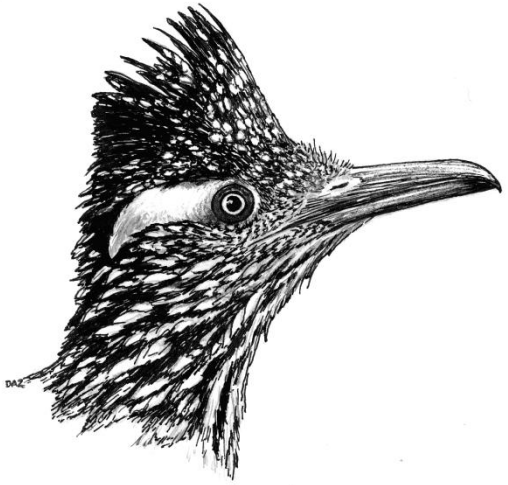
NMOS BULLETIN



New Mexico Ornithological Society

Vol. 41, No. 2 **CONTENTS** **2013**

Articles

Announcements and Information

THE NEW MEXICO ORNITHOLOGICAL SOCIETY, INC.

Post Office Box 3068, Albuquerque, New Mexico 87190-3068
www.nmbirds.org

OFFICERS FOR 2012 – 2014

President:
Dave Krueper, 105 Mission Ridge Road, Corrales, NM 87048
dkrueper@comcast.net

Vice-President:
Jonathan Batkin, 129 West Zia Road, Santa Fe, NM 87505

Secretary:
Ashli Gorbet, 7204 Oralee St. NE, Albuquerque, NM 87109

Treasurer:
Jerry Oldenettel, 499 Farm-to-Market Road, Socorro, NM 87801
borealowl@aol.com

Director:
Martha Desmond, New Mexico State University, P. O. Box 30003,
MSC 4901, Las Cruces, NM 88003-8003; mdesmond@nmsu.edu

Director:
Chuck Hayes, 6504 Dove Court NE, Rio Rancho, NM 87144
chuck.hayes@state.nm.us

Director:
Janet Ruth, 105 Mission Ridge Road, Corrales, NM 87048
janet_ruth@usgs.gov

Young Adult Director:
Matt Baumann, 7800 Venice Avenue, Albuquerque, NM 87112
mb687@yahoo.com

Editors, *NMOS Field Notes*:

Editor:
Sartor O. Williams III, 1819 Meadowview Drive NW,
Albuquerque, NM 87104; sunbittern@earthlink.net

Assistant Editor:
William H. Howe, P. O. Box 461, Albuquerque, NM 87103
whhowe@comcast.net

Editor, *NMOS Bulletin*:
Janet Bair, P.O. Box 3068, Albuquerque, NM 87190-3068
jbair7@gmail.com

NOTES ON THE SONG SPARROWS OF THE SOUTHWESTERN DESERT WITH THE FIRST SPECIMENS OF *MELOSPIZA MELODIA FALLAX* FROM NEW MEXICO

ROBERT W. DICKERMAN

Museum of Southwestern Biology, University of New Mexico
Albuquerque, NM 87131-0001
Email: bobdickm@unm.edu

The palest populations of the highly polytypic Song Sparrow (*Melospiza melodia*) occur in the southwestern states of Arizona and southeastern California, reaching north into southwestern Utah, and south into central Sonora. Four names are available: *M. m. fallax Baird (1874,* Puebla Creek = Walnut Creek, [now Yavapai Co.], Arizona); *M. m. saltonis* Grinnell (1909, one mile SE Mecca, Colorado Desert [now Riverside Co.], California; *M. m. virginis*, Marshall and Behle (1942, near junction Virgin and Santa Clara Rivers, 3 mi. S. St. George, Washington Co., Utah); and *M. m. bendieri* Phillips (1943, Salt River at Tempe Butte, Maricopa Co., Arizona). Two of these names, *virginis* and *bendieri* have been synonymized with *fallax* by their authors.

