



**NEW MEXICO
ORNITHOLOGICAL SOCIETY
51st ANNUAL MEETING**

**26 & 27 April 2013
Silver City, New Mexico**

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ORNITHOLOGICAL
SOCIETY
51st ANNUAL MEETING**

**26 & 27 APRIL 2013
WESTERN NEW MEXICO UNIVERSITY
SILVER CITY, NEW MEXICO**

AGENDA

APRIL 26, 2013

**7:00 EVENING PRESENTATION - ENDANGERED SPECIES
CONSERVATION: IS HABITAT PRESERVATION THE CENTRAL
ISSUE?
NOEL SNYDER
LOCATION: GLOBAL RESOURCE CENTER, WNMU**

APRIL 27, 2013

7:30-8:30 REGISTRATION

8:30-9:30 NMOS BUSINESS MEETING

9:30 – 10:00 BREAK

**10:00-10:15 NMOS GREETING
DAVE KRUEPER (PRESIDENT)
ANNOUNCEMENTS**

**10:15-12:00 NMOS GENERAL SCIENCE SESSION
MORNING
MARTHA DESMOND (NMSU) SESSION CHAIR**

- 10:15-10:35 **HISTORY AND STATUS OF WORTHEN'S SPARROW IN NEW MEXICO**
S.O. WILLIAMS III
- 10:35-10:55 **UPDATED STATUS OF SONG SPARROW (*MELOSPIZA MELODIA*) IN THE GILA RIVER VALLEY**
C.M. RUSTAY AND D.J.GRIFFIN
- 10:55-11:15 **UPDATED STATUS AND CONSERVATION NEEDS OF BENDIRE'S THRASHER**
D.J. KRUEPER
- 11:15-11:35 **THE ROLE OF WINTERING FRUGIVORES IN THE DISPERSAL ECOLOGY OF ONE-SEED JUNIPER IN NORTHEASTERN NEW MEXICO RANGELANDS**
W. JAREMKO-WRIGHT
- 11:35- 11:55 **A "NEW" MIGRANT TRAP IN SAN JUAN COUNTY, NEW MEXICO**
T. REEVES
- 12:00 -1:30 **LUNCH**
- 1:30-5:00 **NMOS GENERAL SCIENCE SESSION AFTERNOON**
MARTHA DESMOND (NMSU) SESSION CHAIR
- 1:30-1:50 **PROJECT BLACK HAWK YEAR 1 RESULTS: BREEDING SEASON HABITAT USE BY MIGRATORY COMMON BLACK HAWK (*BUTEOGALLUS ANTHRACINUS*) IN SOUTHWEST NEW MEXICO**
M.C. NEAL
- 1:50-2:10 **MOVEMENTS AND SPACE USE OF GOLDEN EAGLES (*AQUILA CHRYSAETOS*) FROM SOUTHERN NEW MEXICO**
K.J. MUNRO, J.W. CAIN, AND G.W. ROEMER
- 2:10-2:30 **PLUMAGE, PARENTAGE, AND POLYGyny: USING COLOR BANDING AND DNA TESTS TO UNRAVEL AMERICAN KESTREL BREEDING STRATEGIES**
D.W. STAHLCKER and E.A. WOMMACK
- 2:30-2:50 **BIRDS AND CLIMATE CHANGE IN THE AGE OF SEQUESTRATION**
L.J.S. PIERCE AND C.L. HAYES
- 2:50-3:20 **BREAK**
INFORMAL POSTER SESSION

3:20-5:00 **PANEL DISCUSSION: AVIAN CONSERVATION AND MANAGEMENT
IN NEW MEXICO**
D.J. KRUEPER, K.K. MADDEN, C. BEIDLEMAN, B. CHILDRESS, C.M.
RUSTAY

POSTER

An informal poster session will be held during the afternoon break (2:50-3:20)

**COMMON BLACK-HAWKS (*BUTEOGALLUS ANTHRACINUS*) IN SOUTHERN NEW
MEXICO: THE NEED FOR KNOWLEDGE**
K.J. MUNRO, R.A. STAMLER, D.W. STAHLECKER, AND G. STAMLER

5:00 **ADJOURN**

5:30 **INFORMAL SOCIAL AND NMOS BANQUET**
LOCATION: STUDENT MEMORIAL CENTER

7:00 **KEYNOTE PRESENTATION: SOME CHANGES OVER A CENTURY IN
THE BIRDLIFE OF SILVER CITY, NEW MEXICO**
DALE A. ZIMMERMAN
LOCATION: GLOBAL RESOURCE CENTER

