

## Loggerhead Shrike, *Lanius ludovicianus migrans*

**Status:** *State:* Endangered **Federal:** Nongame Migratory Bird of Management Concern

### Identification

The loggerhead shrike is a robin-sized bird with a large gray head, a black hooked bill, and a black facial mask that extends across the forehead and behind the eyes. The back is gray and the wings are black with a white patch at the base of the outer flight feathers. The tail is black and the underparts are pale gray. Although a predator, the loggerhead shrike lacks the sharp talons of hawks, instead possessing legs and feet typical of passerines. The sexes are alike in plumage, yet male shrikes are larger than females. In comparison to adults, juvenile loggerhead shrikes are duller overall, have brown flight feathers, and are faintly marked with buff barring throughout the body. Loggerhead shrikes often perch in a horizontal posture on fence posts or wires and fly in a low, undulating flight with quick wingbeats.



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The loggerhead shrike resembles both the northern mockingbird (*Mimus polyglottos*) and the northern shrike (*Lanius excubitor*). The mockingbird lacks the black mask and hooked bill of the loggerhead shrike and the tail and wings of the mockingbird are a lighter shade of gray. The wing patterns of these two species also differ, with the mockingbird displaying a white wing patch on the outer flight feathers as well as its coverts. The northern shrike is larger than the loggerhead shrike, paler gray above, and heavier billed. The northern shrike also has a more extensive rump patch, a pale lower mandible (jaw) during the winter, and a narrower black facial mask that does not extend above the eye or across the forehead. In addition, the northern shrike pumps its tail when perched.

The name shrike comes from the word “shriek,” referring to the vocalizations of these birds. Shrikes emit both harsh, screeching calls as well as a musical song. Reminiscent of the brown thrasher’s (*Toxostoma rufum*) melody, the song of the loggerhead shrike consists of a series of two-noted liquid trills and guttural notes repeated over short intervals.

### Habitat

A bird of open countryside, the loggerhead shrike inhabits short-grass pastures, weedy fields, grasslands, agricultural areas, swampy thickets, orchards, and right-of-way corridors. Shrikes occupy sites containing hedgerows, scattered trees or shrubs, and utility wires or fence posts, which serve as perches. Nests are often situated in trees or shrubs bearing thorns, such as hawthorns (*Crataegus spp.*), osage orange (*Maclura*

pomifera), and multiflora rose (Rosa multiflora). Red cedar (Juniperus virginiana) may also be used for nesting. Similar habitats are occupied year-round.

## **Status and Conservation**

The clearing of eastern forests for agriculture during the 19<sup>th</sup> century created habitat for several species of grassland and edge birds, including the loggerhead shrike. The abundance of small farms, pastures, and hedgerows in the northeastern United States enabled this shrike to expand its breeding range. With the advent of mechanized agriculture, large monocultures with few shrubs or hedgerows replaced smaller fields, diminishing habitat quality for shrikes. In addition, open landscapes were lost to development or matured into forests. Consequently, the breeding range and the number of loggerhead shrikes in the Northeast began to decline by the early 1960s. Heavy use of pesticides, particularly DDT, accumulated in the prey of shrikes and resulted in eggshell thinning, reproductive failure, and contamination of adults and young.

Severe habitat loss, coupled with pesticide contamination, proved disastrous for nesting loggerhead shrikes in the northeastern United States. Since the 1970s, loggerhead shrike numbers have plummeted and breeding populations have been extirpated from much of this region. The Breeding Bird Survey has detected annual declines of this species in the Northeast from 1966 to 1999 (Sauer et al. 2000). Likewise, numbers of wintering shrikes detected on Christmas Bird Counts significantly declined survey-wide from 1959 to 1988 (Sauer et al. 1996). The loggerhead shrike was included on the National Audubon Society's Blue List of Imperiled Species from 1972 to 1986, the final year of the list. This shrike was also listed as a Nongame Migratory Bird of Management Concern by the U.S. Fish and Wildlife Service in 1982 and 1987.

Due to severe population declines and habitat loss, the loggerhead shrike was classified as an endangered species in New Jersey in 1987. The New Jersey Natural Heritage Program considers the northeastern subspecies, migrans, to be “imperiled globally because of rarity.” Rare throughout much of the Northeast, the loggerhead shrike is also listed as endangered in New Hampshire, Vermont, Massachusetts, New York, Pennsylvania, Maryland, and Virginia.