36th Annual Conference of the Western Field Ornithologists

Sierra Vista, AZ • 17–21 August 2011

Science Program

19 and 20 August 2011 • Windemere Hotel and Conference Center

Schedule of Presentations

Friday, 19 August 2011

Afternoon Session – Ballroom

12:15–12:20. Welcoming Remarks by WFO President Dave Shuford.

12:20–12:50. Opening Presentation by Dan Fischer. **Early border naturalists.** (See Featured Speakers)

12:50–1:10. ARNETT, JOHN E., TROY CORMAN, EDWIN JUAREZ, CAROL J. BEARDMORE, STEPHANIE PREVOST, VASHTI (TICE) SUPPLEE, and CHRIS MCCREEDY. **Developing a coordinated breeding bird monitoring strategy for the Sonoran Desert in Arizona.**

1: 10–1:30. LEIST, AMY and DAWN FLETCHER**. Testing assumptions of an avian double-sampling area search method on riparian birds of the Lower Colorado River.**

1:30–1:50. MCLEOD, MARY ANNE and ANNE PELLEGRINI. **Effects of tamarisk beetles on Southwestern Willow Flycatchers and their habitats.**

1:50–2:00. **Break.**

2:00–2:20. KELLERMANN, JHERIME, DON FALK, and CHARLES VAN RIPER III. **Migratory stopover habitat and landscape fire mosaics in Arizona's Madrean Archipelago.**

2:20–2:40. DORR, SAMANTHA, TAD THEIMER, MATTHEW JOHNSON, and JENNIFER HOLMES. **Riparian raptor surveys and Gray Hawk productivity and habitat assessment along the San Pedro River, Arizona.**

2:40–3:00. MENESES, R. MARÍA DEL ROCÍO and SUSAN M. WETHINGTON. **Comparison of the nesting ecology of two species of hummingbirds: *Archilochus alexandri* (Black-chinned) and *Cynanthus latirostris* (Broad-billed) in a riparian forest at Patagonia Lake State Park in southeastern Arizona.**

3:00–3:20. WETHINGTON, SUSAN. **Addressing hummingbird conservation issues.**

3:20–3:40. GILL, ROBERT, THEUNIS PIERSMA, and NILS WARNOCK. **The Yellow Sea as a functional ecosystem: Why the North American conservation community should be concerned and involved.**

3:40–4:00. **Break.**

4:00–5:30. Photo Identification: Expert Panel, moderator Ed Harper.

Saturday, 20 August 2011

Afternoon Session – Ballroom

12:15–12:20. Welcoming Remarks by WFO President Dave Shuford.

12:20–12:50. Opening Presentation by Troy Corman. **Recent seasonal status and distribution changes of Arizona birds.** (See Featured Speakers)

12:50–1:10. WILLIAMS, SARTOR O. III. **New Mexico list update: 538 and counting.**

1:10–1:30. GARRETT, KIMBALL L. and, JOSEPH MORLAN. **Update from the California Bird Records Committee.**

1:30–1:50. PYLE, PETER. **Status and identification of Pacific and American Golden-Plovers in California**.

1:50–2:00. **Break.**

2:00–2:20. NELSON, KRISTIE and PETER PYLE. **Crested Caracaras (*Caracara cheriway*) in California: How many individuals?**

2:20–2:40. KYLE, KEILLER and RODD KELSEY. **Results of the 2011 Tricolored Blackbird statewide survey and conservation plans for a declining California species.**

2:40–3:00. SHUFORD, W. DAVID, GARY W. PAGE, GARY M. LANGHAM, and CATHERINE HICKEY. **Status and habitat use of Long-billed Curlews in California's Central Valley in fall.**

3:00–3:20. GILL, ROBERT, COLLEEN HANDEL, ÅKE LINDSTRÖM, and MARCEL KLAASSEN. **Wayward youth: The occurrence and migration of juvenile Sharp-tailed Sandpipers.**

3:20–3:40. DUNN, JON L., DANIEL D. GIBSON, GARY H. ROSENBERG, MARSHALL J. ILIFF, and KEVIN J. ZIMMER. **Geographic variation in the White-winged Scoter (*Melanitta fusca*) with an emphasis on the distribution and identification of the Asian subspecies, *M. f. stejnegeri.***

3:40–4:00. **Break.**

4:00–5:30. Sound Identification: Team Challenge, moderator Nathan Pieplow.

Banquet and Evening Program – Ballroom

6:30–9:30. Keynote Address by Peter Pyle. **Molt-migrant birds in Arizona, Sonora, and Northern Sinaloa.** (See Featured Speakers)

Featured Speakers

Science Sessions Day 1 – Opening Presentation
Friday, 19 August. 12:15 p.m. Ballroom.

