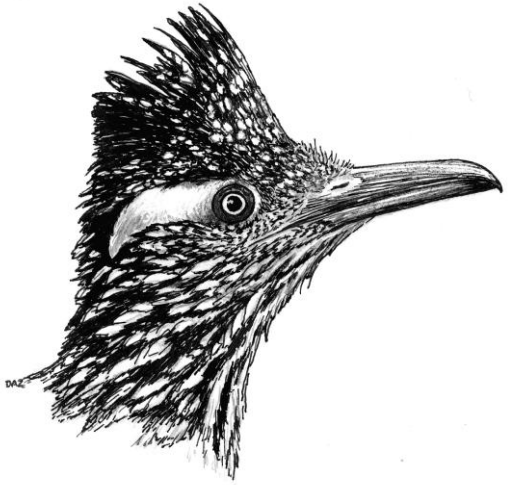
NMOS BULLETIN



New Mexico Ornithological Society

Vol. 38, No. 1 **CONTENTS** **2010**

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THE NEW MEXICO ORNITHOLOGICAL SOCIETY, INC.

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A NOTE FROM THE PRESIDENT

It is time. Some might say it is past time but I will leave that argument for the future. I have enjoyed serving NMOS in a number of roles over the past ten years and as President over the past four years. During this time I have come to appreciate the many members in NMOS and the goals of the organization. One of the strengths that I have observed is that NMOS is composed of beginning birders to experts, from hobbyists to highly trained professionals, women, men, young, old, artists, lumpers, splitters, photographers, writers and a myriad of other talents, but all share the commonality of a desire to know more about our avian friends. It is this diversity that makes NMOS strong, but let us not forget that it was founded as a professional organization with the goal of holding high standards in all areas of avian biology. In the upcoming elections there will be new individuals that will sit on the Board. I encourage you to lend them your support, but also be a participator in the organization. You are in good hands. I know many of the individuals that will still serve as Board members. I have worked and birded with Dave Krueper. He will make an excellent President and will bring exciting new ideas to NMOS. I want to thank those who I have served with. We haven't always agreed but you were gracious in allowing me to present my ideas. The results of our discussions were a better NMOS. I am now going to take some time and step away. I have a number of projects to complete, and I need some time to reflect. My very best to all whose paths I have crossed in the past several years. You honor me with your friendship.

— Roland Shook

FIRST DOCUMENTED WILLOW FLYCATCHER (*EMPIDONAX TRAILLII*) NESTING IN EDDY COUNTY, NEW MEXICO

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Abstract.—On 28 June 2008, I discovered the first verified nesting (an adult male-female pair with a nest containing two eggs) of the Willow Flycatcher (*Empidonax traillii*) in Eddy County, New Mexico. Prior to this finding, there had been no confirmed nesting of the Willow Flycatcher in New Mexico in the area bounded on the west by 106.08° W and on the north by 35.50° N, and, thus, none along the Pecos River nor its tributaries in Eddy County. It is most plausible that the encountered flycatchers were of the Southwestern *extimus* subspecies, which is listed as both state endangered in New Mexico and federally endangered. The discovered flycatcher population is not immediately threatened by anthropogenic habitat destruction, as it is located on National Park Service- and The Nature Conservancy-administered lands at Rattlesnake Springs. However, currently undocumented Willow Flycatcher populations or future expansions of the Rattlesnake Springs population along the Pecos River and its tributaries could be negatively impacted by current and proposed saltcedar control projects that might destroy nesting habitat. It is recommended that standardized Willow Flycatchers surveys be completed in riparian areas in Guadalupe, DeBaca, Chaves, and Eddy counties to determine the flycatcher's current abundance and distribution in southeastern New Mexico.

