

## 2014 Eastern Loggerhead Shrike Field Report - Season Results

By: Hazel Wheeler, WPC Species Recovery Biologist

### Wild Population

#### Monitoring

**Sixteen pairs were sighted in Ontario** this season: 9 in Carden, 6 in Napanee, and 1 in Smiths Falls. This is a notable decrease from last year (22 pairs), and the smallest the population has been since monitoring efforts began in 1991, which is of great concern. Fourteen of these pairs successfully bred, and 35 young were fledged across Ontario (20 in Carden, 13 in Napanee, and 2 in Smiths Falls). There were no birds seen in Grey-Bruce or Pembroke/Renfrew this season.

In addition to breeding pairs, there were 11 unpaired birds confirmed this year, all in Carden. The majority of these birds appeared to be males holding territories, which raised the question of why there seemed to be such a lack of available females. This is the first year that there appeared to be such a sex discrepancy in individuals in Carden.

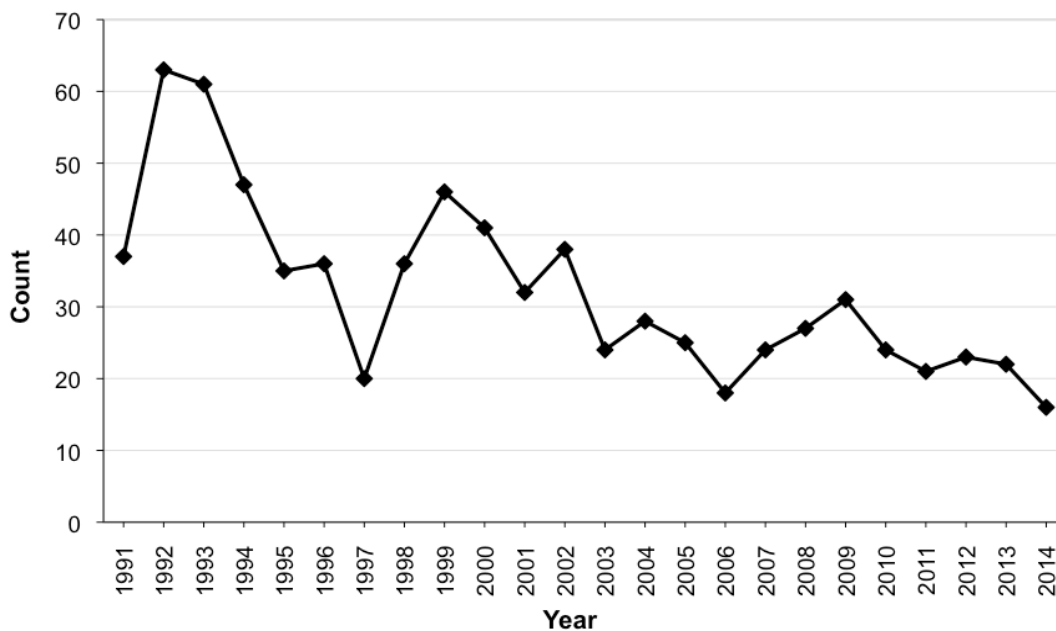


Figure 1: Total number of ELOSH pairs in Ontario 1991-2014

#### Adopt-A-Site Program

Survey efforts were greatly aided by Adopt-A-Site volunteers. Forty volunteers covered almost 200 priority habitat patches across the core areas, and were responsible for the vast majority of coverage outside of the Carden and Napanee cores. Indeed, it was through a volunteer that we were able to confirm the breeding pair in Smiths Falls this year, where breeding shrikes have been absent since 2009. As in 2013, volunteers surveyed for both shrike and an additional list grassland bird species of interest, such as Bobolink and Eastern Meadowlark. These data can be used to develop strategies to conserve a range of species that share the unique alvar ecosystem with Loggerhead Shrike.

### ***Returning captive birds***

Four captive-released birds were confirmed returning to Ontario breeding grounds: three 2012-release birds (one hatched at the Toronto Zoo and hacked in Napanee, one hatched at African Lion Safari and hacked in Napanee, and one hatched and released in Carden); and one 2013-release (hatched at Mountsberg and hacked in Napanee). The 2013 bird, which was carrying a geolocator, successfully bred with a wild bird in Carden, and was trapped after the young had fledged so staff could retrieve the tag. One other bird successfully bred with a wild bird in Napanee. The remaining birds were singles, one of which was seen at the Carden field site throughout the season, and was often seen trying to interact with the captive birds.

This is the third year for the hacking program in Napanee, which began in 2012. We have now had eight birds return (7 released in 2012, 1 in 2013); this represents a 12% return rate for all birds released over the past two years combined. This is a markedly high number for the program when comparing to past years: prior to the implementation of the hacking program in Napanee, the overall return rate for captive-bred birds was 5%, and the highest annual return rate was in 2007, when 6.4% of birds released in 2006 returned to Ontario the following year. These high rates of return for hacked birds show great promise for the program, as field-breeding will be entirely replaced with hacking in 2015.

