

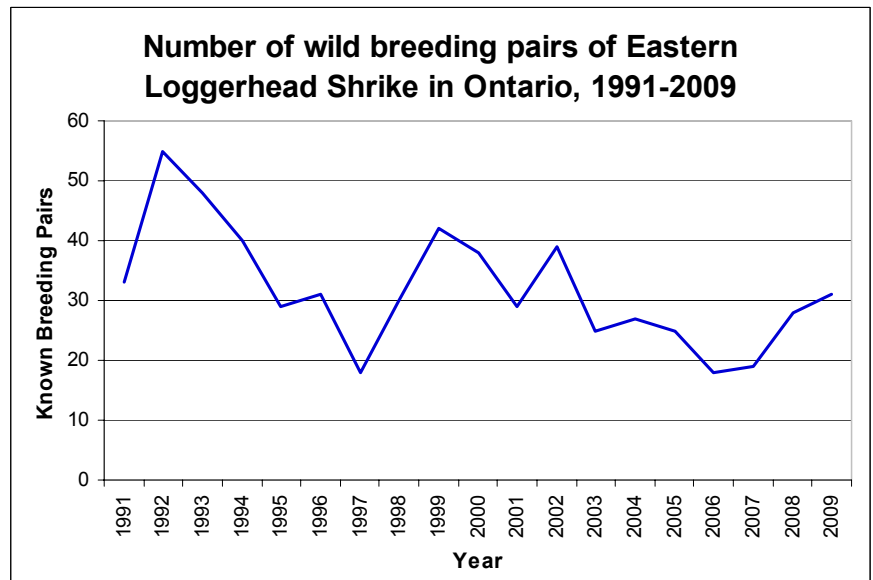
## 2009 Eastern Loggerhead Shrike Field Report Season Results

### Wild Population

There was an increase observed in the wild population this year, with 31 pairs confirmed in the province: 18 in Carden, 9 in Napanee, 1 in Smiths Falls, 1 in Renfrew, and 2 in Grey-Bruce Counties. This is the largest the wild population has been in the last 7 years, and perhaps more importantly we have seen an increasing trend over the last 4 years. Pairs were observed in locations that had not previously had confirmed reports of shrikes, i.e. Fenelon Falls and South Bruce Peninsula. Twenty-two of these pairs successfully fledged a total of at least 81 young, which is comparable to previous years (27 pairs fledged at least 79 young in 2008 and 21 pairs fledged 85 young in 2007).

The survey effort this season was greatly enhanced by a dedicated team of volunteers. Adopt-A-Site programs in Napanee and Carden (inaugural year) aided survey coverage of these important core areas. As well this year, a pilot Grassland Bird Survey (GBS) was conducted in Ontario. The intent of the GBS was to locate the majority of shrikes in the core areas (providing survey coverage outside of Carden and Napanee and enhancing coverage within those 2 cores) and identify the suite of avian species typically associated with suitable shrike habitat. There were 66

participants this year. For more information on any of these programs please contact us.



This year saw the return to breeding grounds of 4 Ontario captive-bred birds previously released from the field breeding program, including one 3-year old bird. The juvenile return rate of Ontario release birds this year was 1.9% (2 of 103 released in 2008), which is down from last year (6.4%) but well within the range reported for wild juvenile migratory shrikes. Of particular note this season was the confirmation of a 2008-release bird from Quebec's captive breeding program, paired with a wild bird in Carden. This is the first confirmation of the return of a Quebec release bird. Two of the 4 Ontario release birds bred successfully this year.

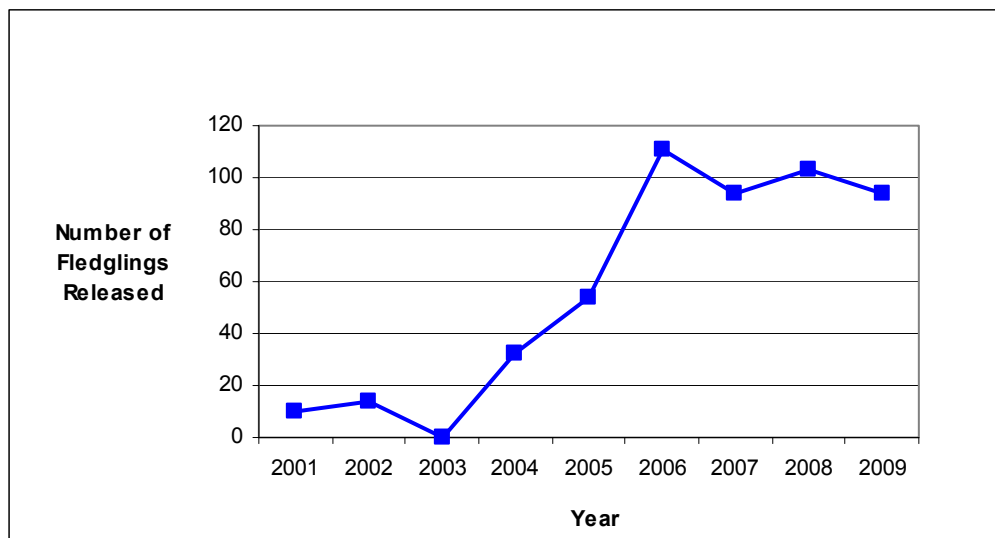
There was more intensive and frequent monitoring of this year's breeding pairs as part of a study on Territory-Use. As behaviour was monitored, perch sites were mapped and the behaviour of each shrike observed was noted. All data will be analyzed over the winter, providing important information on shrike behaviour, territory size and use throughout the breeding cycle, and habitat requirements of shrikes.

