

The scientific name *Lanius*—meaning butcher—foretells of a habit of the northern and loggerhead shrike.

Illinois Shrikes

Story By Steven D. Bailey and Sheryl DeVore

Each winter, the northern shrike returns to Illinois in mid-to-late October, choosing hundreds of acres to call its own until it departs six months later. In one winter, several to many of this species appear, mostly in northern Illinois. But every so often, perhaps once every few decades, 50 to 100 northern shrikes seek winter homes in Illinois, some even venturing as far south as Effingham.

The relative scarcity of the northern shrike (*Lanius excubitor*), as well as its peculiar, raptor-like behavior, draws birders to seek it out in winter in Illinois. The other shrike seen in Illinois—the loggerhead or *L. ludovicianus*—is just as interesting



A northern shrike perches at Rollins Savanna in Lake County. Shrikes are noted for having a hooked bill and impaling their prey on thorns and barbed wire.



(Photo courtesy Steven D. Bailey.)

to watch and just as scarce. Indeed, the loggerhead is endangered as a breeder in the state.

A shrike is a songbird, but it acts like a bird of prey, regularly eating other songbirds and often impaling them (with other choice meals such as voles and large insects) on barbed wire and vegetative thorns to save for a rainy day when food is scarce. This outdoor pantry might also serve as a territorial or

courtship ritual—with males showing off their prowess to attract females and deter other would-be suitors. Impaling prey on a thorn also helps a shrike better hold on to its prey while eating. The shrike's talons aren't as strong as that of a bird of prey.

The loggerhead returns to Illinois in March from its southern wintering grounds—perhaps as far south as the Gulf Coast and Mexico—just as the northern shrike is leaving Illinois to fly to its far northern breeding grounds.

Knowing the species' range and time of appearance in Illinois can



help separate the two—a shrike anywhere in Illinois during summer almost always is a loggerhead, while a shrike in the northern two-thirds of Illinois from November through February is most likely a northern. But sometimes, the loggerhead and northern's time of appearance overlaps.

Both the northern and loggerhead adults have grayish backs contrasting with black wings and tail and a blackish mask through the eye. Both also have splashes of white at the tail tips and in patches at the base of the primary wing feathers, especially noticeable in flight. The gray on a northern shrike is much lighter or frostier compared with the darker gray plumage of the loggerhead. It's easy to see the patterns on these handsome birds from a distance. Both shrikes fly with rapid wingbeats interspersed with occasional dips.

Through a spotting scope, the observer can see that both have hooked bills, but that the northern's is more pronounced. The loggerhead's bill appears stubbier. In addition, the northern shrike often has a distinct brown (on juvenile) to light gray (on adult) scaling across the white breast. Close looks also reveal that the base of a northern's lower mandible

is whitish gray to yellow, while it's always dark on the loggerhead.

Also through a spotting scope, the observer can see that the loggerhead's black mask, actually a narrow strip of black feathers, is wider than the northern's. The northern shrike appears to have a thin strip of white on its forehead contrasting with the dark mask.

Whether northern or loggerhead, the shrike has supreme vision—a trained northern shrike once detected flying bumblebees as far away as the length of a football field. That keen eyesight means the shrike typically sees you before you see it—and too close of an approach by a human often sends it flying.

Shrikes catch invertebrate and vertebrate prey, although the northern catch more mammals and birds than loggerheads do.

Shrikes secure grasshoppers and other invertebrates simply by jumping on them and mashing them. If the shrike is after a bird, it catches it with its feet and then uses its hooked beak and powerful jaw muscles to kill.

Born at Lost Mound National Wildlife Refuge in JoDaviess County, a young loggerhead shrike is banded for a study to determine its habitat needs.

Rodents like to bite, however, so a shrike sometimes jumps and dances around its prey, taking quick bites until the victim dies. Sometimes a shrike will go into a bush, stomp around and flash its white wing patches to scare a bird into the open. Both northern and loggerhead shrikes impale their prey on hawthorns, crab apples, osage orange, buckthorn, barbed wire and other thorny substrates. They also will wedge prey in the fork of a branch.

