

Eastern Loggerhead Shrike 2008 Season Update

By Jessica Steiner and Elaine Williams, WPC

2008 saw another successful season for Eastern Loggerhead Shrike recovery in Ontario. We saw an increase in wild population numbers relative to that seen in the last few years and more than 100 juvenile shrikes were released from the field breeding program. Of great significance was the return to breeding grounds of 8 birds previously released from the field breeding program - 2 of these were released in 2006. This is the first time the program has seen release birds return to breed in consecutive years, and attests once again to the fitness of field propagated young and their valuable contribution to augmenting wild numbers. Indeed, the juvenile return rate of release birds this year, at 6.4%, is many times higher than that reported for wild juvenile migratory shrikes. Almost a quarter of wild pairs confirmed in Ontario this year contained a release bird - solid evidence that the field breeding and release techniques being developed are working.

Wild Population

With 27 pairs confirmed in the province, the wild population was at the largest it's been in the last 4 years. Although the relatively wet and cool breeding season likely had some negative impacts on nesting, overall productivity was comparable to previous years with at least 79 young total fledging in Ontario (21 pairs fledged 85 young in 2007).

In the Carden core, 16 pairs were confirmed and 13 of these successfully bred fledging at least 49 young, including two successful second clutches. Shrikes were observed exploiting new areas this season, with the discovery of three new territories and 2 territories that had not been recently occupied, which bodes well for the sustainability of this local population. The increase seen in this local population is encouraging given the all time low of 7 pairs seen as recently as 2006. Seven birds previously released from the field breeding program (2 in 2006, 5 in 2007) were confirmed in Carden this year, 6 of which paired with wild counterparts. Five of these successfully bred, contributing at least 18 young to this years cohort.

Nine pairs were observed in the Napanee core area, of which 6 successfully nested, producing a minimum of 27 young. This local population was at an all time low of only 7 pairs last year, so this slight increase in numbers gives hope that we will continue to experience a new upwards trend in this area in the future.

Single pairs of shrikes were confirmed outside the Napanee and Carden regions, in the historic breeding areas of Renfrew and Smith Falls. In Renfrew, 3 adult birds were confirmed occupying the same site and 3 fledglings were observed there later in the season.

A 2007-release bird was confirmed spending time around the field breeding enclosures in Dyer's Bay, however this bird was never seen to pair up, and no pairs were confirmed in the area this season.

This year an effort was made to trap all wild adults in order to determine individual identification and band newcomers. Although over 1,000 adults and nestlings (wild and captive) have been banded since 1999, many birds have lost colour bands over the years, making individual identification, and thus bird history, nearly impossible to determine in the field, meaning that important demographic data was being lost. Nearly all adults were successfully trapped this year, providing insights into the composition of this years breeding population. These activities also

revealed that some of our returning release birds had lost their characteristic dark green bands. These birds would not have been identifiable as release birds in the field. This suggests that return rates for young released from the field breeding program may have been underestimated in previous years.

Field Breeding And Release

The field breeding program maintained its momentum this year with another productive season which resulted in 103 juvenile shrikes being released to the wild in July and August. Field staff cared for 24 pairs at our Carden and Dyer's Bay field breeding sites. In Dyer's Bay, 9 of 11 pairs bred and 7 of these went on to produce second clutches, with the end result being the release of 48 young from this site. At the Carden field site, 9 of 13 pairs successfully bred and 6 double-clutched, resulting in 45 birds for release. Five pairs kept back at our Ingersoll facility also bred successfully this year (including one double-clutch), and 13 young were taken to Dyer's Bay in July to be grouped with field-propagated young in preparation for release. In addition to these release numbers, 15 young considered of high genetic priority for the captive population were retained, and will be joining our adult birds this winter at the Toronto Zoo, our Ingersoll facility, and our new partner African Lion Safari, for future participation in our breeding efforts.

All birds released from the field breeding program are banded as a group, with the unique band combination denoting the year of release. This year, all birds were fitted with a colour band over a silver ID band on the left leg. Birds released in Carden received a dark green band, while those in Dyer's Bay donned dark blue. 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).

This season we are continuing with our efforts to radiotrack released young, in the hopes of gaining important information on juvenile ecology, and clues on migration routes and wintering grounds which remain a large knowledge gap for the species. Last year's pilot study revealed that it was possible to track young birds equipped with a tiny radiotag (only 1.4 grams) both on the ground and from the air in a small Cessna. Of the 19 birds released with radiotransmitters in 2007, 4 are known to have been taken by avian predators. Problems securing flights for aerial telemetry in a timely manner meant birds were not tracked as closely as we would have liked, and when flight time was finally obtained, thorough searching of Southern Ontario did not pick up any signals, strongly suggesting that the rest had successfully migrated into the U.S. This year we are building and improving upon last year's efforts and have released 20 birds with live transmitters from our Carden site. These birds are currently being tracked from the Carden area, and have already been found as far south as Victoria Corners and Hamilton.

Favourable Review of Captive Breeding and Release Program

Esteemed Senior Research Scientist at the Smithsonian Institute, and North American Liaison to the IUCN (World Conservation Union) Reintroduction Specialists' Group, Dr. Devra Kleiman, conducted an independent review of the Eastern Loggerhead Shrike (ELOSH) captive breeding and release program, comparing it to six other endangered avian captive breeding and release programs. Her findings were highly favourable, suggesting the program would ultimately provide a model for future recovery programs for migratory passerines.

Not only has the management of the ELOSH program exceeded its demographic and genetic objectives, it has done so cost-effectively with a relatively low annual budget (costs for the San Clemente Loggerhead shrike program, a non-migratory species closest to ELOSH are 10 times

higher), and has achieved significant success in a remarkably short period with the return and successful breeding of captive-bred released birds 4 years after the first releases (as compared to 10 for the Peregrine falcon, 9 for the San Clemente shrike and over 24 for the Micronesian kingfisher).

Dr. Kleiman's unequivocal recommendation was that the ELOSH captive breeding and release program be continued for a minimum of an additional 5 years, noting that the program is young and most captive breeding/release programs take a minimum of 15 years before their impact on recovery can be determined.

An Update on Program Funding

Thanks to Boisset Family Estates' (makers of French rabbit wines), willingness to allow WPC to use up to \$160,000 of their \$320,000 donation as "bridging" funding, we were able to launch the 2008 shrike field season. The funds had originally been donated for the establishment of a wintering facility and expansion of the captive breeding and release program. Without this commitment, there would not have been a field season this year as WPC had not received any government funding commitments towards the shrike recovery effort at the launch of the season.

As of the end of August, WPC has still not received a penny in government funding for shrikes, though we are grateful to learn that the province's Species at Risk Stewardship Fund has approved \$83,468 in funding towards the wild population monitoring and habitat stewardship projects, and federal Habitat Stewardship Program has approved \$137,000 in funding towards habitat stewardship/enhancement activities, landowner contact and communications and outreach. We are hopeful that funding from these two sources will start to come in before the end of September, to offset the over \$175,000 in expenditures WPC has incurred on all shrike recovery efforts, including the breeding and release program, since the beginning of the field season on April 1st.

Environment Canada is also working on securing an additional \$150,000 for the field breeding and release program and maintenance of the captive population over the winter. We are hopeful that this funding will come through, particularly in light of the very favourable report on the evaluation of the shrike captive breeding/release program prepared by Dr. Devra Kleiman.