FISCHER, DAN L. **Early border naturalists.** *6014 N. Panorama Park Drive, Tucson, AZ 85704.*

This brief talk will be about those early naturalists and their exciting avian experiences in the border regions before 1900. Included will be ornithologists who focused on and sometimes discovered many of the birds in the border regions of Arizona, New Mexico and Mexico. It will also cover some of the species that were once more abundant, but are now scarce or extirpated from the region.

Dan L. Fischer's close association with the borderland region began after he arrived as a young boy with his parents in Yuma, Arizona, in 1937. Although his professional career was that of an engineer in industry, his preoccupation, or second vocation, has been related to natural history subjects with a strong emphasis on birds. For over fifty years, Dan has traveled the borderlands, pursuing and photographing birds, while retracing the journeys of many early explorers and naturalists. He expanded these interests to become a serious student of the historical aspects of ornithology during the last several years. He reviewed several hundred journal entries, manuscripts, and publications on the topic, and a book on this long-neglected subject finally took form: *Early Southwest Ornithologists – 1528 – 1900*, published by the University of Arizona Press (2001). Dan also contributed "A Brief History of Arizona Ornithology" and provided over fifty images to the *Arizona Breeding Bird Atlas*, published by the University of New Mexico Press in 2005. Dan is currently working on another book.

Science Sessions Day 2 – Opening Presentation
Saturday, 20 August. 12:15 p.m. Ballroom.

CORMAN, TROY E. **Recent seasonal status and distribution changes of Arizona birds.** *3918 E. Laurel Ln., Phoenix, AZ 85028; aplomado@cox.net.*

Bird populations are in constant flux which is often linked to the changing environment and other factors. This brief presentation will highlight the steady (and sometimes rapid) changes in the distribution and seasonal status of Arizona birds during the past decade or so. Focus will primarily be on birds in southern Arizona, but will include other regions of the state as well. While a warming climate may influence some of these population shifts, other potential factors are more challenging to identify.

Troy Corman was raised in rural south-central Pennsylvania and moved to Arizona in 1980 to pursue higher education and explore the natural wonders of the Southwest. During the mid- and late 1980s he conducted avian and herpetological inventories on the upper San Pedro River for the Bureau of Land Management. This unique area would later become the well-known San Pedro Riparian National Conservation Area, a 40 mi. section of the valley extending from St. David south to the Mexico border. He has worked for the Nongame Branch of the Arizona Game and Fish Department since 1990, primarily conducting bird surveys for species of concern, and currently coordinates many long-term, statewide bird monitoring projects with various federal, state and private entities. With a keen interest in the natural history and distribution of birds, Troy coordinated the Arizona Breeding Bird Atlas project (1993-2000) from its inception. He was also a primary author and the senior editor of the *Arizona Breeding Bird Atlas*, published by the University of New Mexico Press (2005). Following the atlas, Troy worked with a strong core group to establish the Arizona Field Ornithologists (AZFO), for which he is the current president. This progressive state ornithological organization was the first to establish the concept of field expeditions, where most

planned outings are to little known areas where knowledge of the seasonal status and distribution of birds is poor or lacking. Under Troy's leadership, AZFO also recently began using the talents of its members to conduct much needed avian surveys.

Keynote Address
Saturday, 20 August. 6:30 p.m. Ballroom.

PYLE, PETER. **Molt-migrant birds in Arizona, Sonora, and Northern Sinaloa.** *The Institute for Bird Populations, P.O. Box 1346, Point Reyes Station, CA 94956; ppyle@birdpop.org.*

Several western bird species are now known to undergo "molt-migrations" to the Mexican Monsoon Region of southeastern Arizona and northwestern Mexico, where they stop for six weeks or more in July-September to molt, before resuming migration to their wintering grounds in the Neotropics. Exactly where and when these species undergo molt remains almost completely unknown and, in fact, we don't even fully know which species are involved! Because molting is one of the most energy-demanding events within the annual cycle of adult birds, habitat loss and degradation of molt-migration-stopover areas have the potential to dramatically lower adult survival rates of these species. In the Sonora Joint Venture (SJV) area of southeastern Arizona and northwestern Mexico, high quality riparian, grassland, woodland, desert, or other specialized habitats needed to molt successfully are currently threatened by development, grazing, and other land-use and water-use practices. Peter will discuss the results of a study aimed at understanding the species involved, the phenology of molt-migration, different molt strategies and the conservation implications of the phenomenon.

Peter Pyle received a B.S. in biology from Swarthmore College in 1979 and has worked as an ornithologist and marine biologist. During the late 1970s and early 1980s he conducted field work in Hawaii, Micronesia, and Samoa. Since the early 1980's much of his research was conducted on birds and white sharks at the Farallon Islands, California. He has developed a special interest in bird molt and how it can be used to age birds, and has published many papers and taught many workshops on this subject in North and Latin America. He is a research associate both at the California Academy of Sciences, San Francisco, and the B.P. Bishop Museum, Honolulu. To date he has authored or co-authored over 150 papers in scientific journals. His *Identification Guide to North American Birds*, Parts 1 and 2 constitute an indispensible resource for banders and anyone trying to identify or age birds in the hand. He has also authored several popular articles and over 50 scientific reports, primarily for the Institute for Bird Populations, where he is currently a staff biologist.

