

## **Crissal Thrasher (*Toxostoma crissale*)**

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

NMPIF assessment score: 16

NM stewardship responsibility: High

National PIF status: Stewardship (Southwest region)

New Mexico BCRs: 16, 34, 35 (most in 34 & 35)

Primary breeding habitat(s): Chihuahuan Desert Shrub (arroyos), Pinyon-Juniper Woodland (Juniper Savannah)

Other habitats used: Montane Shrub, Middle-elevation Riparian, Southwest Riparian

### **Summary of Concern**

Crissal Thrasher is primarily a bird of dense arroyo and riparian shrub vegetation. It is sparsely distributed throughout its range, and is of concern due to its relatively restricted distribution and small population size.

### **Associated Species**

Greater Roadrunner, Western Kingbird, Loggerhead Shrike (SC2), Northern Mockingbird, Pyrrhuloxia, Black-tailed Gnatcatcher, Canyon Towhee, Black-chinned Sparrow (SC1), Scott's Oriole, House Finch

### **Distribution**

Crissal Thrasher is discontinuously distributed throughout most of the Mojave, Sonoran, and Chihuahuan deserts of the southwest United States and northern Mexico. Its range extends from southeast California and southern Nevada west through central and southern portions of Arizona and New Mexico and far west Texas, south through central Sonora, and south and east through much of Chihuahua, Coahuila, Zacatecas, San Luis Potosi, and Hidalgo (Howell and Webb 1995, Cody 1999).

In New Mexico, Crissal Thrasher occurs at lower and middle elevations throughout the southern portion of the state, north up the Rio Grande to Albuquerque, and up the Pecos River to Roswell (Ligon 1961, Cody 1999, Parmeter et al. 2002).

## Ecology and Habitat Requirements

Crissal Thrasher primarily inhabits dense desert scrub and arroyo riparian vegetation. It also occurs in foothill scrub and pinyon-juniper woodland with a shrubby understory. Although it occupies a range of habitat types, the common element is an association with dense bushy vegetation (Cody 1999). In Arizona and southern New Mexico, it may be found in lowland riparian belts, desert washes, mesquite thickets, and up foothill slopes into pinyon pine-oak-juniper woodland habitat. It generally avoids creosote-dominated habitats, but may be found in arroyo vegetation such as desert willow, desert plume, brickellia, mesquite, catclaw acacia, and little-leaf squawbush on slopes above creosote plains (Raitt and Maze 1968). It also occurs in juniper savannah near desert washes.

Crissal Thrasher makes use of salt cedar thickets along the Pecos River and Rio Grande, and may have benefited from this exotic species invasion (Hunter et al. 1988, Cody 1999). It also uses revegetated riparian zones following removal of salt cedar (Anderson et al. 1989). It generally avoids suburban habitat while using nearby riparian areas (Emlen 1974). Mesquite thickets may be preferred habitat, especially in summer (Rice et al. 1983, Cody 1999).

Crissal Thrasher is considered a permanent resident throughout its range, but it may wander out of preferred breeding habitat in winter. This species is an early breeder, with first clutches laid in February or March in lower deserts and by early April at higher elevations. Breeding season may continue through June or July, and second broods appear to be common. Nests are typically placed in the interior of dense shrubs such as mesquite. This species has been shown to successfully reject eggs laid by Brown-headed Cowbirds (Finch 1982). Crissal Thrashers forage on the ground for insects and other arthropods (Cody 1999).

## Conservation Status

### Species Assessment

DISTRIBUTION	4
THREATS	3
GLOBAL POPULATION SIZE	4
LOCAL POPULATION TREND	2
IMPORTANCE OF NEW MEXICO TO BREEDING	3
<b>COMBINED SCORE</b>	<b>16</b>

Crissal Thrasher is a Species Conservation Concern, Level 2 species for New Mexico, with a total assessment score of 16. It receives high vulnerability scores of 4 from PIF for its small distributional range and relatively small population size. PIF considers Crissal Thrasher a Stewardship Species for the Southwest Avifaunal Biome. Crissal Thrasher is a U.S. Fish and Wildlife Service (2002) national Bird of Conservation Concern.

**Population Size and Density**

Total population for the state is unknown. PIF estimates a species population of 260,000, and that New Mexico holds about 16% of the species population, or about 42,000 birds. The percentage estimate indicates that New Mexico has high stewardship responsibility for this species.

Reported densities vary widely both among and within different habitat types. Highest breeding densities reported are over 10 pairs/40 ha in mesquite thickets in California, Nevada and Arizona (studies summarized in Cody 1999). Densities in Chihuahuan desert in New Mexico much lower, 0.2-0.6 pairs/40 ha (Raitt and Maze 1968). Overall, data suggest that territory size in optimal habitat (tall mesquite) may be close to 2 ha, in good habitat generally 4-5 ha, and perhaps twice that in less preferred habitat (Cody 1999).

**Population Trend**

Crissal Thrasher is sparsely distributed across most of its range, and is not well sampled by BBS. Existing BBS data suggest a fairly stable population, with a high degree of uncertainty regarding directional trends. BBS data for 1966-2004 are:

	Annual Trend (%)	P-value	Number of Routes
New Mexico	5.2	0.47	12
FWS Region 2	1.7	0.54	41
Western BBS	1.2	0.64	48

**Threats**

Crissal Thrasher is not considered to be highly threatened in New Mexico. The species is relatively tolerant of scattered development, but may be threatened locally where development disturbs or removes well-developed desert scrub and arroyo vegetation. It is also relatively tolerant of, or may benefit from, salt cedar invasion in riparian areas (Anderson et al. 1989, Hunter et al. 1988). However,

loss or degradation of riparian habitat due to grazing, development, or other factors may be harmful to local populations.

### **Management Issues and Recommendations**

Management for Crissal Thrasher in New Mexico should focus on maintaining healthy and diverse shrub vegetation in arroyos and riparian areas, and in pinyon-juniper (juniper savannah) habitat.

### **NMPIF Recommendations**

- Encourage breeding surveys and ecological studies.
- Maintain dense shrub cover in appropriate habitat.
- Manage grazing in riparian areas as needed to maintain dense shrub cover

### **Species Conservation Objectives**

#### **PIF Objectives**

The PIF North American Landbird Conservation Plan places Crissal Thrasher in the conservation action category of Long Term Planning and Responsibility, and sets a continental population objective of maintaining or increasing the current population over the next 30 years.

#### **NMPIF Objectives**

- Seek to maintain a stable or increasing population in New Mexico.

### **Sources of Information**

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