

# Habitat and Population Survey of Eastern Loggerhead Shrike

## Near Winnipeg, Manitoba – 2006 Field Season

*Prepared by Cory J. Lindgren*

The eastern loggerhead shrike (*Lanius ludovicianus migrans*) is a grassland songbird that was listed as Endangered in Canada in 1991 and later listed as Endangered in Manitoba in 1998. Although suitable habitat for the eastern loggerhead shrikes appears to exist in several areas of Manitoba, in recent years nesting pairs have only been observed in the rural municipalities of West St Paul, Rosser and Headingly, located to the north and west of the City of Winnipeg.

### **Population Monitoring**

In 2006, a total of 3 nesting pairs and three individual loggerhead shrikes were found in Manitoba (N=9). The first shrikes were found May 5 2006, however a completed nest indicated they had arrived much earlier. A total of 4 nests were found in 2006 – one for each of three nesting pairs plus one successful second nest. One nest was abandoned in 2006. All nests were located either in the rural municipalities of West St. Paul, Rosser or Headingly, Manitoba. A total of 22 eggs were produced in four nests with clutch sizes ranging from four to seven eggs (mean = 5.5 eggs/nest). Fourteen eggs successfully hatched (mean = 3.5 hatchlings/nest) resulting in a 63% hatching success rate. Fledging success was 78% as 11 of 14 young (mean = 2.7 fledglings/nest) survived to fledge in 2006. The mean number of young produced per female shrike in 2006 was 3.6. An entire clutch of three nestlings was found dead at the Cedar Acres property as a result of West Nile Virus.

### **Banding**

Seven hatch year shrikes were banded in 2006. Banding of nestlings occurred generally around 9 days of age or at a time when it was estimated that they were of sufficient size yet not too large and prone to premature fledging. The first family group of hatch year shrikes was banded on June 27 2006 while the last hatch year shrike was banded on July 22 2006, both at Cedar Acres and both clutches were produced by the same nesting pair.

In 2006, at least 2 shrikes that had been previously banded in the core area returned to breed at the Cedar Acres property, where they had nested in 2005.

### **Alarming Trends**

In 2006, three nesting pairs were found, this is the lowest number of nesting pairs found since 1998. Monitoring efforts revealed about a 30% decrease from the thirteen adult shrikes found in 2005, 44% decrease from the 16 shrikes found in 2004, and a 60% decline from a high of 22 shrikes found in 2000. The total number of shrikes observed in 2006 was 43% below the nine year average of 15.55 shrikes per year. There was a 38% decline in the number of nesting pairs, a 40% decline in the number of successful nesting pairs, a 15% decline in eggs produced, and a 42% decline in young produced between the 2005 and 2006 nesting seasons.

It would seem this population is facing eminent extirpation unless innovative recovery action is immediately employed.

### **Awareness**

An educational program was initiated with a West St Paul grade 5 class in 2005 and continued through 2006. The class studied aspects of species at risk ecology, assisted in shrike surveys, planted shrike habitat within their school yard, and spent a day in the field observing nesting shrikes.