

Mexican Jay (*Aphelocoma ultramarina*)

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

Other habitats used: Southwest Riparian

Summary of Concern

Mexican Jay is a species of pine-oak woodlands of central and northern Mexico, and the southwestern United States. It is not considered threatened, but its limited distribution and primary dependence on a single habitat type make it a species that should be monitored.

Associated Species

Montezuma Quail (SC1), Whiskered Screech-Owl (BC2), Arizona Woodpecker (BC2), Black-Throated Gray Warbler (SC1) Juniper Titmouse (SC1), Bridled Titmouse (BC2), Black-headed Grosbeak, Spotted Towhee

Distribution

In Mexico, Mexican Jay is resident in the Sierra Madre Occidental, Sierra Madre Oriental, and the Central Volcanic Belt. Its range extends north as far as east-central Arizona and west-central New Mexico, and a small portion of west Texas.

In New Mexico, this species occurs primarily in the Peloncillo and Animas Mountains. It also occurs less commonly farther north, west of the Black Range, to Grant and southwestern Catron Counties (Brown 1994, Parmeter et al. 2002).

Ecology and Habitat Requirements

Mexican Jay is a highly social species of pine-oak and pine-juniper woodlands of central and northern Mexico and the southwestern United States. It is non-migratory and maintains a high degree of fidelity to its natal group—perhaps more so than of any other North America bird species. In the Chiricahua Mountains of Arizona, Mexican Jays are present in pine and juniper woodlands containing several species of oaks. Territories ranged from desert edge and oak-lined creeks extending into grasslands, to the border of continuous coniferous forest. All had an oak component large enough to produce a substantial acorn crop (Brown and Brown 1985). Distribution in New Mexico has also been linked to the presence of mast-producing trees (Edwards 1986). Stored acorns and pinyon seeds are essential for over-winter survival. Mexican Jays forage on the ground in large social groups (Brown 1994).

Breeding activity usually begins in April; date of first clutches has shifted 10 days or more earlier in the year since 1971 (Brown et al. 1999). In the Chiricahua Mountains, Mexican Jays nested in Emory oak, alligator juniper, and several other oak and coniferous species. Nests are usually in the top half of the tree, at an average height of 27 feet. A clutch of 4 or 5 eggs is typical. Populations fluctuate in size, as fledging success and overwinter survival are greatly reduced in years of low rainfall the preceding summer and winter. Occasional years of high recruitment are offset by more typical years in which few young jays survive to enter the breeding population (Brown 1994).

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

Mexican Jay 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 2.2 million, and that 11% occurs in the United States. PIF also estimates that New Mexico holds under 0.1% of the species population, or around 1,300 birds. In good habitat in a transect following a valley, 26.5 territories averaged 0.58 km across. Linear density along Cave Creek Canyon in the Chiricahua Mountains was 16.7 jays/km, or about 29 jays/km².

Population Trend

This species is not well-sampled by BBS. Populations fluctuate as noted above, but there appears to be no strong increasing or decreasing trend. This species receives a score of 3 from NMPIF for local population trend.

Threats

Overall, threats are not considered to be high. Increasing development in woodland areas causes loss of habitat for Mexican Jays. Pine-oak habitat in some areas may also be vulnerable to catastrophic fire.

Management Issues and Recommendations

No special management is recommended at this time.

NMPIF Recommendations

- Seek to maintain healthy pine-oak habitat where Mexican Jays are present, including measures to reduce risk of catastrophic fire where warranted.

Species Conservation Objectives

NMPIF Objectives

- Seek to establish monitoring to better assess species status in New Mexico.
- Maintain current populations.

Sources of Information:

Brown, J. M. 1994. Mexican Jay (*Aphelocoma ultramarina*). In *The Birds of North America*, No. 118 (A. Poole and F. Gill, Eds.). Philadelphia, PA: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.

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