions between seed-eating birds (crossbills and nutcrackers) and conifers. He received a B.A. from UC Berkeley, a M.S. from Northern Arizona University, and a Ph.D. from State University of New York at Albany. He was a post-doctoral fellow at Princeton University and at the University of British Columbia before becoming an Assistant Professor of Biology at New Mexico State University. He was on the faculty at New Mexico State University for 11 years, and moved to the University of Wyoming in 1994 to become a Professor in the Department of Zoology and Physiology and the Robert B. Berry Distinguished Chair in Ecology. He is currently the Editor of the Natural History Miscellany section of *The American Naturalist* and during the past seven years has served on the editorial boards of the journals *Evolution*, *The American Naturalist* and *Functional Ecology*. Additional details can be found in the CV posted on his website at <http://www.uwyo.edu/benkman/>.