Richard S. Crossin and I collected 38 specimens of Song Sparrows in central Arizona as follows: Pima Co., November 1997 and April 1998; Pinal Co., February and April 1997, October and November 1998; Maricopa Co., January and April 1998; and Yavapai Co., December 1998. Although all specimens of *fallax* were taken within habitats suitable for nesting, some winter mixing of subspecies occurs among these isolated habitats. Winter specimens of *fallax* have been taken in non-nesting habitats such as San Simon Cienega, Hidalgo Co., New Mexico. Typical *M. m. montanus* were collected in the same habitat as *fallax* in Pima Co.

We searched for Song Sparrows along Walnut Creek, the type locality of *fallax*, on 19 December 1998, but found only marginal habitats at best. Overgrazing could well be the explanation; nesting habitat at the type locality of *fallax* no longer e*xists*. We did find *fallax* 4 miles SE of Camp Verde, Yavapai Co., along the Verde River, about 10 miles ESE of Walnut Creek the following day.

Among the series of 38 specimens there is only slight variation, with two exceptions. Two birds MSB 20492, 14.5 miles W Gila Bend, Maricopa Co., 13 January 1998, and MSB 20681 Pacacho Reservoir, Pinal Co. 27 February 1998, fall outside of the individual variation found within the rest of the series. These were paler and grayer, with clearer gray superciliaries, and were identified as *saltonis*. Phillips *et al.* (1978) considered *saltonis* to be a "weakly characterized" subspecies, but still, they were able to identify a major flight year. Patten and Smith-Patten (2004) I believe erroneously lumped *saltonis* with *fallax*. I consider *saltonis* a useful concept. It has the same relation to *fallax* as the pale grayish race *atlantica,* restricted to the Atlantic coastal zone, has to

the widespread *M. m. melodia/euphonia* complex. Patten and Smith-Patten (2004) accepted *atlantic*a, as did Browning (1978) although it and *saltonis* are both isolated peripheral populations.

Within our series of *fallax,* the only consistent trend was for birds from the Verde River population to be slightly browner, and to have a tendency to have a small amount of sooty in their central breast spot. However when compared with *montanus* they are consistently more reddish, much paler, and with redder ventral streaking.

Gabrielson and Lincoln (1951) described "post-mortem" color change (also called "foxing") among specimens due to museum age. Dickerman (1963) illustrated foxing in Mexican Song Sparrows, and found that older museum specimens were useless to compare with freshly collected material. Populations have adapted their colors to local existing environments, not to those into which they may change in after years in the museum. This means that any taxonomic study of a species (in which foxing is known to occur) should use only fairly recently taken specimens; and those taken in the fall to mid-winter in fresh, unworn (*i.e.,* in genetically determined) plumage.

Four topotypes of *bendieri* from the Salt River in Phoenix, Maricopa Co. were received in the Amadeo M. Rea collection; 7 January 1967 (MSB 16285); 27 November 1969 (MSB16299); 12 April 1971 (MSB 16391); and 12 April 1971 (MSB16291). Unfortunately, these proved to be so foxed in the reddish tones, that they are as distinct from our 1997-1998 specimens as any two widely recognized Song Sparrow subspecies (Fig. 1), and were useless for color comparison. This occurred in just over 20 years.

Figure 1. Three topotypes of *Melospiza melodia bendirei* [=*fallax*] January 1957 and November 1959 (right) and recent specimens of similar populations (left), showing the degree of reddening (foxing) that has occurred in a relatively short period.

Two unpublished specimens from the San Simon Cienega, Hidalgo Co., New Mexico, taken on 25 October 1992 (MSB 10000) and 23 April 1993 (MSB 14048) are identified as *fallax*. They differ only slightly from each other, even considering the differences in dates of collection and subsequent wear, and they gave rise to this study. Phillips *et al.* (1978) reported an earlier specimen of *fallax,* taken 3 December 1956 (Delaware Natural History Museum 18053) from the northern part of the Cienega within New Mexico. These are the first reports of the pale desert complex in New Mexico.

I dedicate this note to my friend and colleague, the late Richard S. Crossin. I thank the Arizona Game and Fish Department for collecting permits.

LITERATURE CITED

Browning, R. M. 1978. An evaluation of the new species and subspecies proposed in Oberholser's Bird Life of Texas. Proc. Bio. Soc. Wash. 91:85-122.