Abstracts of Scientific Presentations

ARNETT, JOHN E.[1], TROY CORMAN[2], EDWIN JUAREZ[2], CAROL J. BEARDMORE[3], STEPHANIE PREVOST[1], VASHTI (TICE) SUPPLEE[4], and CHRIS MCCREEDY[5]. **Developing a coordinated breeding bird monitoring strategy for the Sonoran Desert in Arizona.** [1]*56th Range Management Office, 7224 N. 139th Dr., Luke Air Force Base, AZ 85309; John.Arnett@luke.af.mil.* [2]*AZ Bird Conservation Initiative, Nongame Branch, Arizona Game and Fish Department, 5000 W. Carefree Hwy., Phoenix, AZ 85086-5000*; *TCorman@azgfd.gov, EJuarez@azgfd.gov.* [3]*U.S. Fish and Wildlife Service, Sonoran Joint Venture, 2321 W. Royal Palm Rd., Ste. 103, Phoenix, AZ 85021*; *Carol_Beardmore@fws.gov.* [4]*Audubon Arizona, 3131 S. Central Ave., Phoenix, AZ 85040*; *tsupplee@audubon.org.* [5]*University of Arizona, School of Natural Resources, 236 N. 2nd Ave., Tucson, AZ 85705; cmccreedy@prbo.org.*

Through the Arizona Bird Conservation Initiative (ABCI), various partners have joined to promote the development of a unified breeding bird monitoring strategy that will elucidate the distribution, habitat use, and population trend of poorly-monitored species and species-at-risk of the Sonoran Desert. The strategy will build upon ABCI's successful riparian birds monitoring program, and will rely on an extensive network of field observers to conduct surveys across the region, starting in 2012. To assist in developing a suitable field protocol, several partners conducted field surveys to assess and compare survey methods in Sonoran Desert scrub and sparse creosote flats. Taking into consideration the region's lengthy breeding season, surveys were conducted from January to May, 2011, to allow for a range of species to be sampled. Surveys were completed using grids of 16 point-transects spaced at 250 m intervals, and double-sampling using area searches of 15, 20, and 25 hectares in size. Here we discuss the quantitative and qualitative comparisons of these methods.

DORR, SAMANTHA[1], TAD THEIMER[1], MATTHEW JOHNSON[2], and JENNIFER HOLMES[2]. **Riparian raptor surveys and Gray Hawk productivity and habitat assessment along the San Pedro River, Arizona.** [1]*Department of Biology, Northern Arizona University, Flagstaff, AZ 86011; Samantha.Dorr@hotmail.com, Tad.Theimer@nau.edu.* [2]*Colorado Plateau Research Station, Northern Arizona University, Flagstaff, AZ 86011; Matthew.Johnson@nau.edu, Jennifer.Holmes@nau.edu.*

We surveyed the San Pedro River and Aravaipa Canyon for breeding riparian raptors between April and August of 2010 and 2011. We identified 11 species utilizing these drainages during the breeding season. We confirmed eight species breeding, which included: Gray Hawk (*Buteo nitidus*), Common Black-Hawk (*Buteogallus anthracinus*), Cooper's Hawk (*Accipiter cooperii*), Sharp-shinned Hawk (*Accipiter striatus*), Zone-tailed Hawk (*Buteo albonotatus*), Swainson's Hawk (*Buteo swainsoni*), Red-tailed Hawk (*Buteo jamaicensis*) and American Kestrel (*Falco sparverius*). Species that were not confirmed included: Mississippi Kite (*Ictinia mississippiensis*), Golden Eagle (*Aquila chrysaetos*), and Peregrine Falcon (*Falco peregrinus*). In 2010, we monitored 34 Gray Hawk nests and found reproductive success averaging 1.47 fledglings per pair. This was slightly higher than a study conducted in 1995-1997 where Gray Hawk productivity was 1.32 fledglings per pair. We also found that areas along the San Pedro River unoccupied in 1995-1997 are currently occupied and successful breeding Gray Hawk habitat. We are also investigating a pattern in which early nest initiation dates are correlated with larger mesquite bosques, which could be used as an indicator for habitat quality with Gray Hawks. We will discuss these results for both the 2010 and 2011 field seasons.