The Willow Flycatcher (*Empidonax traillii*) is a Neotropical migrant landbird that breeds from southern California north to British Columbia and east to Maine (AOU 1998). Generally, four subspecies of Willow Flycatcher are recognized: *E. t. traillii*, *E. t. adastus*, *E. t. brewsteri*, and *E. t. extimus* (Unitt 1987, Paxton 2000). *E. t. extimus*, the Southwestern Willow Flycatcher ("Southwestern Willow Flycatcher" or "flycatcher"), nests in

dense riparian vegetation that is almost always in the vicinity of surface water or saturated soils, and breeds from southern California and Baja California eastward through Arizona, southern Utah, southern Colorado, New Mexico, and, possibly, Trans-Pecos Texas (Sedgwick 2000, USFWS 2002). Due to the extirpation of many historical *E. t. extimus* breeding populations and concurrent loss of required breeding habitats, the United States Fish and Wildlife Service (USFWS) listed the flycatcher as endangered in 1995 (USFWS 1995). The majority of the flycatcher breeding population is currently restricted to only three states—New Mexico, Arizona, and California—and the flycatcher is stated-listed as endangered in all three (Steinhart 1990, AZGFD 2002, NMDGF 2008).

Across the flycatcher's range, 40% (an estimated 519 of 1,299) of all breeding territories (i.e., an area defended by a male during the breeding season) reported in 2007 were from New Mexico, where the most significant populations occurred along the Rio Grande and Gila River drainages (Durst et al. 2008). The flycatcher was first confirmed nesting in New Mexico in the early 1940's in Doña Ana County (Oberholser 1974, Ligon 1961). Since that time, better identification criteria and increases in birders in the field, survey effort, and sizes of some flycatcher populations (e.g., the population near San Marcial, along the Rio Grande, Socorro County) have resulted in increased reports of flycatchers breeding in the state. During cooperative, standardized surveys conducted statewide from May-July 1993-2007, nesting (i.e., either nests or fledglings) was reported from 8 river drainages and 11 of the 33 counties (Table 1; NMDGF unpubl. data). It is very possible that there remain yet undiscovered breeding flycatcher populations in New Mexico, as, during the same surveys conducted from 1993-2007, males defending breeding territories were reported from a greater number of drainages (9) and counties (17) (Table 2; NMDGF, unpubl. data). Although efforts to survey for the flycatcher within the state have been formidable, attempts to locate nests have been restricted by the size of the state and by the requirement for a USFWS Threatened and Endangered Species Permit to search for and monitor flycatcher nests.

Here I describe the first verified Willow Flycatcher nesting record in Eddy County, New Mexico. I incidentally discovered an adult male-female pair with a nest containing two eggs at 07:57 (MDT) on 28 June 2008 at Rattlesnake Springs, Eddy County, New Mexico (32.10° N,

104.47° W). The nest was located on land administered by The Nature Conservancy (TNC), but the adult pair was observed on both TNC-administered land and adjacent land administered by the National Park Service (Carlsbad Caverns National Park).

TABLE 1. Locations of documented nesting of Southwestern Willow Flycatcher (*Empidonax traillii extimus*) in New Mexico by drainage and county from 1993 to 2007 (New Mexico Department of Game and Fish, unpubl. data).

Drainage	County
Canadian River, Gila River, Little Colorado River, Mimbres River, Rio Chama, Rio Grande, and San Francisco River	Bernalillo, Catron, Doña Ana, Grant, Hidalgo, McKinley, Mora, Rio Arriba, Socorro, Taos, and Valencia

TABLE 2. Locations of breeding season territories of Southwestern Willow Flycatcher (*Empidonax traillii extimus*) in New Mexico by drainage and county from 1993 to 2007 (New Mexico Department of Game and Fish, unpubl. data).

Drainage	County
Canadian River, Gila River, Little Colorado River, Mimbres River, Pecos River, Rio Chama, Rio Grande, San Francisco River, and San Juan River	Bernalillo, Catron, Colfax, Doña Ana, Eddy, Grant, Hidalgo, McKinley, Mora, Rio Arriba, San Juan, San Miguel, Sandoval, Sierra, Socorro, Taos, and Valencia.

