

from TCWC unless otherwise identified as HMNS. MALES: Archer: 12126–12127; Brazos: 7718; Comal: 9384; Culberson: 2601, 11079, 12128; Dallas: 7299; Dimmit: 8158; Duvall: 7082; Freestone: 9515; Galveston: HMNS 1593; Grayson: 9152, 11742; Harris: 1664; Lamar: 11741; Matagorda: HMNS 1225; Maveric: 1987; McLennan: 13161; Presidio: 2687; Red River: 11743; Sterling: 13072; Taylor: 5374; Tom Greene: 10196; Val Verde: 1811; Wichita: 12138, 12141. FEMALES: Anderson: 7717; Bell: 9481; Brooks: 8545; Crane: 11554; Culberson: 9844; Dimmit: 7994; Galveston: HMNS 1135; Jim Wells: 7189; Kerr: 311; Montague: 12137; Reagan: 10298; San Jacinto: 13111; Schleicher: 7420; Throckmorton: 2529; Trinity: 760; Van Zandt: 8107; Webb: 2230; Wichita: 12140, 12142; Williamson: 11008.

## SLATE-THROATED REDSTARTS (*MYIOBORUS MINIATUS*) BREEDING IN MADERAS DEL CARMEN, COAHUILA, MEXICO

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**ABSTRACT**—The breeding range of the slate-throated redstart (*Myioborus miniatus*) stretches from South America to Mexico, where it extends northward along the Sierra Madre Oriental to southeastern Coahuila and along the Sierra Madre Occidental to southern Chihuahua and Sonora. We report the discovery of slate-throated redstarts breeding in the Maderas del Carmen mountains in Coahuila. This represents a range extension of approximately 400 km and is, to our knowledge, the northernmost breeding record for this species.

**RESUMEN**—La distribución de cría del chipé de montaña (*Myioborus miniatus*) se extiende desde Sudamérica hasta México, donde comprende la Sierra Madre Oriental al sureste de Coahuila y la Sierra Madre Occidental al sur de Chihuahua y Sonora. Documentamos el descubrimiento de chipés de montaña criando en las montañas de Maderas del Carmen, Coahuila. Este hallazgo constituye una extensión de la distribución de cría de unos 400 km y posiblemente representa el registro de cría más norteño para esta especie.

The slate-throated redstart (*Myioborus miniatus*) is a broadly distributed species that inhabits montane and submontane forests from South America to northern Mexico (Curson et al., 1994). The range of the northernmost subspecies (*M. m. miniatus*) extends from Guatemala north to southern Chihuahua and Sonora in the Sierra Madre Occidental, and to southeastern Coahuila in the Sierra Madre Oriental, where it inhabits montane evergreen, pine-oak (*Pinus-Quercus*), and secondary forest from 600 to 2,500 m elevation (Howell and Webb, 1995; American Ornithologists' Union, 1998). Individuals have been seen in south-

eastern Arizona, southwestern New Mexico, and western Texas, but to our knowledge, there are no breeding records outside of the documented range.

The Maderas del Carmen, the major forested part of the Sierra del Carmen in the Big Bend region of northern Coahuila, shelters one of the largest expanses of moist coniferous forest for several hundred kilometers in any direction. Its avifauna has been the subject of several investigations in the last 50 years. Neither Miller (1955) nor Wauer and Ligon (1977) listed the slate-throated redstart among their observations. In 1999, biologists with the

El Carmen Project began a thorough inventory of the flora and fauna of the range. In July 2002, a single singing slate-throated redstart was observed by BM in Cañón Moreno in the area around Campo Dos, in riparian habitat surrounded by mesic montane forest.

Between 31 May and 10 June 2003, at least 4 males were seen and heard singing along a 1-km portion of Cañón Moreno. This habitat, at 2,300 m elevation, has a perennially running stream and is composed predominantly of southwestern white pine (*Pinus strobiformis*), ponderosa pine (*P. ponderosa* var. *scopulorum*), Arizona cypress (*Cupressus arizonica*), Douglas-fir (*Pseudotsuga menziesii*), Coahuila fir (*Abies coahuilensis*), netleaf oak (*Quercus rugosa*), and a Mexican oak species (*Q. sideroxila*).

A pair of slate-throated redstarts was observed on 9 June 2003 along Cañón Moreno near Campo Dos (28°59'36.6"N, 102°36'40.8"W). The male displayed territorial behavior, singing from various tree branches, mainly at heights of 5 to 10 m, and in the dense undergrowth along the stream. The female, tentatively identified at that time by duller plumage, interspersed periods of foraging with periods of inactivity perched on dead tree branches at heights less than 5 m. We used playback of the song of the male to lure the female into a mist-net. In-hand examination revealed a wrinkled brood patch, suggesting that she was tending a nest. After taking photographs, the bird was released.

We later observed the female carrying insects to a location near the ground, where she disappeared several times on a moderately sloping hillside covered with pine needles not more than 10 m from the stream. The area was approximately 5 m from one of the more densely vegetated portions of the canyon and was dominated by a thicket of mountain ninebark (*Physocarpus monogynus*). Territorial singing demonstrated by at least 3 nearby males suggests that a small breeding population existed there at that time.

