

## **Elegant Trogon (*Trogon elegans*)**

NMPIF level: Biodiversity Conservation Concern, Level 1 (BC1)

NMPIF assessment score: 16

NM stewardship responsibility: Low

National PIF status: Watch List

New Mexico BCRs: 34

Primary breeding habitat(s): Southwest Riparian

Other habitats used: Madrean Pine-Oak Woodland (foraging)

### **Summary of Concern**

Elegant Trogon is primarily a Mexican species with a limited breeding population in several mountain ranges of southeast Arizona, with at most a few pair breeding regularly in the Peloncillo Mountains of New Mexico. It requires moist riparian canyons with a sycamore component and upland areas of arid woodland.

### **Associated Species**

Zone-tailed Hawk, Elf Owl (SC1), Black-chinned Hummingbird (SC2), Arizona Woodpecker (BC2), Northern Flicker, Dusky-capped Flycatcher, Hepatic Tanager, Brown-crested Flycatcher, Magnificent Hummingbird (BC2)

### **Distribution**

Elegant Trogon is resident along the Pacific slope of Mexico from Sonora to Oaxaca, and in eastern Mexico from central Tamaulipas and southeast Nuevo León south to Puebla and Oaxaca (Howell and Webb 1995). A separate population is also resident in portions of Guatemala, El Salvador, and the interior of Honduras, south to Costa Rica. In summer, the breeding range extends a fairly short distance north into southeast Arizona.

In New Mexico, this species is present only in the Peloncillo Mountains in southwest Hidalgo County (Kunzmann et al. 1998, Parmeter et al. 2002).

## Ecology and Habitat Requirements

Across its range in Mexico and Central America, Elegant Trogon occupies a range of lowland, foothill and mountain habitats, including high elevation montane forests, semi-arid pine-oak woodland, lowland tropical deciduous forest and thorn forest. In southeast Arizona, where breeding populations have been studied, it is associated with sycamore- or high-elevation cottonwood-dominated riparian vegetation in a surrounding matrix of pinyon-juniper, pine-oak woodland or upland forest (Kunzmann et al. 1998). Within individual home ranges, centered in riparian canyons, trogons spent more time in upland pine-oak habitat than in riparian vegetation. Similarly in New Mexico, sycamores, pines, and oaks are all considered critical habitat components. In both riparian and pine-oak habitat, this species prefers dense vegetation with plenty of undergrowth (Hall 1996, Hall and Mannan 1999).

Elegant Trogons arrive in the southwest United States in April, and nesting occurs from May through August. Males actively defend territories of a half mile to a mile in length (Hall 1996). This species is a secondary cavity nester in either live or dead wood, and requires larger diameter trees. It competes with other secondary cavity nesters for nest sites. Most common are woodpecker holes, particularly those excavated by Northern Flicker (Taylor 1994, Hall and Karubian 1996). In southeast Arizona, 53 of 58 nests were in riparian areas, mostly in sycamore trees, though oaks and pines were also used. Most nests were located within 300 m of perennial water, but this is not necessarily a requirement for nesting habitat (Taylor 1994, Hall 1996).

## Conservation Status

### Species Assessment

DISTRIBUTION	3
THREATS	5
GLOBAL POPULATION SIZE	4
LOCAL POPULATION TREND	3
IMPORTANCE OF NEW MEXICO TO BREEDING	1
<b>COMBINED SCORE</b>	<b>16</b>

Elegant Trogon is a Biodiversity Conservation Concern, Level 1 species for New Mexico, with a combined vulnerability score of 16. At the continental level, it receives a high PIF vulnerability score of 4 for its small population size. From NMPIF, it receives a maximum score of 5 for threat to breeding in the state.

In the state of New Mexico, Elegant Trogon is listed as endangered by New Mexico Department of Game and Fish. Elegant Trogon is also a national PIF Watch List species.

### **Population Size**

PIF estimates a species population of 200,000. Numbers breeding in the United States are small, less than 100 in Arizona and only a few pairs regularly breeding in New Mexico (Kunzmann et al. 1998).

### **Population Trend**

No BBS data are available. Nationally, PIF finds some evidence of declines and assigns this species a 4 for population trend. Numbers in Arizona have fluctuated from year to year. NMPIF assigns a score of 3 for local population trend, indicating uncertainty.

### **Threats**

Across the northern portion of its range, much of the preferred riparian and pine-oak habitat of this species has been altered or eliminated, and this habitat continues to be threatened. In addition to stochastic factors that are always a threat to very small and isolated populations, Elegant Trogons which breed in the Peloncillo Mountains are highly vulnerable to further deterioration of habitat quality. A combination of overgrazing, erosion, and drought may reduce the water table such that sycamore presence is reduced or eliminated.

### **Management Issues and Recommendations**

Management for Elegant Trogon in New Mexico should focus on protecting and improving riparian habitat in nesting canyons in the Peloncillo Mountains. In Arizona, Hall and Mannan (1999) suggest management based on consideration of entire watersheds, because Elegant Trogons use both riparian and upland zones. They note that management should include maintenance of high water tables in canyons to promote growth and recruitment of sycamore trees.

### **NMPIF Recommendations**

- Manage or restrict land uses that may result in a drawdown of the water table in nesting canyons. A high water table is critical for sycamore rejuvenation.
- Maintain snags and larger trees in oak and oak/sycamore canyons.

- Seek to enhance sycamore habitat in the Arizona portion of the Peloncillo Mountains.

### **Species Conservation Objectives**

#### **PIF Objectives**

The PIF North American Landbird Conservation Plan places Elegant Trogon in the conservation action category Management. It sets a population objective of increasing the current population by 50% over the next 30 years.

#### **NMPIF Objectives**

- Maintain or increase the current population in the Peloncillo Mountains.

#### **Sources of Information**

Hall, L. S. 1996. Habitat selection by the Elegant Trogon (*Trogon elegans*) at multiple scales. Ph.D. Diss., Univ. of Arizona, Tucson, AZ.

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Howell, S. N., and G., S. Webb. 1995. A guide to the birds of Mexico and northern Central America. Oxford Univ. Press, New York.

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