OBSERVATION

While I was birding at Rattlesnake Springs, Eddy County, New Mexico on 28 June 2008, I heard a Willow Flycatcher at 07:45 giving the "wee-oo" or "wheeo" call followed by a trill call. Recognizing that these vocalizations are usually given by paired adults interacting in close proximity to a nest and/or offspring (Stein 1963, USFWS 2002), I retreated approximately 8 m from where the vocalizations were heard and made my observations from a seated position. At 07:53, I heard a bill-snap and had my first visual confirmation of an adult Willow Flycatcher as it chased a Yellow-breasted Chat (*Icteria virens*) and gave the "whitt" call once. After seeing the flycatcher, I returned to the spot where I had first heard a vocalization and immediately located a nest with two eggs at 07:57 (Fig. 1), whereupon an adult flew towards me, giving the "wheeo" call repeatedly (Fig. 2). I continued to observe the nest until 08:38, and I only approached the nest again for the purpose of photographing the nest and recording its location with a Global Positioning Unit. During the observation period, I confirm the presence of two adults on only one occasion, at 08:35, when one adult remained perched near the nest while another flew to the nest, looked in the nest, and then began incubating the eggs. I did not return to observe the flycatchers or the nest during the remainder of the breeding season (which generally extends from May to early August). Although I notified both TNC and Carlsbad Caverns National Park biologists within days of my finding of the nest at Rattlesnake Springs, they did not complete any follow-up observations.

NEST DESCRIPTIONS

Habitat.—The nest was located in Rattlesnake Springs, a riparian oasis of cottonwood (*Populus deltoides*), Goodding's willow (*Salix gooddingii*), netleaf hackberry (*Celtis reticulata*), Russian-olive (*Elaeagnus angustifolia*), cattail (*Typha* spp.) and other riparian plant species bordered by irrigated fields and Chihuahuan Desert vegetation (e.g., creosote bush [*Larrea tridentata*], yucca [*Yucca* spp.], honey mesquite [*Prosopis glandulosa*], and snakewood [*Condalia* spp.]). No surface water was evident at or

FIGURE 1. Willow Flycatcher (*Empidonax traillii*) nest (reflected in a compass mirror) in laying stage discovered in *Celtis* sp. at 07:57 (MDT) on 28 June 2008 at Rattlesnake Springs, Eddy County, New Mexico. (Photograph by H. Walker.)

FIGURE 2. Adult Willow Flycatcher (*Empidonax traillii*) discovered breeding at Rattlesnake Springs, Eddy County, New Mexico on 28 June 2008. (Photograph by H. Walker.)

immediately adjacent to the nest site; the nearest surface water was likely Rattlesnake Springs itself located a little over 0.5 km away.

Nest site characteristics.—The nest was a cup that was placed on a horizontal branch approximately 1.2 m up in a netleaf hackberry tree (Fig. 1).

Nest stage.—The nest was discovered containing two Willow Flycatcher eggs and there was no nest parasitism by the Brown-headed Cowbird (*Molothrus ater*) (Fig. 1). The nest was likely in the laying phase, as the typical clutch size for the flycatcher is 3-4 eggs (Sedgwick 2000).

Nest outcome.—As the nest was observed on only a single occasion, nest outcome was not determined.

DISCUSSION

This paper contributes new information on the breeding distribution of the Willow Flycatcher in New Mexico. Prior to 2008, there had been no confirmed nesting of Willow Flycatchers in New Mexico in the area bounded on the west by 106.08° W and on the north by 35.50° N, and, thus, none along the Pecos River, from its origin in Mora County to its exit from New Mexico in Eddy County, nor along any of its tributaries. However, the lack of breeding records for the Willow Flycatcher in the Pecos River Valley in New Mexico might be partially explained by the flycatcher's inconspicuous plumage and the fact that most accounts of the valley's avifauna are anecdotal and from incomplete and somewhat inconsistent historical visits to the valley by ornithologists, other scientists, and birders. Nonetheless, a review of historical accounts does provide evidence that, at the most, breeding by the flycatcher in the Pecos River Valley was never widespread.