DUNN, JON L.[1], DANIEL D. GIBSON[2], GARY H. ROSENBERG[3], MARSHALL J. ILIFF, and KEVIN J. ZIMMER[4]. **Geographic variation in the White-winged Scoter (*Melanitta fusca*) with an emphasis on the distribution and identification of the Asian subspecies, *M. f. stejnegeri*.** [1]*52 Nevada Street, Bishop, CA 93514*; *cerwa@earthlink.net.* [2]*P.O. Box 155, Ester, AK 99775; avesalaska@gmail.com.* [3]*P.O. Box 91856, Tucson, AZ*

85752-1856; ghrosenberg@comcast.net. [4]*Los Angeles County Museum of Natural History, 900 Exposition Blvd., Los Angeles, CA 90007; kjzimmer@charter.net.*

The White-winged Scoter is currently maintained as a polytypic holarctic species with three distinct subspecies, European *M. f. fusca* (often known by the English name Velvet Scoter), Asian *M. f. stejnegeri*, and North American *M. f. deglandi.* The first two subspecies occur casually at the eastern and western perimeters of North America, *M. f. fusca* in Greenland and *M. f. stejnegeri* in Alaska. This paper will discuss the identification (at this stage only adult males or advanced immature males are safely identifiable) and distribution of the three subspecies and the overarching taxonomic question that arises as to whether or not more than one species are involved.

GARRETT, KIMBALL L.[1] and JOSEPH MORLAN[2]. **Update from the California Bird Records Committee.** [1]*Section of Ornithology, Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, CA 90007*; *kgarrett@nhm.org.* [2]*1359 Solano Drive, Pacifica, CA 94044; jmorlan@ccsf.cc.ca.us.*

We provide an update of the activities of the California Bird Records Committee (CBRC) since the October 2010 Western Field Ornithologists Conference, including a discussion of recent additions to the California state list, the challenges of dealing with records of the recently-split Eastern Whip-poor-will and Winter Wren, and the current status of the record of a bean-goose (*Anser fabalis/serrirostris*) at the Salton Sea November 2010 to January 2011. We also discuss a selection of other important records recently reviewed by the Committee. Finally, we review the growing wealth of information and search capabilities included on the CBRC's web site.

GILL, ROBERT[1], COLLEEN HANDEL[1], ÅKE LINDSTRÖM[2], and MARCEL KLAASSEN[3]. **Wayward youth: The occurrence and migration of juvenile Sharp-tailed Sandpipers.** [1]*USGS Alaska Science Center, 4210 University Dr., Anchorage, AK 99508*; *robert_gill@usgs.gov.* [2]*Department of Biology, Animal Ecology, Lund University, S-223 62 Lund, Sweden.* [3]*Centre for Integrative Ecology, Deakin University, Waurn Ponds Campus, Geelong, Victoria 3217, Australia.*

Probably no other Old World shorebird occurs in North America as frequently as the Sharp-tailed Sandpiper (*Calidris acuminata*). A four-decade-long accumulation of information from western Alaska, with recent insights from satellite-tagged trans-Pacific migrant shorebirds, sets the migration pattern of *C. acuminata* alone among birds. Each autumn most juveniles appear to make a 1500–3400-km detour from their natal areas in central and eastern Siberia to western Alaska. Most Sharp-tailed Sandpipers remain in coastal habitats of western Alaska for about two months, putting on near-record amounts of fuel, before embarking on non-stop flights of between 7100 and 9800 km to nonbreeding grounds in Australasia. The widespread occurrence of *acuminata* in western Alaska, where they stage with hundreds of thousands of other shorebirds, including Dunlin (*C. alpina pacifica*), is best explained by a super-rich source of food and a paucity of predators in coastal habitats of Alaska in late autumn. The regular occurrence of juvenile Sharp-tailed Sandpipers farther south along the west coast of North America each autumn is due to an association with Dunlin and their migration to the West Coast.

GILL, ROBERT[1], THEUNIS PIERSMA[2], and NILS WARNOCK[3]. **The Yellow Sea as a functional ecosystem: Why the North American conservation community should be concerned and involved.** [1]*USGS Alaska Science Center, 4210 University Dr., Anchorage, AK 99508*; *robert_gill@usgs.gov.* [2]*Department of Marine Ecology, Royal Netherlands Institute for Sea Research, P.O. Box 59, 1790 AB Den Burg, Texel, and Animal Ecology Group, Centre for Ecological and Evolutionary Studies, University of Groningen, P.O. Box 11103, 9700 CC Groningen, The Netherlands.* [3]*Audubon Alaska, 441 West Fifth Ave., Ste. 300, Anchorage, AK 99501.*

