

Identification

At this point, it makes sense to say a few words about shrike identification. A juvenile Northern Shrike is easy to separate from Loggerhead and Northern adults. Juvenile Northern Shrikes are broadly washed in brown over much of the dorsal area, and the wing coverts, tertiaries, and secondaries are edged with brown, and even the bar through the eye is dull brown. Juvenile Northerns also usually have much stronger barring on the ventral surface than adults. If a shrike is not seen well enough to determine the age, then it's probably not been seen well enough to be called a Loggerhead or Northern.

All the popular field guides, including National Geographic, oversimplify the ease to which these two species can be separated. Kaufman (1990) apparently does not consider the challenges of separating the species difficult enough to deserve mention in his advanced birding guide. Yet many shrikes go unidentified over a large part of their range where temporal aspects of their migration or winter range place them together. In fact, the average annual departure date for Loggerhead Shrike in Sangamon County is one week after the earliest arrival dates for Northern Shrike in the state (Bohlen 1989). Bohlen also shows many of the earliest spring arrivals for Loggerhead as being before or near the same time as departures of the latest wintering Northern Shrikes. Additionally, one or more Loggerheads are relatively frequently found wintering in central and or northern Illinois. The 1999/2000 winter season was no exception; as mentioned above, at least 3 Loggerheads were reported in northern Illinois, and 1 in

central Illinois. Perhaps a Northern Shrike incursion causes at least some observers to look more closely at any shrike they come across, while causing others to I.D. (perhaps incorrectly) a shrike simply by location.

In separating the two shrikes, observers should look for several different field marks. Several excellent articles discuss some of the more salient field marks (see Zimmerman 1955, Balch 1988, Granlund 1995) I can do no better than repeat these criteria (from Balch 1988) for separating Loggerhead and Northern Shrikes:

The bird is a Northern Shrike if it has any of the following:

- A larger, longer, heavier bill.
- Much white or gray in the lores (a broken mask) with conspicuous whitish feathers at the base of the upper mandible.
- A white spot below the eye.
- Light color on the bill after mid-February
- Light color on the upper mandible (any month).

The bird is a Loggerhead Shrike if it has any of the following:

- A smaller, stubbier bill.
- An all dark bill before mid-March.
- Black nasal tufts.
- Black feathers at the base of the upper mandible.

Along with the high numbers of shrikes, a significant percentage of immatures (14%) was observed in the 1999/2000 winter population in Illinois. Typically, most birds in Illinois are reported as adults. The only other age-related data I could find for this species' occurrence in winter was McPeck & Adams (1994) for Michigan birds. Specimen data who "most of our winter visitors to be immature birds." Voles represent a large part of the Northern Shrike's diet in its northern breeding grounds as well as the wintering grounds. It's possible that in years when the vole cycle crashes, adults force immatures out of the op-

timal areas. It would be interesting to know if a latitudinal segregation occurs within this species with respect to age and/or sex. This type of differential migration has been noted in many species such as Dark-eyed Junco, White-crowned Sparrow, and Yellow-bellied Sapsucker (Howell 1953, King et al. 1965, Ketterson and Nolan 1976), to name a few. Kerlinger and Lein (1986) showed another cyclical species, the Snowy Owl, has a preponderance of 1st year birds in some areas during their irruptive movements, as well as a segregation of males and females.

Territories

One problem encountered when trying to sort through the Northern Shrike reports from regions with exceptional concentrations the winter of 1999/2000 was determining just how many birds were actually present. The problem was especially true for Fermi-Lab and Morton Arboretum in DuPage County, as well as the numerous sightings around Clinton Lake in central Illinois. Northern Shrikes occupy large territories during both the breeding and winter ranges; this phenomenon occurs across the species' range. Some Ohio Northern Shrikes hunted over great circular routes. An observer followed one Northern Shrike for 2.5 miles during 30 minutes, and it still had not completed its circle (Zimmerman 1955). Atkinson (1993) measured average wintering territories of six color-banded and six radio-tagged birds in Idaho and found the average shrike occupied 540 acres, although more than one-half of the activity was confined to a core area of about 125 acres. In Sweden, scientists estimated 3.7 wintering individuals occupied approximately 35 square miles each (Lefranc 1997). It is unclear if any of these studies occurred