The earliest confirmed record of the Willow Flycatcher in the Pecos River Valley is a skin (U.S. Nat. Mus. No. 186097; *E. t. adastus*) that Vernon Bailey collected on 26 May 1903 near Santa Rosa, Guadalupe County (Cooke in Bailey 1928). Since that time, there has been only a single possible nesting record of the Willow Flycatcher in southeastern New Mexico; a clutch of three eggs collected on 4 June 1919 by the oologist E. F. Pope at Roswell, Chaves County (J. Hubbard, pers. comm.). Descriptive information on the nest from which the eggs were collected is very suggestive of the nest being that of a Willow Flycatcher,

but, until the identification of the eggs can be verified by DNA or other analyses, this plausible Willow Flycatcher nesting record remains unconfirmed. Biologists associated with various early expeditions and surveys of New Mexico from 1854-1924 did not collect or otherwise record the Willow Flycatcher in or near present Eddy County (J. Hubbard, pers. comm., Bailey 1928, Bailey 1928). In addition, no Willow Flycatchers were encountered 20 July-13 August 1930 by a University of Kansas collecting party that collected bird specimens in areas in and around Carlsbad Caverns National Park, including Rattlesnake Canyon (J. Hubbard, unpubl. data). With an increased presence of birders in the field and completion of various biological surveys along the middle Pecos River Valley (defined as the reach between Sumner and Brantley dams) in the late 1990s, there were various detections of Willow Flycatchers in the Pecos River Valley of New Mexico, but these were of apparent migrants and breeding has never been reported. For example, Hubbard (1987) found singing flycatchers on 12 June 1971 in the lower Peñasco Valley, Chaves County, but no evidence of breeding was documented and these individuals could have been migrants. Furthermore, Hunter et al. (1985) reported that surveys conducted September 1979-May 1981 from Santa Rosa, New Mexico south to Girvin, Texas resulted in 28 Willow Flycatcher detections, most of which (n = 20) were detected as fall migrants from 2 August to 24 September and the rest (n = 8) of which were detected as spring migrants from 17 May to 25 May. No summering or nesting individuals were located, though unidentified *Empidonax* were detected as late into the breeding season as 11 June. In addition, standardized Willow Flycatcher surveys completed 1994-1997 in various sites in Chaves, Eddy, Guadalupe, Lincoln, and San Miguel counties resulted in detections of a handful of spring migrant flycatchers, but did not document breeding (NMDGF, unpubl. data).

Similar to elsewhere in the Pecos River Valley, accounts of Willow Flycatchers at Rattlesnake Springs have been sporadic, anecdotal, and limited to those of migrants. The species was not listed as being present in Carlsbad Caverns National Park by either Standiford (1965) or West (1972), and was considered uncommon ("found on at least 10% [but less than 25%] of trips" to the area) by West (1979:2-4). During bird netting efforts conducted at Rattlesnake Springs 1-4 May 1975 as part of a study

by New Mexico Department of Game and Fish personnel and various cooperators (NMDGF, unpubl. data), no Willow Flycatchers were captured or detected. The few specific records of Willow Flycatchers at Rattlesnake Springs in the last three decades are unpublished accounts of migrants from birders. For example, eight "mostly singing" individuals were observed at the springs on 26 May 1986 by William H. Howe and Gary Rosenberg, and one individual was observed at the springs on 9 May 1993 by John L. Dunn (J. Hubbard, pers. comm.). In more recent years, birders have detected northward migrant Willow Flycatchers annually at the springs (D. Griffin, pers. comm., S. West, pers. comm.). Although standardized flycatcher surveys or nest searching efforts have not been completed at the springs (R. West, pers. comm.), given that the springs is popular among birders, it is unlikely that a sizeable (> a few pairs) population of breeding flycatchers at the springs has gone undetected.

Although the finding of a Willow Flycatcher breeding pair with a nest and eggs at Rattlesnake Springs, Eddy County is unique to the geographic area, at least two factors possibly contributed to colonization by the species. Firstly, the dense riparian vegetation and lentic water found at Rattlesnake Springs make it suitable for breeding Willow Flycatchers. Secondly, the Southwestern Willow Flycatcher is adapted to readily colonizing riparian vegetation as it becomes available, commonly moving within and between drainages to maximize reproductive success (Paxton et al. 2007).

