

## **Thick-billed Kingbird (*Tyrannus crassirostris*)**

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

NMPIF assessment score: 17

National PIF status: Watch List

New Mexico BCRs: 34

Primary breeding habitat(s): Southwest Riparian (Guadalupe Canyon)

Other habitats used: None in New Mexico

### **Summary of Concern**

Thick-billed Kingbird is a PIF Watch List species of western Mexico. The small New Mexico breeding population is dependent on riparian habitat in Guadalupe Canyon in southern Hidalgo County.

### **Associated Species**

Violet-crowned Hummingbird (BC1), Gila Woodpecker (BC2), Brown-crested Flycatcher, Bell's Vireo (SC1), Phainopepla

### **Distribution**

Thick-billed Kingbird is a resident species along the Pacific slope of Mexico, from Sonora to Oaxaca. Its breeding season distribution extends slightly further north. The species was first detected breeding in the United States in the Guadalupe Mountains of southeastern Arizona in 1958. Since that time, a dispersed breeding population has become established in southeastern Arizona. Guadalupe Canyon in southern Hidalgo County is the single location in New Mexico in which Thick-billed Kingbirds are known to breed regularly.

### **Ecology and Habitat Requirements**

In the southwest, Thick-billed Kingbirds occupy riparian canyons with cottonwood and Arizona sycamore. In Sonora, this species uses a broader array of habitats containing large deciduous trees, including open areas in tropical deciduous forest, riparian growth, thornscrub, thorn forest and oak

woodland (Russell and Monson 1998, Lowther 2002). Very little information on breeding ecology is available. Nests observed in Arizona and New Mexico have been located high (30-65 feet) in Arizona sycamore, usually in a crotch near the trunk (Zimmerman 1960, Baltosser 1980, Russell and Monson 1998). Birds arrive in Guadalupe Canyon in early May, and remain until August (Parmeter et al. 2002). In this riparian canyon location, Thick-billed Kingbirds often forage on adjacent slopes of desert scrub.

## Conservation Status

### Species Assessment

DISTRIBUTION	5
THREATS	4
GLOBAL POPULATION SIZE	3
LOCAL POPULATION TREND	4
IMPORTANCE OF NEW MEXICO TO BREEDING	1
<b>COMBINED SCORE</b>	<b>17</b>

Thick-billed Kingbird is a Biodiversity Conservation Concern, Level 1 species for New Mexico. It receives a maximum vulnerability score of 5 from PIF for its small distributional range in Mexico, and scores of 4 from NMPIF for threat to breeding in the state and local population trend. In the state of New Mexico, Thick-billed Kingbird is listed as endangered by New Mexico Department of Game and Fish. It is also a national PIF Watch List species.

### Population Size

PIF estimates a species population of two million, less than 1% of which occurs in the United States. The New Mexico population consists of a small number of breeding pairs.

### Population Trend

No BBS data exist for the United States, and trends in Mexico are unknown. This species has expanded its range into southeast Arizona since the 1950s, but apparently not beyond the single known breeding location in New Mexico.

## **Threats**

The state population of this species is highly vulnerable due to its small size and restriction to a single location. Breeding habitat at Guadalupe Canyon is vulnerable to human disturbance and grazing, and potentially to long-term declines due to drought.

## **Management Issues and Recommendations**

Management options for this species are limited to protecting breeding habitat at Guadalupe Canyon.

## **NMPIF Recommendations**

- Maintain existing restrictions on access.
- Avoid prescribed burns in this area.
- Manage grazing and watershed condition to promote regeneration of sycamore and cottonwood-willow associations.

## **Species Conservation Objectives**

### **PIF Objectives**

The PIF North American Landbird Conservation Plan places Thick-billed Kingbird in the conservation action category Long-Term Planning and Responsibility. It sets a population objective of maintaining or increasing the current population over the next 30 years.

### **NMPIF Objectives**

- Maintain or increase the breeding population in Guadalupe Canyon.

## **Sources of Information**

Baltosser, W. H. 1980. A biological inventory of endangered species occurring in Guadalupe Canyon (Hidalgo County), New Mexico. New Mexico Dep. Game and Fish, contract 519-68-06, final rep. 3539.

Lowther, P. E. 2002. Thick-billed Kingbird (*Tyrannus crassirostris*). In *The Birds of North America*, No. 604 (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.

Russell, S. M., and G. Monson. 1998. The birds of Sonora. Univ. of Arizona Press, Tucson, AZ.

Zimmerman, D. A. 1960. Thick-billed Kingbird nesting in New Mexico. *Auk* 77:92–94.