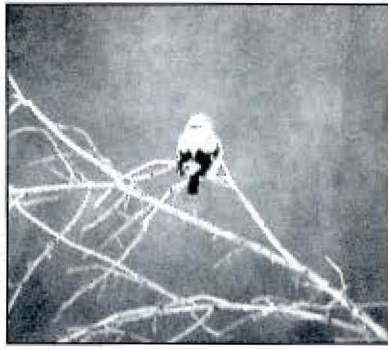


Marsh), the edges of rivers or lakes (e.g. Horseshoe Lake, Clinton Lake, Windfall Lake, Third Lake, Kishwaukee River, Rock River, Lake Michigan, Silver Lake, Lake Shabbona, Lake Springfield, Sangchris Lake State Park, Baker's Lake, Herrick Lake), and sites in wet prairie and other marshy habitat (Chain O' Lakes State Park, Fermi-Lab, Crabtree Nature Center, Meredosia National Wildlife Refuge, West Chicago Prairie, Hidden Lake Forest Preserve, Springbrook Prairie). One ornithologist commented the Northern Shrikes seen at the Savanna Army Depot did not utilize the drier grasslands where Loggerhead Shrikes breed at that site (D. Wenny personal communication). Atkinson's (1993) Idaho birds frequented riparian areas more than expected and grassy areas less than expected. Observers did report Illinois birds in dry, upland grassy areas including pastureland at the base of wooded bluffs in Marshall County and in a few other areas.

Feeding Habits

One of the more interesting characteristics of Northern Shrike behavior involves what it eats and how it catches and disposes of its prey. Like other members of its family, Northern Shrikes catch their prey, then store them in caches known as larders by impaling them on many types of sharp projections including barbed wire and the spines and thorns of trees and shrubs. Hawthorns, crab apples, osage orange and barbed wire are common sites for Loggerhead Shrikes in Illinois (pers. obs.), and are likely sites for wintering Northern Shrikes as well.

In a study by Yosef (1993), Northern Shrikes on their breeding grounds in Israel responded to the placement of barbed wire fencing on their hunting grounds by reducing territory size. The shrikes immediately began using the barbed wire for impaling sites and each male's territory size shrank almost immediately. Loss of extensive areas of barbed wire fencing in the Midwest and other locations may



Illinois' southernmost documented record (pending IORC review) of Northern Shrike on 28 November 1999 near Horseshoe Lake in Madison County. Photo by Frank Holmes.

have been one of many reasons for the decline of Loggerhead Shrikes, and may have implications for management of Northern Shrikes (whose numbers are also decreasing) on their wintering grounds.

The Northern Shrike possesses extremely acute vision. Cade (1967) has noted shrikes wintering in New York fly directly from tree-top perches to traps baited with mice or small birds, over courses in excess of 200 yards. Cade has also witnessed wild shrikes attack caged shrikes or free-flying trained birds from distances approaching 1,000 yards. One of his trained birds could even spot flying bumblebees at least 100 yards away.

Northern Shrikes spend long hours on perches scanning their hunting grounds. The perches are usually 3 to 24 feet high. The bird sometimes remains in one spot for up to 30 minutes, but usually changes perches more frequently. Wintering shrikes in Sweden covered distances of 7.3 miles per day, using about 3.5 perches per mile (Lefranc 1997).

Shrikes catch most invertebrate prey by simply mashing them. The hooked beak and powerful jaw muscles can be lethal weapons to vertebrate prey, and can leave bloody fingers to those vertebrates "lucky" enough to catch one during banding operations. Just ask Jonathan Simms of Lombard who caught an immature

bird at Camp Sagawau in the Palos area of southwestern Cook County the winter of 1999/2000. Simms said, "My fingers will remember this for a long time." Cade (1967) summarizes the actual treatment of both avian and mammalian prey, but says "the attack is always immediately directed at the neck of the quarry... the cervical vertebrae often being severed in two or three places," exactly as in falcons. Cade continues: shrikes "usually catch birds in their feet... although they occasionally try to strike them down with their beaks... On the other hand, a shrike does not grab a rodent in its feet, because it (the shrike) is likely to be bitten. Instead it harasses the rodent by jumping and dancing erratically around the prey, then delivers a series of quick bites." Cade (1962, 1967) reported most birds are taken by surprise and rarely while in flight; this is further substantiated by Mester (1965). Many times the Northern Shrike drops off a high perch and begins flying low to the ground through fairly dense shrubs trying to flush avian prey into the open. Failing this method, the shrike may actually enter a bush and move about the branches flashing its white wing patches and twisting its tail around to scare prey into more open areas (Mester 1965). I observed a shrike at Moraine Hills State Park (McHenry County) on 8 January 2000 perched in a small area of brush, marsh, and wet prairie. Suddenly it dropped to just above the marsh vegetation and began a quick flight through the small willows and dogwoods. At one point, it dropped to the ground and seemed to disappear, but was back up to its perch a few minutes later, apparently unsuccessful.

Prey Species

Studies of winter shrikes have shown most prey consisting of arthropods (mainly large beetles and grasshoppers) and small animals including lizards, frogs, birds, and mammals (Mester 1965, Atkinson &