Unlike the nest locality, use of netleaf hackberry as nesting substrate by Willow Flycatchers is not unprecedented, though it is atypical. In New Mexico, the Southwestern Willow Flycatcher predominately nests in cottonwood (*Populus* spp.), willow (*Salix* spp.), boxelder (*Acer negundo*), and saltcedar (*Tamarix ramosissima*) (NMDGF, unpubl. data). However, the subspecies has been previously documented nesting in netleaf hackberry. The first and only documentation of the flycatcher nesting in netleaf hackberry in New Mexico was in 2001, when the author and others located a nest in netleaf hackberry along the Gila River, Grant County (United States Forest Service Rocky Mountain Research Station unpubl. data). The first nesting attempt failed, but the pair renested in the same tree later that season and successfully fledged young. The flycatcher has been also reported nesting in netleaf hackberry in Arizona.

In 2002, the first record of a flycatcher nest in netleaf hackberry in Arizona was documented on the San Pedro River (Arizona Game and Fish Department, unpubl. data). A flycatcher nest was again found in netleaf hackberry in Arizona in 2005 (Arizona Game and Fish Department, unpubl. data).

CONSERVATION/MANAGEMENT IMPLICATIONS

Because no known breeding Willow Flycatcher populations existed in eastern New Mexico prior to 2008, the source population(s) and subspecies of the Willow Flycatchers breeding at Rattlesnake Springs are unclear. Several Willow Flycatcher subspecies, such as *E. t. extimus*, *E. t. adastus*, and *E. t. traillii*, likely migrate regularly in spring and fall along the Pecos River and its tributaries (Hubbard 1987) and, thus, could found the population at Rattlesnake Springs. However, it is most probable that the two Rattlesnake Springs adults found in 2008 were *E. t. extimus*, as the area between the Rio Grande and the Pecos River from northern New Mexico down to northern Texas is thought to likely form the southeastern edge of the Southwestern Willow Flycatcher's historical range (USFWS 2002). In addition, the closest known extant flycatcher breeding populations, which occur along the Rio Grande in New Mexico, are of the *extimus* subspecies (USFWS 2002, Paxton et al. 2008).

The Southwestern Willow Flycatcher is listed as both state endangered in New Mexico (NMDGF 2008) and federally endangered (USFWS 1995). The primary threats to the subspecies are loss and modification of breeding habitat (USFWS 2002). However, the small and, possibly, burgeoning breeding flycatcher population at Rattlesnake Springs is not immediately threatened by anthropogenic habitat destruction or modification. The riparian oasis is designated as an Important Bird Area by the National Audubon Society and is managed by both the National Park Service and The Nature Conservancy, and the missions of all three organizations include preserving wildlife and wild places. Nonetheless, anthropogenic activities elsewhere do have the potential to negatively affect the flycatcher. Specifically, saltcedar control projects along the Pecos River and several of its tributaries could negatively impact flycatcher populations. Although saltcedar has not yet invaded Rattlesnakes Springs, the plant is abundant along the nearby

Black and Pecos rivers, and currently undocumented flycatcher populations or future expansions of the Rattlesnake Springs flycatcher population along these and other drainages would be threatened by destruction of saltcedar nesting habitat. To date, the primarily means employed to eradicate or control saltcedar in southeastern New Mexico have been herbicide and an exotic leaf beetle, *Diorhabda elongata* (Coleoptera: Chrysomelidae), which are often implemented without concurrent actions to vegetate with native woody riparian plant species. Widespread aerial (helicopter) application of herbicide has occurred along the Pecos River and several of its tributaries from 1999 and through 2005 (Hart et al. 2005), and has been an identified threat to local Yellow-billed Cuckoo (*Coccyzus americanus*) breeding populations (NMDGF 2008, S. O. Williams III, pers. comm.). Release of leaf beetles has been less extensive than herbicide application (Table 3), but, perhaps, is a greater threat to the flycatcher because there is little control over which and when areas vegetated with tamarisk are defoliated by the leaf beetle once the beetles travel away from their initial release sites. Because breeding flycatchers had not yet been documented in southeastern New Mexico when beetle release sites were established in or nearby that part of the state, the sites do not meet the United States Fish and Wildlife Service requirement of a 322-km (200-mile) buffer between the sites and documented flycatcher breeding areas. As eradication of saltcedar will likely remain a priority by most management agencies, critical to developing a strategy to protect and assure maintenance of any current or future flycatcher populations in southeastern New Mexico are documenting and delineating the flycatcher's distribution across the Pecos Watershed. It is recommended that monitoring efforts be reinitiated in areas in southeastern New Mexico that were last surveyed in 1994-1997 and expanded into other riparian areas in Guadalupe, DeBaca, Chaves, and Eddy counties.