The Yellow Sea as a functional ecosystem is in peril. China has lost 37% of its intertidal area since 1950 and the Republic of Korea 43% since 1917. These countries have formal plans to reclaim a further 45% and 34%, respectively. [Reclamation of similar scale is occurring in North Korea but accurate figures are lacking.] In a five-year period between 2006 and 2010 the government of China fostered the reclamation of an estimated 1,000 km^2 of

intertidal substrates each year to aid massive industrial development along the coast of the Yellow Sea. From a North American perspective this total exceeds the amount of all unvegetated intertidal habitats remaining in the contiguous United States. The avian resources being affected by this undertaking number in the tens of millions and link at least five continents during their migrations. North America has direct links to the Yellow Sea through species like Yellow-billed Loon, Bar-tailed Godwit, Dunlin, and Sharp-tailed Sandpiper and probably no other ecosystem on Earth supports more species of Globally Threatened birds than does the Yellow Sea. Included among the 25 listed taxa are the critically endangered Spoon-billed Sandpiper, Nordmann's Greenshank, Black-faced Spoonbill, Red-crowned Crane, Oriental Stork, and Chinese Egret. For over a decade, regional conservation organizations and ornithological groups within the East Asia-Australasian Flyway have highlighted the environmental issues occurring about the Yellow Sea. A new, multi-faceted effort involving coordinated science, outreach and education, enforcement of international agreements, and diplomatic intervention will hopefully result in effective conservation actions.

KELLERMANN, JHERIME[1], DON FALK[2], and CHARLES VAN RIPER III[3]. **Migratory stopover habitat and landscape fire mosaics in Arizona's Madrean Archipelago.** [1]*School of Natural Resources and USGS/SBSC/Sonoran Desert Research Station, 1110 E. South Campus Dr. Room 123, University of Arizona, Tucson, AZ 85721; jlkellermann@gmail.com.* [2]*School of Natural Resources & Environment & Laboratory of Tree Ring Research, 325 Biological Sciences East, University of Arizona, Tucson, AZ 85721.* [3]*School of Natural Resources and USGS/SBSC/Sonoran Desert Research Station, 1110 E. South Campus Dr. Room 123, University of Arizona, Tucson, AZ 85721.*

Migratory stopover sites are critical components of annual survival and are a priority for conservation. Climate change is impacting the phenology and distribution of birds and vital food resources. Additionally, El Niño-Southern Oscillation events that strongly influence Arizona's climate are expected to change in frequency and intensity, further affecting ecosystem dynamics and processes, especially fire regimes. Understanding the relationships between stopover habitat selection and fire at landscape scales across multiple vegetation communities will provide critical information for the management and conservation of migratory birds. We performed weekly point count surveys from 10 March-20 May, 2009-2011, in three mountain ranges of southeast Arizona. We defined four broad landcover types: mesquite, oak-juniper woodland, pine-oak, & montane conifer. We examined relationships of mean weekly migrant abundance with time since fire (TSF), landcover, and fire severity using linear mixed-effects models and used regression trees to develop predictive habitat use maps. Migrant abundance was significantly greater in montane conifer than other forest types and in moderate burn severity. There was a significant interaction between landcover and TSF, whereby migrant abundance was significantly higher in 60-90 year-old burns in pine-oak forest. Perhaps of greatest importance is that migrants selected pine-oak and montane conifer forests and moderate and high burn severity areas disproportionally to their spatial availability. Although moderate and high severity burns are selected by migrating birds, they may also threaten persistence of preferred vegetation communities. Climate change could increase the severity, frequency, and extent of fires in arid lands further altering high elevation forests and increasing the reduction and isolation of critical habitats that link the western cordillera of Mexico and the US for hundreds of animal and plant species. Future management and research should focus on spatial patterns of the number, size, age, burn severity, and arrangement of fire mosaics in multiple habitat types.

KYLE, KEILLER and RODD KELSEY. **Results of the 2011 Tricolored Blackbird statewide survey and conservation plans for a declining California species.** *Audubon California, 765 University Ave. Sacramento, CA 95825; kkyle@audubon.org, rkelsey@audubon.org.*

Tricolored Blackbirds (*Agelaius tricolor*) are nearly endemic to California with over 99% of the population residing in the state. Over the past 80 years, over 90% of the population has disappeared from the California

landscape prompting considerable conservation concern. In response to this dramatic population decline Audubon California and government agencies have been organizing triennial statewide surveys to estimate the population for the species since 1994. The most recent statewide survey organized by Audubon California took place in April 2011, and with the help of over 100 volunteer surveyors conducting driving transects and colony site searches, the California population was estimated to be 260,272. This represents a 34% decrease in population size since the last survey in 2008 and a drop from roughly 3 million birds in 1937. Moreover, 89% of the population nested in the San Joaquin Valley with over 65% of the population nesting in just six colonies. The conservation implications of larger, consolidated colonies is significant given that most of the largest colonies were located in agricultural fields timed to be harvested in the middle of the Tricolor breeding season. Details of the survey results will be discussed along with current conservation efforts to secure habitat and a more productive future for this unique California bird.

