

Bank Swallow (*Riparia riparia*)

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

NMPIF assessment score: 13

NM stewardship responsibility: Low

National PIF status: No special status

New Mexico BCRs: 16, (35)

Primary breeding habitat(s): Middle-elevation Riparian

Other habitats used: Plains-Mesa Sand Shrub; forages widely in lowlands

Summary of Concern

Bank Swallow is one of most widely distributed passerine species worldwide, but reaches the southern limit of its western North American breeding distribution in New Mexico. In the past, nesting colonies existed at various locations along the Middle Rio Grande and elsewhere. Currently a single known colony remains near Albuquerque, which occasionally spawns small, short-lived satellite colonies.

Associated Species

Burrowing Owl, Belted Kingfisher (BC2), Northern Rough-winged Swallow, Rock Wren

Distribution

Bank Swallow has a nearly global distribution. It is a widespread breeder across much of Europe and Asia, wintering in Africa. Bank Swallows also breed across most of the central to northern United States and Canada. The southernmost breeding populations in the United States occur in New Mexico and Texas (Garrison 1999).

In New Mexico, Bank Swallows maintain at least one nesting colony in northwest Albuquerque. Small satellite colonies appear intermittently in the bluffs between Rio Rancho and Corrales. The species may nest in other locations in the north-central part of the state. Breeding in New Mexico was previously more widespread, particularly on the edges of the northern highlands and along the Middle Rio Grande valley south to Socorro and Bosque del Apache, also near Jemez Springs and Espanola. Historically, it has bred as far south as Anthony in the Rio Grande Valley and Carlsbad in the Pecos River Valley (Hubbard

1978). During migration, Bank Swallows are common in lowlands statewide (Ligon 1961, Hubbard 1978).

Ecology and Habitat Requirements

As its scientific name implies, Bank Swallow is associated with streamside habitat where it nests in riverside banks and bluffs. Most rivers and streams with nesting habitats are meandering waterways with eroding streamside banks. Nesting colonies are also sometimes located away from water and in human-made sites such as sand and gravel quarries and road cuts. Foraging occurs widely over most open lowland habitats, particularly where water is present.

Tall, vertical banks of soft soil, firm sand or sandy loam are critical for nest colony formation. Nests are usually excavated in the upper third of banks that are 10 feet or more in height. Bank Swallows exhibit fidelity to successful breeding locations, but also readily adapt to dynamic environments where suitable nesting banks may change periodically. Artificially created nest banks are also sometimes used. Most nesting activity in New Mexico takes place from mid-April through late July (Yanishevsky and Petring-Rupp 1998, Garrison 1999).

Conservation Status

Species Assessment

DISTRIBUTION	1
THREATS	5
GLOBAL POPULATION SIZE	2
LOCAL POPULATION TREND	4
IMPORTANCE OF NEW MEXICO TO BREEDING	1
COMBINED SCORE	13

Bank Swallow is a Biodiversity Conservation Concern, Level 1 species for New Mexico, with a total assessment score of 13. From NMPIF, it receives a maximum score of 5 for threats to breeding in the state, and a score of 4 for local population trend.

Population Size

PIF estimates a global species population of 46 million, 30% of which occurs in the U.S. and Canada. Size of the New Mexico population is unknown, but may consist of a single major nesting colony plus a few isolated small colonies. Based on current sightings, total state population may be about 300 nesting pairs (W. Howe, pers. comm.).

Population Trend

BBS data for 1966-2004 show a decline, statistically significant since 1980 (annual trend = -1.9, $p = 0.03$, $n = 967$). However, due to its coloniality and the ephemeral nature of breeding habitat, trends in this species are not well measured by BBS in areas where it is sparsely distributed, as in most of the western U.S. Local populations are dynamic but overall numbers are thought to be stable (Garrison 1999). In New Mexico, the number of Bank Swallow colonies has decreased in recent decades.

Threats

Bank Swallow receives low threat scores of 2 (breeding and non-breeding) from PIF, but a maximum state threat score of 5 from NMPIF. This species is generally tolerant of human activities and utilizes some human-created habitats. Local populations may be threatened by activities that eliminate vertical river and stream banks used for nesting. In California, much nesting habitat has been eliminated by erosion and flood control projects (Garrison 1999). River management may be responsible for the loss of Bank Swallow nesting colonies along the Middle Rio Grande. The remaining colony in Arroyo Callabacillas in northwest Albuquerque is considered highly threatened by surrounding residential development and associated arroyo management and bank stabilization projects.

Management Issues and Recommendations

Management for Bank Swallows in New Mexico should focus on maintaining suitable conditions for colony maintenance in known breeding areas.

NMPIF Recommendations

- Current nesting areas should be protected because of high site fidelity.
- In areas where nesting sites must be disturbed, construct artificial banks for nesting.
- Seek to integrate protection of Bank Swallow habitat with larger-scale riparian-ecosystem conservation efforts along the Middle Rio Grande and elsewhere.

- Maintain an undeveloped buffer area within 328 ft (100 m) of arroyos where steep banks of sufficient height exist.

Species Conservation Objectives

NMPIF Objectives

- Maintain known colonies at Arroyo Callabacillas in northwest Albuquerque and at satellite colonies in the Rio Rancho/Corrales area.
- Protect, restore and create PrPPPPPsuitable conditions for the establishment of additional colonies in northern New Mexico.
- Survey suitable locations for other colonies that likely exist in New Mexico.

Sources of Information

Garrison, B. A. 1999. Bank Swallow (*Riparia riparia*). In *The Birds of North America*, No. 414 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Hubbard, J. P. 1978. Revised check-list of the birds of New Mexico. New Mexico Ornithological Society Publ. 6.

Ligon, J. S. 1961. *New Mexico Birds and Where to Find Them*. University of New Mexico Press, Albuquerque, NM.

Yanishevsky, R., and S. Petring-Rupp. 1998. *Management of Breeding Habitat for Selected Bird Species in Colorado*. Colorado Division of Wildlife. Denver, CO.