Bridled Titmouse (Baeolophus wollweberi)

NMPIF level: Biodiversity Conservation Concern, Level 2 (BC2)

NMPIF assessment score: 14

National PIF status: No special status

New Mexico BCRs: 34, 35

Primary breeding habitat(s): Madrean Pine-Oak Woodland, Southwest Riparian

Other habitats used: Pinyon-Juniper Woodland

Summary of Concern

Bridled Titmouse is a woodland species of the Mexican Plateau, with limited distribution in New Mexico and Arizona. The New Mexico population is limited to pine-oak and riparian habitats in the southwest portion of the state. It is not considered threatened, but its limited distribution and dependence on a just a few habitat types make it a species that should be monitored.

Associated Species

Montezuma Quail (SC1), Elf Owl (SC1), Acorn Woodpecker, Dusky-capped Flycatcher, Cassin's Kingbird (Stewardship), Hutton's Vireo, Mexican Jay (BC2), Black-throated Gray Warbler (SC2), Spotted Towhee

Distribution

Bridled Titmouse is a montane species of the Mexican Plateau, present in the Sierra Madre Occidental, Sierra Madre Oriental, Sierra Madre del Sur, and the Central Volcanic Belt. It ranges somewhat farther north than most Sierra Madrean species, as far as central Arizona.

In New Mexico, this species is most common in the mountains of Hidalgo County (Animas and Peloncillos) but also occurs north to the San Francisco Mountains, the Black Range, and the Magdalena Mountains, and east to Las Animas Creek in Sierra County (Hubbard 1978, Nocedal and Ficken 1998, Parmeter et al. 2002).

Ecology and Habitat Requirements

Bridled Titmouse is most associated with oak or mixed oak-pine-juniper woodlands. In the mountains of southeastern Arizona, it is generally present at higher elevations than Juniper Titmouse, and at lower elevations than Mexican Chickadee (Nocedal and Ficken 1998), though elevational ranges overlap. It also uses riparian habitats dominated by Fremont cottonwood, Arizona sycamore, and other deciduous species. In southern Arizona, Bridled Titmouse is resident in most riparian habitats, except sycamore forest patches of open foothills (Strong and Bock 1990). In the Chiricahua Mountains, typical habitat shifts with increasing elevation from open oak woodlands to oak-juniper-pine associations, primarily alligator juniper and short-needle Chihuahua and Apache pines (Nocedal and Ficken 1998). Oaks are an important foraging substrate (Nocedal and Ficken 1998). However, in the Chiricahua Mountains, during a drought year when oaks lost their leaves, titmice were found in higher concentrations in riparian areas compared to wetter years because trees in these areas had leaves, providing foraging opportunities (Christman 2002).

Nests are typically placed in natural cavities (such as knotholes) in deciduous trees. Nest boxes are also used. In Arizona, nests were found at a range of heights (3-35 feet) in cottonwoods, sycamores and oaks. Breeding territories are established in mid-April. In southeastern Arizona, mean territory size was 0.77 ha in a riparian community and 0.99 ha in an oak woodland (Balda 1967). Clutches consist of 5-7 eggs. There is some evidence that breeding may be foregone during drought years (Christman 2002).

Conservation Status

Species Assessment

DISTRIBUTION	4
THREATS	3
GLOBAL POPULATION SIZE	3
LOCAL POPULATION TREND	3
IMPORTANCE OF NEW MEXICO TO BREEDING	1
COMBINED SCORE	14

Bridled Titmouse is a Biodiversity Conservation Concern, Level 2 species for New Mexico, with a combined vulnerability score of 14. At the continental level, it receives a high PIF vulnerability score of 4 for its relatively small distributional range.

Population Size

PIF estimates a species population of 860,000, and that 10% occurs in the United States. The species is more numerous in Arizona than New Mexico; Partners in Flight estimates that New Mexico holds about 0.5% of the species population, or about 4,000 birds. In Mexico, Bridled Titmouse is often one of the most abundant foliage gleaners in oak and pine-oak habitat.

Population Trend

This species is not well sampled by BBS in the United States. Little information on population trends in New Mexico or elsewhere is available. NMPIF assigns a score of 3 for local population trend, indicating uncertainty.

Threats

The New Mexico population is limited in size and distribution, but faces no known threats.

Management Issues and Recommendations

No special management is recommended at this time.

NMPIF Recommendations

- Seek to maintain healthy stands of Madrean Pine-Oak woodland habitat in the southwestern mountains, and to reduce risk of catastrophic fire where needed.
- Maintain high-quality riparian areas with deciduous trees within pine-oak canyons which will
 provide refugia foraging habitat during drought years.

Species Conservation Objectives

NMPIF Objectives

- Establish monitoring to better assess species status in New Mexico.
- Determine more specific habitat requirement needs, as this is a little-studied species. This may be particularly important to maintaining this species in the state, which is at the northern periphery of its range.
- Maintain current populations.

Sources of Information:

Balda, R. P. 1967. Ecological relationships of the breeding birds of the Chiricahua Mountains, Arizona. Ph.D. Diss., Univ. Illinois, Urbana, IL.

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Hubbard, J. P. 1978. Revised check-list of the birds of New Mexico. New Mexico Ornithol. Publ. No. 6., Albuquerque, NM.

Nocedal, J., and M. S. Ficken. 1998. Bridled Titmouse (*Baeolophus wollweberi*). *In* The Birds of North America, No. 375 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Parmeter, J., B. Neville, and D. Emkalns. 2002. New Mexico Bird Finding Guide. New Mexico Ornithological Society, Albuquerque, NM.

Strong, T. R., and C. E. Bock. 1990. Bird species distribution patterns in riparian habitats in southeastern Arizona. Condor 92:866-885.