In the winter of 1999-2000 Illinois birders documented a record number of northern shrikes, 105, with most in the suburbs of Chicago.

That season, birder Gayle Wagner said she watched a northern shrike in McHenry County “pluck what appeared to be a very frozen grasshopper impaled on a twig and chomp it down.” Richard Biss, coordinator of the Illinois rare bird alert, observed a northern shrike spit out a pellet—a mass of bones and fur that can't be digested.

National Christmas Bird Count data from 1900 through 1980 show northern shrike populations rise and fall during winter. These fluctuations probably occur based on the season's severity and the cyclic nature of the available prey on the northern shrike's breeding grounds.

(Photo courtesy Matthew Fletcher)



(Photos courtesy Randy Nyboer)



Where and when to find shrikes

- **Northern:** Illinois Beach State Park in Lake County and Glacial Park in McHenry County, November through March. Northern shrikes may occasionally be found chasing and catching birds near backyard feeders, especially near grasslands or marshlands.
- **Loggerhead:** Prairie Ridge State Natural Area in Jasper and Marion counties and Midewin National Tallgrass Prairie in Will County, May through August.

Populations of most of the world's shrike species—including the northern and loggerhead—are declining for various reasons, some of which are not yet fully understood.

“Loggerhead shrike populations are in serious decline within Illinois,” said Jeff Walk, a member of the Illinois Endangered Species Protection Board. The shrike's breeding status in Illinois was changed from threatened to endangered in 2009, he said.

Recent studies “suggest loss of grassland habitat and agricultural intensification has resulted in reduced nest success” of loggerheads, Walk wrote as lead author in “Low Nesting Success of Loggerhead Shrikes in an Agricultural Landscape” published by *The Wilson Journal of Ornithology* in 2006.

Randy Nýboer, Illinois Natural History Survey director of field surveys for the Illinois Natural Areas Inventory Update, said a combination of lost breeding habitat and pesticides on the loggerhead shrikes' wintering grounds could be causing the bird's decline. Nýboer and Dan Elbert have been studying breeding populations of loggerhead shrikes at Lost Mound National Wildlife Refuge in northwestern Illinois.

Research activities at Lost Mound National Wildlife Refuge are providing researchers valuable information on the types of land management practices necessary to attract shrikes.

“We're finding the shrikes like the wide open prairies with some trees for perching,” Nýboer said. “We've noticed when it gets too woody or really heavy with cedars, the loggerhead shrikes won't nest.” Loggerheads nest in cedars, but prefer them to be scattered.

Preliminary land management at Lost Mound (removing heavy woods and overabundant cedars with prescribed burns and other means) seems to be slowly attracting more shrikes, Nýboer explained. A Northern Prairie Wildlife Research Center report suggested that restoring this kind of habitat might improve the loggerhead shrike's ability to reproduce.

Predation also is a problem. Nýboer said he observed a female shrike lay nine eggs—a record number for this species—at Lost Mound. The eggs were eaten, likely by a snake. She laid nine more eggs, which also were eaten. To make things interesting, the researchers found that bull snakes were eating

The Illinois Ornithological Society maintains a Web site (www.illinoisbirds.org) dedicated to Illinois birds and birding, including the Illinois Rare Bird Alert.

shrike eggs, while shrikes were eating western hognose snakes and lined snakes, both threatened in Illinois.

Providing larger tracts of open grassland over smaller, more narrow, grassland strips would enable both shrike species to hunt more efficiently. In turn, the large grasslands would benefit other wildlife. Woody, nesting substrate scattered over these large areas would likely lower nest predation along fence and roadways traveled more by nest predators.

The world of shrikes is indeed complex. As researchers continue their work, there's hope that the northern and loggerhead will remain part of Illinois' avian landscape. 

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Photo courtesy Randy Nýboer