TABLE 3. Locations of leaf beetle, *Diorhabda elongata* (Coleoptera: Chrysomelidae), release sites in or near southeastern New Mexico (New Mexico State University, unpubl. data).

State	Locality	Approximate Distance to Rattlesnake Springs (km)	Year(s) of Release	Status
New Mexico	Pecos River near Brantley Lake State Park	55	2003, 2004	Unestablished
New Mexico	Pecos River near Artesia	81	2003, 2004, 2005	Unestablished
New Mexico	Holloman Air Force Base	121	2008	To be determined
Texas	Pecos River near Pecos	161	2004	Established

ACKNOWLEDGEMENTS

I thank the United States National Park Service (R. West, Carlsbad Caverns National Park) and The Nature Conservancy (D. Gori) for permission to publish this manuscript. I am grateful to J. P. Hubbard for review of the manuscript and invaluable input on historical records of the Willow Flycatcher in the Pecos Valley of New Mexico. I also thank K. Brodhead (for the United States Forest Service Rocky Mountain Research Station) and S. Stump (Arizona Game and Fish Department) for providing data on nesting of Southwestern Willow Flycatcher in netleaf hackberry. C.J. Deloach (United States Department of Agriculture, Agricultural Research Service, Grassland Soil and Water Research Laboratory) and K. Gardner (New Mexico State University, Department of Entomology, Plant Pathology, and Weed Science) provided data on releases of leaf beetles.

LITERATURE CITED

AMERICAN ORNITHOLOGISTS' UNION (AOU). 1998. Check-list of North American Birds. 7th edition. American Ornithologists' Union, Lawrence, KS.

ARIZONA GAME AND FISH DEPARTMENT (AZGFD). 2002. *Empidonax traillii extimus*. Unpublished abstract compiled and edited by the Heritage Data Management System. Arizona Game and Fish Department, Phoenix, AZ.

BAILEY, F. M. 1928. Birds of New Mexico. New Mexico Department of Game and Fish, Santa Fe, NM.

BAILEY, V. 1928. Animal Life of the Carlsbad Cavern. The Williams & Wilkins Co., Baltimore, MD.

DURST, S. L., M. K. SOGGE, S. D. STUMP, H. A. WALKER, B. E. KUS, AND S.D. SFERRA. 2008. Southwestern Willow Flycatcher breeding site and territory survey—2007. Version 1.0, 29 September 2008. United States Geological Survey Open-File Report 2008-1303.

HART, C. R., L. D. WHITE, A. MCDONALD, AND Z. SHENG. 2005. Saltcedar control and water salvage on the Pecos River, Texas, 1999-2003. Journal of Environmental Management 75(4):399-409.

HUBBARD, J. P. 1987. The status of the Willow Flycatcher in New Mexico. New Mexico Department of Game and Fish, Endangered Species Program, Santa Fe, NM.

HUNTER, C. C., W. H. HOWE, AND R. D. OHMART. 1985. Birds of the Pecos River Valley. Draft manuscript (01-28-85). Center for Environmental Studies, Arizona State University, Tempe, AZ.

LIGON, J. S. 1961. New Mexico Birds and Where to Find Them. University of New Mexico Press in cooperation with New Mexico Department of Game and Fish, Albuquerque, NM.

NEW MEXICO DEPARTMENT OF GAME AND FISH (NMDGF). 2008. Threatened and endangered species of New Mexico. 2008 Biennial Review and Recommendations. Santa Fe, NM.

OBERHOLSER, H. C. 1974. The Birdlife of Texas. Vol. 2. University of Texas Press, Austin, TX.