LEIST, AMY and DAWN FLETCHER. **Testing assumptions of an avian double-sampling area search method on riparian birds of the Lower Colorado River.** *Great Basin Bird Observatory, 1755 E. Plumb Ln., Ste. 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 will allow us to estimate population density and long-term population trends for riparian birds. With the double sampling method, we survey a set of plots rapidly and then survey a subset of those plots intensively. 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 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. Additionally, the data collected during this project will be used to estimate error rates for intensive area searches and determine if there are differences in error rates among species. For our talk, we will report the findings from the 2011 field season. We will suggest improvements to the intensive area search survey methods and request feedback on our methods.

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.

MCLEOD, MARY ANNE and ANNE PELLEGRINI. **Effects of tamarisk beetles on Southwestern Willow Flycatchers and their habitats.** *SWCA Environmental Consultants, 114 N. San Francisco St., Ste. 100, Flagstaff, AZ 86001; mmcleod@swca.com, apellegrini@swca.com.*

The tamarisk leaf beetle (*Diorhabda* spp.) was introduced in the desert southwest in 2001 as a biocontrol agent for the non-native salt cedar (*Tamarix* spp.), a plant which dominates much of southwestern riparian habitat. Since its release, the beetle has increased its range faster than expected and now defoliates salt-cedar annually along extensive river reaches. Some beetle-caused mortality of salt-cedar has been observed. Defoliation occurs starting in June and overlaps with the nesting cycles of various bird species, including the Southwestern Willow Flycatcher (*Empidonax traillii extimus*), an endangered riparian obligate. Beetle-caused defoliation first occurred in a flycatcher breeding site in 2008, and beetles and flycatchers now overlap at several flycatcher sites along the Virgin River in southern Utah and Nevada. Breeding populations of Southwestern Willow Flycatchers have been monitored with surveys, nest monitoring, and color-banding along the Virgin River since 1998. Here we present some initial observations of flycatcher response to beetle defoliation, the potential impacts of the beetles on flycatcher populations, and potential actions to mitigate any impacts.

MENESES, R. MARÍA DEL ROCÍO and SUSAN M. WETHINGTON. **Comparison of the nesting ecology of two species of hummingbirds: *Archilochus alexandri* (Black-chinned) and *Cynanthus latirostris* (Broad-billed) in a riparian forest at Patagonia Lake State Park in southeastern Arizona.** *Hummingbird Monitoring Network, P.O. Box 115, Patagonia, AZ 85624; mr_biol@hotmail.com, swething@dakotacom.net.*

The reproductive biology of many hummingbird species remains poorly studied and for some, existing information about the nesting ecology is lacking. The conservation of these birds depends on an adequate knowledge of reproductive biology, distribution, and natural history. The aim of this study was to compare aspects of the nesting ecology of two hummingbird species: *Archilochus alexandri* and *Cynanthus latirostris*. The observations were made at Patagonia Lake State Park southwest of Tucson, Arizona. We found a total of 180 nests of both species between April and July 2009. For each of the nests, data on 11 habitat use variables and 6 variables for general description of the nest were taken. We found differences in habitat use and reproductive biology between the species. *A. alexandri* used taller trees with greater leaf cover and built nests higher in the vegetation than *C. latirostris*. We observed similar nesting and egg-laying peaks for both species. We also found that both species show similar reproductive success of approximately 20%.

NELSON, KRISTIE[1] and PETER PYLE[2]. **Crested Caracaras (*Caracara cheriway*) in California: How many individuals?** *[1]P.O. Box 402, Lee Vining, CA 93541; knelson@prbo.org. [2]The Institute for Bird Populations, P.O. Box 1346, Point Reyes Station, CA 94956; ppyle@birdpop.org.*

Crested Caracaras (*Caracara cheriway*) have long posed a struggle for the California Bird Records Committee (CBRC). Though periodically documented in California as far back as 1837, early records lack seasonal or regional distribution patterns expected for naturally occurring vagrants. Suspicion these birds were escaped or released captives kept Crested Caracara on the CBRC's Supplemental List (containing native species whose identity is established but natural origins were questionable) until 2007. By then the evidence suggested that wild Crested Caracaras do occasionally wander far north of their typical range and the species was added to the CBRC's Main List of species occurring naturally in California. Through February 2011, the CBRC had accepted 31 Crested Caracara records, but the number of individual birds involved had not been thoroughly vetted. With few overlapping dates and a dominance of coastal occurrence, it has been suspected that a smaller number of individuals account for many of California's records. For example, one uniquely marked individual journeyed north approximately 500 km in 2007 and was detected in Los Angeles, Santa Barbara, and Monterey Counties. To assess how many caracaras may have occurred in California and to document their movement patterns, we examined photographs and written documentation for 60 date/location-specific observations of Crested Caracaras in California and Oregon. We considered date, location, age, molt pattern, worn/broken remiges, and cere shape to present several scenarios suggesting that as few as 9-12 birds may account for the 60 observations. One scenario involves a single bird in nearly 30 observations during 2001-2011 as it moved up and down the coast from Riverside County, California, to coastal southern Oregon. Though many records lacked conclusive individual identification, several caracaras appeared to travel north along the coast, while 1-3 others remained fairly sedentary.