Again this year an effort was made to trap all wild adults in order to determine individual identification and band newcomers. All wild adults banded this year received yellow over a silver ID band on the right leg as part of their unique 4-colour combination. We utilized new double-overlap Darvic colour bands this season in an effort to improve band retention. As always

we encourage birders to try and determine band combinations on any shrikes spotted, and of course report any sightings to us! (1-800-956-6608 or [jessica@wildlifepreservation.ca](mailto:jessica@wildlifepreservation.ca)).

### Field Breeding and Release

The field breeding program maintained its momentum this year with another productive season. In late April, 22 breeding pairs were transferred to our breeding and release sites (10 pairs to Dyer's Bay and 12 to Carden) and placed in individual field breeding enclosures. A further 7 pairs were paired at our Ingersoll facility and another 2 pairs at the Toronto Zoo. Twenty of these pairs successfully bred, including 9 second-clutches. The program saw 94 juvenile shrikes released to the wild (69 in Carden and 25 in Dyer's Bay). A further 7 birds were retained for the captive population.

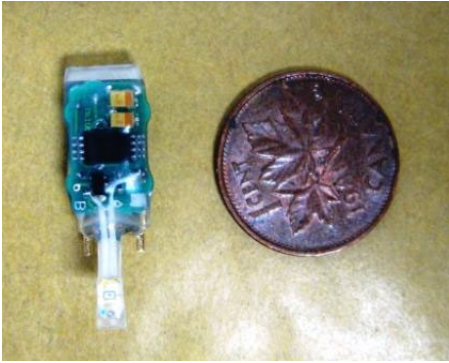


### Geolocators

Since winter 2006, we have been exploring the use of radiotelemetry with our captive shrikes. Not only would radiotelemetry give us information on post-release survival, dispersal and habitat use of our released young, it also had the potential to reveal migration routes and wintering grounds, which remain a huge knowledge gap for this species. Since 2007 we have released 38 juveniles with live tags from our Carden site and they were tracked from the release site, by foot, ground vehicle and air. We saw a promising 75% survival pre-migration. However, even with aerial telemetry, we were not able to keep up with them during migration – they just move too quickly! While we have achieved important information on post-release survival, dispersal movements and habitat use, this technique does not seem effective for determining migration routes and wintering grounds.

In an effort to fill these crucial knowledge gaps, this year we are trying geolocators. This technology has only recently been made small enough for passerines. The device consists of a data logger and a light stalk (Figure 1) which measures and records light. This data can then be translated into position information (latitude/longitude) and a map can be created showing where the bird has been. The catch is that birds would need to be recaptured to collect the data – but we have seen much success with returning birds, making this a real possibility.

This year 49 juvenile birds were released with geolocators (Figure 2). The device is the same weight and uses the same harness design (figure-8 leg loop) as the radiotags used in previous years. It is hoped that 2-3 will return next spring.



**Figure 1:** Geolocator, weighing 1.4g with the harness.



**Figure 2:** Geolocator attached to juvenile shrike.

All birds receiving geolocators were fitted with red over a silver ID band on the left leg. All other release birds received a unique 4-colour combination, again using the new double-overlap Darvic bands.

### **Program Funding**

WPC is grateful for the funding support for this year's shrike recovery activities from the following sources: Canadian Wildlife Service, the Ontario Species at Risk Stewardship Fund, WWF's Species at Risk Recovery Fund for Ontario, the federal Habitat Stewardship Program, the Harold Crabtree Foundation and the Canadian Association of Zoo and Aquariums. We are also grateful to Boisset Family Estates, makers of French Rabbit wines, for providing the bridge funding necessary to launch the field season.

By Jessica Steiner, Species Recovery Biologist, WPC