

Mountain Bluebird (*Sialia currucoides*)

NMPIF level: Species Conservation Concern, Level 2 (SC2)

NMPIF assessment score: 15

NM stewardship responsibility: Moderate

National PIF status: Stewardship, Intermountain West

New Mexico BCRs: 16, 34, 35, (18)

Primary breeding habitat(s): Pinyon-Juniper Woodland

Other habitats used: Montane Riparian, Wet Meadow and Montane Grassland, Great Basin Desert Shrub

Summary of Concern

Mountain Bluebird occurs across much of the western United States and Canada, in a variety of open woodland, meadow and shrub-steppe habitats. Although stable or increasing in other areas, BBS data indicate that this species has experienced significant declines of over 5% a year in New Mexico. Reasons for these declines are not well understood.

Associated Species

Plumbeous Vireo (SC2), Western Scrub-Jay (SC2), Pinyon Jay (SC1), Mountain Chickadee, Juniper Titmouse (SC1), Bushtit, White-breasted Nuthatch, Spotted Towhee, Black-headed Grosbeak

Distribution

The breeding range of Mountain Bluebird extends from central Alaska south across much of western Canada and the northwestern United States. The species becomes resident in portions of Oregon, Nevada, Utah and Colorado, with a range extending south to southern Arizona and southern New Mexico. It winters primarily south of the breeding range to central Mexico, and east to central Kansas and Oklahoma (Power and Lombardo 1996).

In New Mexico, the majority of the population resides in the northern and central parts of the state, in the BCR 16 segment. It breeds south to the Mogollons and Sacramento Mountains, and locally on the eastern plains (Parmeter et al. 2002).

Ecology and Habitat Requirements

Mountain Bluebirds occur in several habitat types in New Mexico, including pinyon-juniper woodlands, mountain meadows, and sagebrush shrublands. In general, this species is associated with high open habitats with a scattered tree or shrub component, including savannahs, prairie-forest ecotones, meadow and alpine tundra edges, and cool desert shrublands. Its primary breeding association in New Mexico is pinyon-juniper. In winter it may form dense aggregations in this habitat type, or in lower elevation grasslands (Power and Lombardo 1996).

Territories are established in April, with nesting from May – July. Mountain Bluebirds nest in abandoned woodpecker holes, or sometimes in natural cavities or rock crevices. In aspen woodlands, Red-naped Sapsucker holes are often used. The species also uses nest boxes in open grassland habitat. Optimal breeding habitat contains old, large (≥ 38 cm diameter at breast height) snags covered with bark, and smaller saplings and snags for foraging perches (Scott 1978, Pinkowski 1979). Mountain Bluebirds feed primarily on insects during the breeding season, hunting from elevated perches and hovering in areas of short vegetation (Power and Lombardo 1996).

Conservation Status

Species Assessment

| | |
|--------------------------------------|-----------|
| DISTRIBUTION | 3 |
| THREATS | 2 |
| GLOBAL POPULATION SIZE | 2 |
| LOCAL POPULATION TREND | 5 |
| IMPORTANCE OF NEW MEXICO TO BREEDING | 3 |
| COMBINED SCORE | 15 |

Mountain Bluebird is a Species Conservation Concern, Level 2 species for New Mexico, with a total assessment score of 15. It is a widespread and common species, and has expanded its range in recent decades. However, populations in New Mexico have shown sharp downward trends (see discussion below).

Population Size

Total population for New Mexico is unknown. PIF estimates a species population of 5,200,000, and that New Mexico holds about 10% of the species population, or about 520,000 birds.

Population Trend

Population trends for this species are somewhat volatile over time and from region to region. Nationally, trends are stable or increasing. In its North American Landbird Conservation Plan of 2004, PIF assigns this species the lowest possible vulnerability score of 1 for population trend. However, NMPIF assigns Mountain Bluebird a maximum score 5 for large regional population decreases. BBS data for the state show a statistically significant annual decrease of 5.5 percent since 1980. Trends are also negative in Arizona, and for the Pinyon-Juniper Woodland and Intermountain Grassland physiographic regions. BBS data for 1966-2004 are:

| | Annual Trend (%) | P-value | Number of Routes |
|----------------|------------------|---------|------------------|
| New Mexico | -5.4 | 0.00 | 34 |
| FWS Region 2 | -5.2 | 0.00 | 56 |
| Western States | 1.7 | 0.00 | 534 |

Threats

Historically, populations have expanded with the westward spread of logging and cattle grazing, and declined in areas of high forest density due to fire suppression. Reasons for the current downward trends in the southwest are not known; however, nest-site availability is known to be a major factor limiting populations (Power 1966, Miller 1970). This species does poorly in areas where trees do not grow large enough to provide natural cavities, and where forest and agricultural management practices have resulted in a loss of natural nesting cavities (Miller 1970, Erskine 1979). Loss of suitable nest sites has been the primary cause of population declines within parts of the range (Power 1966).

Management Issues and Recommendations

It is important to understand reasons for regional declines in this species. Management should focus on maintaining suitable nesting habitat in pinyon-juniper vegetation, montane meadows and forest edges, and sagebrush shrubland.

NMPIF Recommendations

- Minimize cutting or clearing of healthy, mature pinyon-juniper habitat.
- In breeding areas, maintain older, larger snags.

Species Conservation Objectives

NMPIF Objectives

- Seek to better understand reasons for recent declines.
- Seek to stop or reverse downward population trends in New Mexico.

Sources of Information

Erskine, A. J. 1979. Man's influence on potential nesting sites and populations of swallows in Canada. *Can. Field-Nat.* 93:371-377.

Miller, W. 1970. Factors influencing the status of Eastern and Mountain Bluebirds in southwestern Manitoba. *Blue Jay* 28:38-46.

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

Pinkowski, B. C. 1979. Foraging ecology and habitat utilization in the genus *Sialia*. Pp. 165-190 in *The role of insectivorous birds in forest ecosystems* (J. G. Dickson, R. N. Conner, R. R. Fleet, J. C. Kroll, and J. A. Jackson, eds.). Academic Press, New York.

Power, H. W. 1966. Biology of the Mountain Bluebird in Montana. *Condor* 68:351-371.

Power, H. W., and M. P. Lombardo. 1996. Mountain Bluebird (*Sialia currucoides*). In *The Birds of North America*, No. 222 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, D.C.

Scott, V. E. 1978. Characteristics of ponderosa pine snags used by cavity-nesting birds in Arizona. *J. Forestry* 76:26-28.