### ***Banding***

The wild banding program continued in 2014, and **five adults** were caught and banded this year, all in Carden. All wild-caught birds received DG/SI on the right leg as part of their four-colour combination, with the exception of one adult that was already banded RD/SI on right as it was carrying a geolocator (released in 2013). The geolocator bird retained RD/SI, but had two additional colour bands added to the left leg before it was released.

The goal of the colour-banding program is to track sightings of our birds as they move throughout the year, so we encourage (or even challenge) birders to determine any band combinations of shrikes spotted, and of course report your sightings to WPC! (1-800-956-6608; hazel[at]wildlifepreservation.ca)

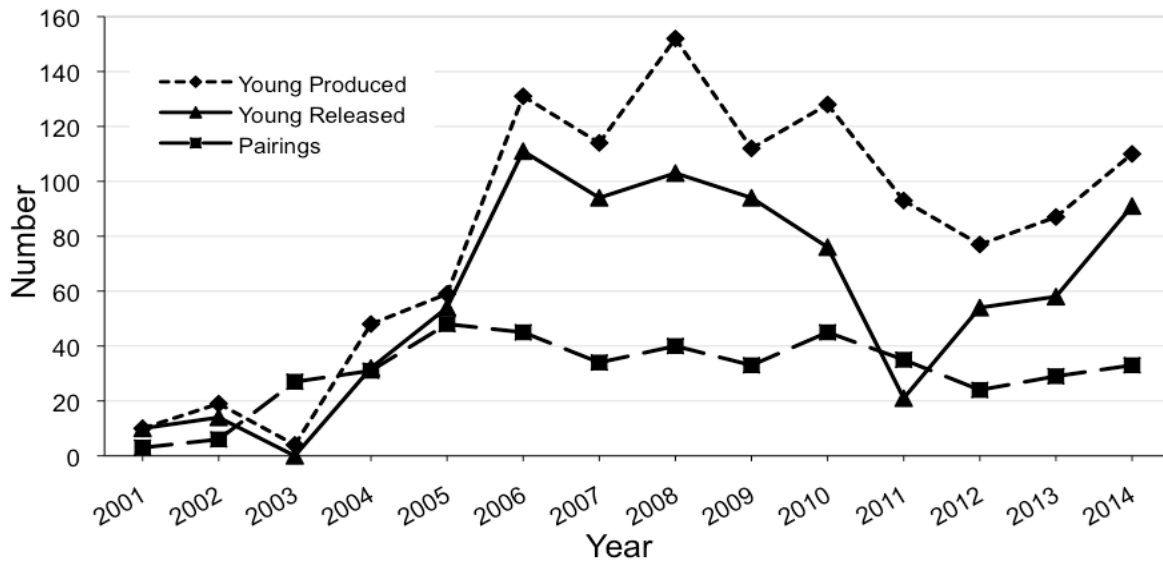
### ***U.S. Sightings***

There were no sightings of banded LOSH in the U.S. in 2014, despite the inclusion of a shrike notice on the Audubon Christmas Bird Count website. Efforts to collect sightings will continue, using the CBC, eBird, and other channels made available through U.S. partners.

## **Captive Population**

### ***Captive Breeding and Release***

Captive breeding this year followed the same blueprint as 2013, with breeding pairs housed in four locations: Mountsberg Raptor Centre, African Lion Safari, the Toronto Zoo, and the Carden field-breeding and release site. This was a great year for the captive-breeding program: **21 pairs** successfully bred, fledgling **110 young** (Figure 2). This is a jump from 2013 numbers (18 pairs, 87 fledglings), and a welcome return to the high productivity that we used to see with the captive birds from 2006-2010. **Ninety-one young** were ultimately released in to the wild, and **nine young** were retained to grow the captive population.



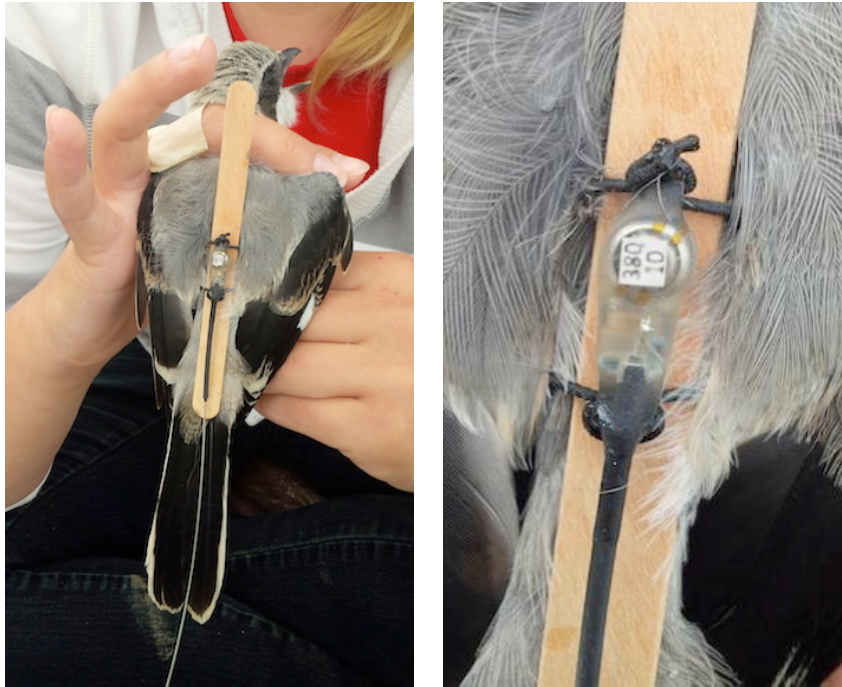
**Figure 2:** ELOSH captive pairings, young produced and young released 2001-2014