PAXTON, E. H. 2000. Molecular genetic structuring and demographic history of the Willow Flycatcher (*Empidonax traillii*). MS thesis. Northern Arizona University, Flagstaff, AZ.

PAXTON, E. H., M. K. SOGGE, S. L. DURST, T. C. THEIMER, AND J. R. HATTEN. 2007. The ecology of the Southwestern Willow Flycatcher in Central Arizona – a 10-year synthesis report. United States Geological Survey Open-File Report 2007-1381.

PAXTON, E. H., M. K. SOGGE, T. C. THEIMER, J. GIRARD, AND P. KEIM. 2008. Using molecular genetic markers to resolve a subspecies boundary: the northern boundary of the Southwestern Willow Flycatcher in the Four-corner States. United States Geological Survey Open-File Report 2008-1117.

SEDGWICK, J. A. 2000. Willow Flycatcher (*Empidonax traillii*). *In*: A. Poole and F. Gill, eds. The Birds of North America, No. 533. The Birds of North America, Inc., Philadelphia, PA.

STANDIFORD, D.R. 1965. Birds of Carlsbad Caverns National Park, New Mexico and adjacent Guadalupe Mountains. 13 pp.

STEIN, R. C. 1963. Isolating mechanisms between populations of Traill's Flycatchers. Proceedings of the American Philosophical Society 107(1):21-50.

STEINHART, P. 1990. California's Wild Heritage: Threatened and Endangered Animals in the Golden State. California Department of

Fish and Game, California Academy of Science, and Sierra Club Books.

UNITED STATES FISH AND WILDLIFE SERVICE (USFWS). 1995. Final rule determining endangered status for the Southwestern Willow Flycatcher. Federal Register 60:10694-10715.

UNITED STATES FISH AND WILDLIFE SERVICE (USFWS). 2002. Southwestern Willow Flycatcher recovery plan. Albuquerque, NM.

UNITT, P. 1987. *Empidonax traillii extimus*: an endangered subspecies. Western Birds 18:137-162.

WEST, S. 1972. Birds of Carlsbad Caverns and Guadalupe Mountains national parks. 18 pp.

WEST, S. 1979. Check-list of birds, Carlsbad Caverns National Park, New Mexico. Carlsbad Caverns National Historical Association, Carlsbad, NM

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NMOS 48th ANNUAL MEETING
&
JOINT NEW MEXICO DEPARTMENT OF GAME AND FISH – NMOS YELLOW-BILLED CUCKOO SYMPOSIUM

10 April 2010
Best Western Rio Grande Inn
1015 Rio Grande Blvd. NW
Albuquerque, New Mexico
(50) 843-9500
www.riograndeinn.com

The New Mexico Ornithological Society will hold its 48th Annual Meeting on Saturday, 10 April 2010 at the Best Western Rio Grande Inn, located just north of the "Old Town" historic district of Albuquerque. This meeting will include an NMOS business meeting, an NMOS General Science Session, a Yellow-billed Cuckoo Symposium (jointly sponsored by NMOS and the New Mexico Department of Game and Fish [NMDGF]), and an evening banquet. Registration is required for all events.

Out-of-town participants are encouraged to stay on site at the Best Western Rio Grande Inn; directions are available on the hotel website (above).

There will be a minimal registration fee ($20) for the Annual Meeting to cover meeting expenses (program/abstract booklet and breaks). The abstracts for presentations at the NMOS General Science Session will be distributed at the meeting and will be published in the *NMOS Bulletin*. In addition, NMDGF will publish a proceedings containing expanded abstracts of oral papers presented at the Yellow-billed Cuckoo Symposium and recommendations for conservation, management, and research; we are asking you to indicate your interest in receiving a hard copy of that proceedings to aid in planning. Once the proceedings are published, electronic copies will be posted on the NMOS and New Mexico Department of Game and Fish websites, and hard copies will be mailed out, at no charge, to all who indicated in advance an interest in receiving one.