PYLE, PETER. **Status and identification of Pacific and American Golden-Plovers in California.** *The Institute for Bird Populations, P.O. Box 1346, Point Reyes Station, CA 94956; ppyle@birdpop.org.*

Two taxa of golden-plovers in North America were split by the AOU in 1993 into Pacific (*Pluvialis fulva*) and American (*P. dominica*) golden-plovers. Both species occur in California, but the status of each since the split has been clouded by identification difficulties, complicated by the many diagnosable plumages shown by each species, as in turn affected by the 2-4 molts that can occur per cycle and sex-specific differences in certain plumages. Pacific Golden-Plover is well documented to winter in small numbers along the California coast but the status of American Golden-Plovers (which winter in South America) has been less clear. As such, I proposed in 2004 the addition of American Golden-Plover to the list of species reviewed by the California Bird Records Committee (CBRC). Seventy

records were reviewed and 59 were accepted through 2009, when it was removed from the list. Here I summarize the status and identification of each species in California based on specimens, the literature, and information now contained in the CBRC archives. Identification is reviewed in consideration of age, sex, molts, and plumages of each species.

SHUFORD, W. DAVID[1], GARY W. PAGE[1], GARY M. LANGHAM[2], and CATHERINE HICKEY[1]. **Status and habitat use of Long-billed Curlews in California's Central Valley in fall.** [1]*PRBO Conservation Science, 3820 Cypress Dr. #11, Petaluma, CA 94954; dshuford@prbo.org.* [2]*Audubon California, 765 University Ave., Sacramento, CA 95825; glangham@audubon.org.*

The Long-billed Curlew (*Numenius americanus*) – a large shorebird of conservation concern at the continental level – is a migrant and winter resident in California's Central Valley, where it concentrates primarily in agricultural lands. Despite recent estimates of the size of the curlew's North American breeding population, little is known about its abundance and habitat needs at migratory stopovers and wintering areas. To help fill these gaps, we coordinated three broad-scale surveys of curlews in the central and southern portions of the Central Valley in fall and winter in 2007-2008 and a more comprehensive survey of the entire Central Valley in August 2009. On the latter survey, we recorded 20,775 curlews in 197 flocks. In all years in autumn, the vast majority of curlews were found in irrigated croplands, primarily alfalfa and irrigated pastures, during this otherwise arid season. More frequent surveys at the local level in Solano County and more recent radio-telemetry studies indicate that some curlews shift their distribution from fall to winter. More work on fine-scale habitat preferences and movements in the Central Valley is needed to aid in the conservation of this at-risk shorebird.

WETHINGTON, SUSAN. **Addressing hummingbird conservation issues.** *Hummingbird Monitoring Network, P.O. Box 115, Patagonia, AZ 85624; swething@dakotacom.net*.

The Hummingbird Monitoring Network (HMN) is a science-based, project-driven, nonprofit organization dedicated to the conservation of hummingbird diversity and abundance throughout the Americas. Our work is focused on what hummingbirds need to survive, successfully reproduce, and maintain thriving populations by addressing their conservation issues through science-based monitoring, research, habitat restoration/ enhancement, and education/outreach projects. In this paper, I will describe key conservation issues facing hummingbirds, some of the projects that are being conducted to address these issues, and results from HMN's monitoring work in southeastern Arizona.

WILLIAMS, SARTOR O. III. **New Mexico list update: 538 and counting.** *Museum of Southwestern Biology, University of New Mexico, Albuquerque, NM 87131; sunbittern@earthlink.net.*

The New Mexico Bird Records Committee was organized in 1992, began reviewing records shortly thereafter, and has operated continuously since then. The committee's goals, organization, rules, methods, and membership are similar to most other state organizations; initial species acceptance, however, requires unequivocal specimen, photographic, or audio recording evidence. An update on the status of the New Mexico list was presented to the 28th Western Field Ornithologists Conference in 2003, comparing the 502 then-verified species with earlier state compendia, discussing various facets of the recent additions, and making predictions for possible future additions. In the eight years since then, 36 additional species have been accepted, for an impressive rate of over four species per year, and bringing the state list to 538 species. These recent additions will be discussed, and bold (or inane) predictions for future additions will be offered.

Presenter Biographies

John Arnett holds B.S. and M.S. degrees in wildlife ecology from the University of Florida, and has studied a variety of taxa in North and South America. He is currently a wildlife biologist based at Luke Air Force Base in Phoenix, AZ, a representative in the Department of Defense PIF working group, and Secretary of Sonoran Audubon Society.

Samantha Dorr is a graduate student at Northern Arizona University conducting research on Gray Hawk habitat quality and changes in Gray Hawk population dynamics in the San Pedro Riparian National Conservation Area in southeastern Arizona.