This discovery extends the breeding range of the slate-throated redstart north by approximately 400 km in the Sierra Madre Oriental and it is, to our knowledge, the northernmost breeding record of this species (records of presumed breeding in Sonora are slightly more southern; Russell and Monson, 1998). Where it occurs, the slate-throated redstart is considered a resident, although there is seasonal al-

titudinal migration (Curson et al., 1994) and the northernmost breeding populations probably migrate south for the winter (Howell and Webb, 1995). Casual observation over several days around the site of the nest in October 2003 failed to locate any individuals. The following spring in 2004, only a single individual was seen in the canyon. From 5 May to 25 May, one male was consistently observed singing once every 10 seconds near the stream approximately 1 km north of Campo Dos. On 25 May from 0740 to 1240, the entire 5-km length of Cañón Moreno was traversed with only one individual recorded.

Whether long-lasting or ephemeral, this new breeding population merits further study to determine its size and seasonal movements. Investigations of recent colonization attempts such as this could shed light on the sometimes puzzling avian biogeography of isolated mountain ranges, which Gehlbach (1981) called "the hop, skip, and jump of breeding bird distributions." Considering the proximity of this population to the border, it is likely that more individuals will be sighted in the USA, particularly in the Chisos Mountains of Big Bend National Park, which lie 70 km to the northwest.

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#### LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1998. Check-list of North American birds, sixth edition. American Ornithologists' Union, New York.
- CURSON, J., D. QUINN, AND D. BEADLE. 1994. Warblers of the Americas: an identification guide. Houghton Mifflin Company, Boston, Massachusetts.
- GEHLBACH, F. R. 1981. Mountain islands, desert seas. Texas A&M University Press, College Station.
- HOWELL, S. N. G., AND S. WEBB. 1995. A guide to the birds of Mexico and northern Central America. Oxford University Press, New York.
- MILLER, A. H. 1955. The avifauna of the Sierra del Carmen of Coahuila, Mexico. Condor 57:154-178.
- RUSSELL, S. M., AND G. MONSON. 1998. The birds of Sonora. University of Arizona Press, Tucson.
- WAUER, R. H., AND J. D. LIGON. 1977. Distributional relations of breeding avifauna of four southwest-

ern mountain ranges. In: R. H. Wauer and D. H. Riskind, editors. Transactions of the symposium on the biological resources of the Chihuahuan desert region, United States and Mexico. United States Department of the Interior, National Park

Service, Transactions and Proceedings Series, Number 3, Washington D.C. Pages 567–578.

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## DIMINUTIVE WOODRAT (*NELSONIA NEOTOMODON*) IN CHIHUAHUA, MEXICO

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**ABSTRACT**—*Nelsonia neotomodon* is recorded for the first time for the state of Chihuahua, Mexico. This record extends the distribution of this species 250 km to the north. Morphometric and reproductive information for a sample of *N. neotomodon*, as well as additional unpublished records, are provided. The data suggest that this species has a continuous distribution in the Sierra Madre Occidental and that there is no significant geographic variation or sexual dimorphism.

**RESUMEN**—Se registra por primera vez la presencia de *Nelsonia neotomodon* en el estado de Chihuahua, México. Este registro extiende la distribución de la especie 250 km al norte. Se proporcionan datos morfológicos y reproductivos de una muestra de *N. neotomodon*, así como de material que no había sido previamente documentada. Los datos disponibles sugieren que esta especie tiene una distribución continua en la Sierra Madre Occidental y que no existen ni dimorfismo sexual ni variación geográfica significativos.

The genus *Nelsonia* includes 2 species of rare, endemic rodents from the Mexican highlands. The distributions of these species do not overlap; *Nelsonia goldmani* is distributed in the central-west portion of the Transvolcanic Mexican belt, the northernmost record available being from Cerro Patambán, Michoacán. *Nelsonia neotomodon* is known from the Sierra Madre Occidental, from northwestern Durango to Aguascalientes, Zacatecas, and Jalisco (Fig. 1). These species are readily separated by a combination of external and cranial characters (Merriam, 1903; Engstrom et al., 1992).

Little is known on the biology of *N. neotomodon*. Although collection efforts have been intensive and frequent within its distribution area (Hooper, 1954; Álvarez and Polaco, 1984), specimens deposited in collections in the United States and Mexico scarcely add to 45 (Engstrom et al., 1992; Muñiz-Martínez and Arroyo-

Cabrales, 1996; López-Wilchis and López-Jardine, 1999). The diminutive woodrat occurs in high montane habitats (above 2,000 m), in coniferous or pine-oak (*Pinus-Quercus*) forests (Hooper, 1954; Álvarez and Polaco, 1984; Engstrom et al., 1992). It is restricted to rocky cliffs or hillsides, usually along streams with abundant, large-sized rocks and boulders. This species is under special protection by the Mexican government according to NOM-059-ECOL-2001 (SEMARNAT, 2002). As part of the efforts to inventory the fauna of small mammals of the Sierra Tarahumara in the southern portion of the Mexican state of Chihuahua, a specimen of *N. neotomodon* was captured in 2002; this record constitutes the first for the state. Thus, the objectives of this note are to document the range extension of *N. neotomodon* and to summarize additional records not published previously by other authors.