The NMOS evening banquet will also be held at the Best Western Rio Grande Inn; the keynote banquet speaker will be Dr. Murrelet Halterman, Cuckoo Project Director, Southern Sierra Research Station, California. She will speak from her perspective on 20 years of study on Western Yellow-billed Cuckoos. The banquet will be a plated dinner. We are asking you to select one of three primary menu items – honey-piñon chicken, pork tenderloin, or a vegetarian dish (Chef's choice). The price is $25. Payment for registration and the banquet are to be made through NMOS using the registration form below.

NMOS will make one organized, guided field trip available (no charge): an owling trip into the Sandia Mountains on Friday night, 9 April. Please fill in the information requested on the Registration Form below if you are interested in this organized field trip. We will use this information to determine whether there are enough interested people to justify running it and to help in planning. Additional information will be posted on the website as it becomes available.

REGISTRATION FORM

Fees (payable to NMOS) are due by 31 MARCH 2010.

Number of Meeting Registrations @ $20 _____
Number of Student Meeting Registrations @ $10 _____

Please indicate your interest in receiving a hard copy of the Proceedings of the Yellow-billed Cuckoo Symposium. (This will be mailed to you when available, at the address you submit below.)

Number of copies of the Symposium Proceedings _____

Number of Reservations for Saturday Banquet Buffet @ $25 _____
Please select one entrée: Honey-piñon Chicken _____
Pork Tenderloin _____
Vegetarian (Chef's Choice) _____

Please indicate if you are interested in the following organized, guided field trip: _____ Owling field trip – Sandia Mtns. on Friday evening.

TOTAL AMOUNT ENCLOSED $_____

NAME(S) _____

ADDRESS _____

E-MAIL _____

Please provide your e-mail address. It will enable us to contact you with last-minute information (e.g., confirmation of registration, emergency meeting cancellation, information about field trips, etc.).

Send payment and Registration Form to:
Roland Shook, 3306 Royal Drive, Silver City, NM 88061

NEW MEXICO ORNITHOLOGICAL SOCIETY
FINANCIAL STATEMENT FOR 2009

Balance as of 12/31/08:	
Checking Account Balance	$8,171.19
Petty Cash	32.29
Undeopsited Checks	0
Total	8203.48
Net Transactions from 1/1/09 to 12/31/09:	
Dues	2990.00
NM Bird Finding Guide Sales	2116.00
NM Field Checklist Sales	65.50
Annual meeting	280.27
Postage and shipping	-614.40
Miscellaneous	-34.57
Grants	-2000.00
Database maintenance	-1000.00
Printing	-750.00
Storage Unit Rent	-500
Interest	2.27
Total Transactions	555.07
Total 2009 beginning balance plus transactions	8758.55
Balance as of 12/31/09:	
Checking Account Balance	8,398.76
Petty Cash Balance	32.29
Checks outstanding	0.00
Undeposited Checks	348.00
12/31 balance	$8758.55

Date: 14 January 2010 Submitted by: Jerry R. Oldenettel, Treasurer

NOMINATIONS FOR NMOS OFFICERS AND DIRECTORS

At the upcoming 48th Annual Meeting of the New Mexico Ornithological Society, the NMOS Nominating Committee will present a slate of nominations for officers and board members that will serve over the next two years (2010 to 2012). Prior to the Annual Meeting, nominations from the membership may also be submitted to the Committee. These nominations must be signed by at least three members. To submit nominations for officers and board members, write to the Nominating Committee Chair, Sartor O. Williams III (see inside front cover for contact information). A final list of nominees will be available on the NMOS web site (www.nmbirds.org) before to the meeting on 10 April 2010.

* * *

NMOS ANNUAL MEETING SILENT AUCTION FUND-RAISER

Thanks to a generous donation from Lois C. Herrmann, a long-time NMOS member, we will have a pair of **Zeiss 10 X 40 B binoculars**—gently used, good condition—available for bid by silent auction at the NMOS 48th Annual Meeting in April. The minimum starting bid for these binoculars will be $300. Those familiar with Zeiss optics will recognize what a good buy this is. Money raised through the auction will support NMOS programs and activities. Bring your checkbooks - it's a good cause!

This issue of the *NMOS Bulletin* published 10 March 2010.
Printed on 100% recycled paper.

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

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

New Mexico Ornithological Society
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Albuquerque, NM 87190-3068

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