Jon Dunn, a Western Field Ornithologists board member, is a tour leader for Wings. He has been chief consultant (recently with Jonathan Alderfer) on all editions of *National Geographic's Birds of North America*. He has authored or co-authored numerous articles and several books on birds. He is a member of the AOU's North American Checklist Committee, the ABA Checklist Committee, and the California Bird Records Committee.

Dawn Fletcher has been a biologist with Great Basin Bird Observatory since March of 2011. Dawn received a B.S. in biology from Ohio State University and an M.S. in biological sciences from the University of Nevada, Las Vegas. Over the last eight years she has worked on bird research projects throughout the southwest.

Kimball Garrett, a Western Field Ornithologists board member and past president, has been a member of the California Bird Records Committee since 1978.

Daniel D. Gibson has studied the status, distribution, abundance, and geographic variation of Alaska's birds for over 45 years. Long associated with the University of Alaska Museum, at Fairbanks, he retired in 2007 as the bird collection manager and continues as a research associate. He has published numerous scientific papers, as well as *Birds of the Aleutian Islands, Alaska* with G. Vernon Byrd.

Bob 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 and geolocator technology to track long-distance movements of shorebirds. To date, the team has followed populations of Bristle-thighed Curlews, Long-billed Curlews, Whimbrels, and the four species of godwits.

Jherime Kellermann is currently a doctoral candidate at the University of Arizona. He attained a master's degree in 2007 from Humboldt State University in Arcata, CA studying the ecological and economic services of birds on Jamaican coffee farms. He has 16 years experience conducting ornithological research throughout western North America, Hawai'i, and the Caribbean with federal, state, and private organizations.

Keiller Kyle is the Tricolored Blackbird Conservation Coordinator for Audubon California and works extensively on efforts to protect and conserve the species across California. He received his master's degree in ecology from Purdue University in 2008 and previously spent several years conducting research in Hawaii, California, Venezuela, and Costa Rica. He now works and resides in Sacramento, CA.

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 a

M.S. in wildlife from Humboldt State University and has enjoyed field jobs in Washington, Hawaii, Alaska, California, Idaho, South Carolina, and Chile.

Mary Anne McLeod is a senior scientist with SWCA Environmental Consultants where she currently manages a study of Southwestern Willow Flycatchers along the Lower Colorado River and its tributaries. She has worked on this study for the last nine years and now serves on the Southwestern Willow Flycatcher advisory committee for the Tamarisk Coalition.

María del Rocío Meneses is a graduate of Benemérita Universidad Autónoma de Puebla in biology and a prospective graduate student at the School of Natural Resources, University of Arizona. She is a field biologist interested in hummingbird breeding biology and has been collaborating with the Hummingbird Monitoring Network (HMN) as an intern for three years.

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

Kristie Nelson works with PRBO Conservation Science in Lee Vining, CA. She has conducted ornithological field work throughout California, and manages PRBO's long-term research on California Gulls at Mono Lake. A life-long birder, she has served on the California Bird Records Committee since 2003.

Anne Pellegrini is a biologist with SWCA Environmental Consultants where she acts as project coordinator on a study of Southwestern Willow Flycatchers along the Lower Colorado River and its tributaries. She has worked on this study for three years.

Peter Pyle – see biography under Featured Speakers.

Dave Shuford is a long-time biologist at PRBO Conservation Science and currently serves as president of Western Field Ornithologists. Dave's research has focused on the status, distribution, and broad-scale habitats needs of shorebirds and waterbirds in California and throughout the West, as well as at-risk species and breeding bird atlasing in California.

Susan Wethington is executive director of the Hummingbird Monitoring Network (HMN) and adjunct associate professor in the School of Natural Resources, University of Arizona. She has a Ph.D. in ecology and evolutionary biology from University of Arizona. Recently, she partnered with the U.S. Forest Service to develop the Western Hummingbird Partnership, a new program in the USFS Wings across the Americas program.

Sandy Williams is New Mexico editor for *North American Birds*, editor of *NMOS Field Notes*, and secretary of the NMBRC. He was responsible for non-game and endangered birds for NM Game and Fish for two decades. He holds degrees from LSU (B.S., M.S.) and Colorado State (Ph.D.) and is currently a research associate at UNM's Museum of Southwestern Biology.

Identification Challenges

Photos: Expert Panel. *Friday, 19 August. 4:00–5:30 p.m. Ballroom.* Always a favorite and ever popular staple at WFO meetings, a distinguished panel of identification experts will examine and comment on photographs of "mystery" birds. Panelists will analyze photographs of birds and discuss the relevant aspects of each bird and its particular characteristics that lead to an identification. The intent is to provide a real learning experience for audience and panel alike. Panel moderator is **Ed Harper**.

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

Sounds: Team Challenge. *Saturday, 20 August. 4:00–5:30 p.m. Ballroom.* **Nathan Pieplow** returns 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!

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.

*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.