We continued to see reduced mortality this year as compared to past years, especially during the breeding season. WPC staff continue to work closely with veterinarians at the Toronto Zoo and the OVC Pathology Lab to investigate reasons for the mortality the program has experienced.

***Banding, Colour-Marking, Geolocators and Radio Tags***

Two types of tags were deployed on young birds this year: geolocators and radio tags. Radio tags differ from geolocators in that the latter need to be recovered for any data to be downloaded, whereas location data from radio tags will be gathered remotely by receiving stations, and can be sent to WPC without ever having to physically recapture the bird. The radio tags used this year were deployed on the Motus Wildlife Tracking System ([www.motus-wts.org](http://www.motus-wts.org)), which includes a network of approximately 200 radio antenna arrays throughout Ontario, extending in to the Maritime provinces, then down the eastern seaboard to Virginia. This is the first year of operation for Motus, so all of us at WPC are excited to see what data our tagged birds will supply!

All captive-bred and released birds that were not outfitted with additional remote sensing equipment received unique four-colour combinations which included DG/SI on the left leg to identify them as a 2014 release bird. **Forty-four birds** received geolocators this season, and had only RD/SI on left for ease of identification next season. An additional **eight birds** received radio tags (Figure 3), and had only SI on left. In addition to permanent bands, all birds received temporary colour-marking to aid in individual identification while in the release enclosures and during post-release monitoring (Figure 4).



**Figure 3.** Radio tag attachment on a captive-bred shrike



**Figure 4.** Colour-marked captive-bred birds observed during post-release monitoring.

### ***New Project Partners***

This fall, WPC welcomes a new partner facility to those that provide essential overwintering and breeding space for our captive Loggerhead Shrikes: Little Ray's Reptile and Wildlife Zoo (<http://raysreptiles.com/>) in Ottawa. The staff at Little Ray's spent the end of the summer busily building new winter shrike enclosures, which were filled at the beginning of September with their new avian charges. Things are going well so far, as the staff gets to know the birds, and the birds get to know our nation's capital. Welcome Little Ray's!

## **Habitat Stewardship and Outreach**

### ***Habitat Stewardship***

Over August, Area Biologists met with interested landowners to discuss potential stewardship projects for this fall/winter. Several priority projects have been identified in both the Carden and Napanee core areas, including fencing and water system projects in critical ELOSH habitat. In Napanee, stewardship projects were coordinated by WPC staff, and in Carden, Couchiching Conservancy continues to be an important partner in project planning and implementation.

### ***Public Presentations and Site Tours***

Hazel Wheeler, WPC Species Recover Biologist (SRB), and volunteer Chana Steinberg represented WPC at Migratory Bird Day at the Toronto Zoo on May 10. A display board was mounted and outreach materials were made available to visitors.

SRB represented WPC at the Spring Bird Festival at Colonel Sam Smith Park in Toronto on May 24. There was much interested in shrike and pollinators, and a constant stream of people visited the display.

WPC had a display booth at the Carden Nature Festival on Jun 7-8. A tour of the Carden field-breeding site was conducted on Jun 7, with 10 people in attendance.

If you are interested in having one of our biologists speak to your group regarding the Loggerhead Shrike Recovery Program, please contact us.

### ***Landowner Appreciation Dinners***

Landowner and Volunteer ELOSH Appreciation Dinners were held in Carden on August 21 (~60 attendees), and Napanee on August 26 (~65 attendees). Tours of the field breeding site in Carden (10 attendees) and the Napanee release site (3 attendees) were given prior to the dinners. At both dinners, staff shared season's results over a PowerPoint slideshow of pictures from the season, and outreach materials were made available. Feedback was very positive.

## **Program Funding**

WPC is grateful for the funding support for this year's shrike recovery activities from the following sources: Environment Canada - Canadian Wildlife Service, the Ontario Species at Risk Stewardship Fund, and the federal Habitat Stewardship Program.

In addition we would like to thank all program volunteers for their generous donation of time to the various aspects of the program, and of course to the landowners, whose continued support and stewardship efforts are essential to recovery efforts.