ACKNOWLEDGMENT

The New Mexico Ornithological Society thanks Lisa Wren Walraven for the creation and donation of the Olive Warbler art being used for the NMOS 51st Annual Meeting. If you are interested in Lisa's art, check out her website at <http://happywren.com/>

ABSTRACTS

ORAL PRESENTATIONS

(IN ORDER OF PRESENTATION; PRESENTERS UNDERLINED)

HISTORY AND STATUS OF WORTHEN'S SPARROW IN NEW MEXICO

S. O. Williams III, Museum of Southwestern Biology, University of New Mexico, Albuquerque, NM 87131

Worthen's Sparrow (*Spizella wortheni*) has long been considered one of the most enigmatic bird species attributed to New Mexico: the single specimen collected in the state, from which the species was described, remains the only U.S. record of the species and the only occurrence away from Mexico. The facts are straightforward: an adult male sparrow was collected in the vicinity of Silver City on 16 June 1884 by Charles H. Marsh, who believed he had taken a Field Sparrow (*S. pusilla*); Marsh sent the skin to Charles K. Worthen in Illinois, who sent it on to Robert Ridgway at the Smithsonian Institution, where it was accessioned into the collection on 21 July 1884, with Ridgway formally describing it as a new species 22 August 1884. But, although the details of the event, from original collection to publication as a new species, are well-established, this has not prevented speculation that the record is somehow dubious, this stemming in part from the novelty of the occurrence and perhaps spurred on by repeated inaccurate literature references as to date, collector, and other details. In addition, there has been debate as to whether the New Mexico bird was an accidental vagrant from Mexico or was representative of a local population that subsequently became extirpated. Recent work in Mexico indicates the species is non-migratory, lending credence to the extirpation hypothesis; the Silver City bird was collected in mid-June, now understood as the height of the species' breeding season. Today, Worthen's Sparrow is reduced to a handful of very small populations in grasslands on the northern Mexican Plateau where, owing to habitat degradation, it is considered one of the most critically endangered avian species in North America.

UPDATED STATUS OF SONG SPARROW (*MELOSPIZA MELODIA*) IN THE GILA RIVER VALLEY

C.M. Rustay, 11824 Stanford Dr. NE, Albuquerque, NM 87106, and D.J. Griffin, 644 W. Court Ave., Las Cruces, NM 88005

Early ornithologists have commented on the lack of Song Sparrow (*Melospiza melodia*) records in the Gila Valley of New Mexico during the breeding season, considering that they are a common breeder in southeastern Arizona. However, within the last several years, anecdotal reports of singing Song Sparrows in the Gila Valley have surfaced. In 2011, Griffin visited the Lower Box of the Gila River in late May, June and July and found pairs acting territorial, carrying food and feeding nestlings. One nest was discovered. In June, 2012 Griffin returned with Rustay. Photos and video recordings of these Song Sparrows were obtained. The subspecies believed to be involved is *M. m. fallax*. Differences in plumage and song compared with other Song Sparrows breeding in the state will be presented.

STATUS AND CONSERVATION NEEDS OF BENDIRE'S THRASHER.

D.J. Krueper, US Fish and Wildlife Service, Region 2 Regional Office, Albuquerque, NM, 87103

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

THE ROLE OF WINTERING FRUGIVORES IN THE DISPERSAL ECOLOGY OF ONE-SEED JUNIPER IN NORTHEASTERN NEW MEXICO RANGELANDS

W. Jaremko-Wright, Department of Natural Resources Management, New Mexico Highlands University, Las Vegas, NM 87701

The encroachment of junipers into rangelands is dependent upon the types of animal dispersers present and their post-foraging behavior, micro-site requirements for successful seed germination, and the availability of structurally complex perches. The role of birds in the dispersal ecology of one-seed juniper (*Juniperus monosperma*) in northeastern New Mexico was investigated along a continuum of juniper establishment from young savannas to old-growth woodlands. The wintering bird community was sampled with variable distance point counts from January to March, 2013. Stand establishment date, juniper regeneration, canopy cover, and other habitat variables were also measured at points. Not surprisingly, frugivorous thrushes (Turdidae) were the most commonly encountered group of birds and showed significant habitat partitioning based on tree canopy cover and vegetation complexity. Mountain Bluebirds (*Sialia currucoides*) were the most abundant species in the study area, and were found at their highest densities in savannas with the lowest canopy cover. This is significant because these savannas are the youngest in age, and are effectively the ecotone between the juniper woodland and grassland (i.e., where the most active encroachment is occurring). Results showed that a significant proportion of seedlings were found under structurally complex perches, female trees (59%), male trees (29%), and shrubs (5%), highlighting the importance of perches and seedling emergence. Although other species known to consume and disperse juniper seeds were present, the abundance, behavior, and habitat preference of Mountain Bluebirds suggest they are the primary disperser of juniper into grasslands of northeastern New Mexico.