Dickerman, R. W. 1963. The Song Sparrows of the Mexican Plateau. Occas. Papers No. 8. Minnesota Museum of Natural History.

Gabrielson, I. N. and F. C. Lincoln. 1951. Post mortem color change in bird specimens. Condor 53:298-299.

Patten, M. A. and B. D. Smith-Patten. 2004. Linking the Salton Sea with its past: The history and avifauna of Lake Cahuilla. Studies in Avian Biology 27: 12-17.

Phillips, A. R., J. Marshall, and G. Monson. 1978. The Birds of Arizona. The Univ. of Arizona Press. Tucson.

* * *

ABSTRACTS FROM THE NMOS 51ST ANNUAL MEETING

The following abstracts are from the papers presented April 27, 2013, at the 51st Annual Meeting of the New Mexico Ornithological Society held at Western New Mexico University, Silver City, New Mexico.

ORAL PRESENTATIONS

(In Order of Presentation)

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 af Bendire's Thrasher – D.J. Krueper, U.S. 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 yearround 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, largescale wildfire events, and possible competition with the congener Curve-billed Thrasher (*Toxostoma curvirostre*). Research is needed to determine winter range and seasonal movements, site fidelity, population size and trends, and management impacts. The U.S. Fish and Wildlife Service has identified it as a Bird of Conservation Concern, 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 exclosure, 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-dimentional 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 U.S. 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 reevaluation of available data as well as utilizing new techniques (molecular).

* * *

SAVE THE DATE – NMOS 2014 ANNUAL MEETING

The 52nd Annual Meeting of the New Mexico Ornithological Society will be held on April 26, 2014, at the Best Western Rio Grande Inn in Albuquerque. Details will be posted on the NMOS web site and in the Bulletin as they become available.

* * *

MEMBERSHIP DUES REMINDER

Please take the opportunity now to pay your 2013 or 2014 NMOS membership dues. To pay for membership, please download the membership form from our website (www.nmbirds.org), fill out, and mail to the following address, providing a check made out to "NMOS". Thank you!

New Mexico Ornithological Society
P.O. Box 3068
Albuquerque, NM 87190-3068

* * *

NEW MEXICO ORNITHOLOGICAL SOCIETY

— Founded 1962 —

The New Mexico Ornithological Society was organized to gather and disseminate accurate information concerning the bird life of New Mexico; to promote interest in and appreciation of the value of birds, both aesthetic and economic, to further effective conservation of the state's avifauna; to facilitate opportunity for acquaintance and fellowship among those interested in birds and nature; and to issue publications as a means of furthering these ends.

Membership and Subscriptions: Membership in the New Mexico Ornithological Society is open to anyone with an interest in birds. Memberships are for a calendar year and annual dues are payable 1 January. Dues are: Regular Membership $20; Family $30; Student $10; Supporting $50; Life $500. Address for the New Mexico Ornithological Society: Post Office Box 3068, Albuquerque, NM 87190-3068.

NMOS BULLETIN

ISSN 2167-003X

The *Bulletin* is published quarterly; subscription is by membership in NMOS. The *Bulletin* serves two primary purposes: (1) to publish articles of scientific merit concerning the distribution, abundance, status, behavior, and ecology of the avifauna of New Mexico and its contiguous regions; and (2) to publish news and announcements deemed of interest to the New Mexico ornithological community.

NMOS members are encouraged to submit articles and news. Articles received are subject to review and editing. Published articles are noted in major abstracting services. Please submit articles in double-spaced electronic format, such as a Microsoft Word document, by e-mail to the Editor (see inside front cover). Refer to recent issues of the *Bulletin* for examples of style. News items may be submitted to the Editor by way of e-mail.

www.nmbirds.org

This issue of the *NMOS Bulletin* published October 2, 2013
Printed on 100% recycled paper.

New Mexico Ornithological Society
P.O. Box 3068
Albuquerque, NM 87190-3068

NON-PROFIT
ORGANIZATION
U.S. POSTAGE
PAID
PERMIT NO. 623
ALBUQUERQUE, NM

ADDRESS SERVICE REQUESTED