A “NEW” MIGRANT TRAP IN SAN JUAN COUNTY, NEW MEXICO

T. Reeves, CSIT Department, San Juan College, 4601 College Blvd., Farmington, NM 87402

A classic migrant trap was “discovered” on the Navajo Agricultural Products Industry (NAPI) lands in the spring of 2012 by Charlie Black. Intensive observations of birds began in fall 2012. Charlie made several visits and I have made 40 trips there since 14 September 2012. The trap is a 12 acre grove of cottonwoods, coyote willow, and tamarisk; there are low numbers of Siberian elm, peach-leaf willows, and Russian olives. Internally the woodland has tall and short dense thickets, open thickets, areas of dense tall cottonwoods, short “cut-back” cottonwoods, bare/grassy/weedy openings, a small stream channel sometimes with flowing water, and one open area with a few dead trees. The grove is surrounded by dirt roads, weedy areas, four-wing saltbush, grassland, agricultural fields on three sides, and a highway with power poles on one side. This is the only large grove of trees for miles. To date (5 March 2013) about 75 species have been found in the woods and adjacent fields. Two bird species are new to the county, several are 2nd, 3rd, and 4th records, and many are the first documented in the county for species, subspecies, sex, and/or age. Sixteen species of raptors including 5 owls, plus several color forms and subspecies (including Harlan’s and Krider’s Red-tailed Hawks, and dark phase Ferruginous Hawk) have been documented. Also known are 10 species of warblers, 4 vireos, 4 woodpeckers, and 11 sparrows and allies. Sixty-five species have been documented with photographs.

PROJECT BLACK-HAWK YEAR 1 RESULTS: BREEDING SEASON HABITAT USE BY MIGRATORY COMMON BLACK HAWK (*BUTEOGALLUS ANTHRACINUS*) IN SOUTHWEST NEW MEXICO.

M.C. Neal, Avian Ecologist, New Mexico Department of Game and Fish, Santa Fe, NM 87504

In 2010 HawkWatch International’s Senior Research Biologist initiated a pilot study to assess the efficacy of a long-term endeavor focused on the Common Black-Hawk (*Buteogallus anthracinus*) population of southwest New Mexico. An initial nest success rate (n=9) of 0.67 and common anthropogenic causes of nest failure were documented. The 2011 objectives were to: increase understanding of Common Black-Hawk (COBH) seasonal habitat use, assist wildlife and land managers in achieving recommended vital rates and conservation goals, assess regional population trends, and teach the importance of umbrella species. Conservation efforts included: a 20 acre cattle enclosure, planting of mature trees, and mitigation measures directed at reducing human disturbance of COBH monitoring nests. Education programs (n = 15) reached 450 students and over 100 adults in Catron and Grant Counties. These efforts resulted in a 19 percent increase in the observed nest success rate (n=11) to 0.86. An expanded raptor inventory survey, encompassing 209 km of the Gila and San Francisco Rivers, established a baseline COBH territory occupancy rate (n=29) of 0.83. As a riparian obligate species, we theorized that local landscape scale components of in-stream and riparian structure relative to prey abundance and/or accessibility might drive nest site selection and fidelity. Rapid Bioassessment Protocol stations were conducted at active, inactive, and randomly selected points (n = 30). The full logistic model (AIC = 30.32) indicated the potential importance of geomorphic complexity (AIC = 26.23). The parameter estimates indicated a positive effect of geomorphic complexity on the odds of locating an active nest.

MOVEMENTS AND SPACE USE OF GOLDEN EAGLES (*AQUILA CHRYSAETOS*) FROM SOUTHERN NEW MEXICO

K.J. Munro, Department of Biology, New Mexico State University, Las Cruces, NM 88003, J.W. Cain, U.S. Geological Survey, New Mexico Cooperative Fish and Wildlife Research Unit, Las Cruces, NM 88003, and G.W. Roemer, Department of Fish, Wildlife and Conservation Ecology, New Mexico State University, Las Cruces, NM 88003

In spite of their attractiveness as a clean, renewable energy source, wind energy developments are not ecologically benign. Potential impacts of wind energy facilities on avian species include collision mortality, habitat degradation or loss, and displacement of migration patterns caused by disturbance from wind energy facilities. One species that has specifically elicited concern regarding wind turbine-related mortalities is the Golden Eagle (*Aquila chrysaetos*). In order to understand the impacts of wind energy developments on Golden Eagle populations it is necessary to first understand their behavior on multiple levels. Habitat selection and space use data are needed to gain a comprehensive picture of Golden Eagle requirements and how land-use disturbances can affect survivorship. We collected 3-dimensional location data from satellite transmitters for five Golden Eagles in southern New Mexico. One of these eagles was a resident and had an active territory during spring/summer 2012. The remaining four birds dispersed in spring 2012 and settled in various parts of western US and Canada. They returned to southern New Mexico in late fall 2012. As of November 9, 2012 we had an average of 3,785 locations per eagle. These data will help to make informed decisions regarding future wind developments and will provide valuable information for use in post-development monitoring.

PLUMAGE, PARENTAGE, AND POLYGYNY: USING COLOR-BANDING AND DNA TESTS TO UNRAVEL AMERICAN KESTREL BREEDING STRATEGIES

D.W. Stahlecker, Eagle Environmental, Inc., 30 Fonda Road, Santa Fe, NM 87508, and E.A. Wommack, Museum of Vertebrate Zoology, 3101 Valley Life Sciences Building, University of California, Berkeley, Berkeley, CA 94720

During the 2009 breeding season, behavioral observations indicated that an American Kestrel (*Falco sparverius*) male in semi-rural Eldorado at Santa Fe, New Mexico, fathered broods with two different females in nest boxes 300 m apart. Individual marking of breeding adults between 2010 and 2012 produced more concrete observational evidence of polygyny in 2011. Courtship of secondary females occurred during incubation of the primary brood, so that secondary females initiated incubation 4-5 weeks later than primary females. Feather samples were collected from all nestlings in the two boxes between 2009 and 2012, and from two adult males and four adult females involved in breeding efforts at the two nest boxes over the same period. Eight polymorphic loci, each with one allele from each parent, were compared using the program CERVUS, which used likelihood analysis to assign parentage. CERVUS confirmed the polygyny observed in 2011, but not the initial polygyny observed in 2009, at least not with the same marked male that was polygynous in 2011. The lateness of a 2012 brood suggests polygyny by the second marked male and two successive years of one female accepting the secondary female role. The occurrence of polygyny was perhaps enhanced by visually different females and the lower quality of the nest box used by all secondary females.

BIRDS AND CLIMATE CHANGE IN THE AGE OF SEQUESTRATION

L.J.S. Pierce and C. L. Hayes, New Mexico Department of Game and Fish, P.O. Box 25112, Santa Fe, NM 87504

Having specific strategies for dealing with the impact of climate change on wildlife is becoming more and more important for wildlife management agencies such as US Fish and Wildlife Service and state Game and Fish Departments. Regional data sets for climate variables exist, as do many models of the potential impact of climate change to wildlife species; however, acquiring data specific enough to connect those models to on-the-ground management actions for all of those species is daunting, particularly given the current economic situation in government. Suggestions are made for patterns that may be observed for bird distribution and abundance that may be related to a changing climate, using examples from birds and other species groups. A dialogue will be encouraged over how the birding community and wildlife management community can work together to preserve our birds in an age of severe budget cuts.

POSTERS

COMMON BLACK-HAWKS (*BUTEOGALLUS ANTHRACINUS*) IN SOUTHERN NEW MEXICO: THE NEED FOR KNOWLEDGE

K.J. Munro, Department of Biology, New Mexico State University, Las Cruces, NM 88003, R.A. Stamler, Department of Molecular Biology, New Mexico State University, Las Cruces, NM 88003, D.W. Stahlecker, Eagle Environmental, Inc., 30 Fonda Rd., Santa Fe, NM 87508, and G. Stamler, 101 River Rd., Gila, NM 88038

Despite what their name suggests, the Common Black-Hawk (*Buteogallus anthracinus*) is far from common throughout its migratory range in the southwestern United States. Listed as a species of concern in Arizona, and threatened in Texas and New Mexico, this obligate riparian nester is in need of further attention and research. The small New Mexican population is highly vulnerable to alterations or further losses of riparian forest habitat. Past studies have determined that only about 250 pairs of Common Black-Hawks breed in the U.S., with 80-90% of these occurring in Arizona. A 2000-2001 study in the Cliff-Gila Valley recorded 37 nesting attempts in 21 territories, but more recent data are needed to assess the current status of this species in New Mexico. All migration information for Common Black-Hawks is anecdotal and monitoring methods for this species have shown to be ineffective. While monitoring and conservation of breeding habitat is a priority in the southwest, identifying wintering habitat is equally important for the conservation of this species. This can be achieved through an intensified banding program, or ideally, tagging Common Black-Hawks with satellite transmitters. This would provide important year-round information on dispersal, recruitment of new breeders, and fidelity to territories, nest sites, and mates. This species is also in need of a comprehensive study to resolve the confused systematics and nomenclature in the *Buteogallus* complex through re-evaluation of available data as well as utilizing new techniques (molecular).