

**Alberta Conservation Association
2010/11 Project Summary Report**

Project Name: *Alberta Northern Leopard Frog Recovery Program*

Wildlife Program Manager: Doug Manzer

Project Leader: Kris Kendell

Primary ACA staff on project:

Kris Kendell, Adam Moltzahn, Charmaine Trottier and Stefanie van Huystee

Partnerships

Alberta Sustainable Resource Development
Calgary Zoo
Government of Canada Habitat Stewardship Program for Species at Risk
Parks Canada
TD Friends of the Environment Foundation
Town of Taber

Key Findings

- With a tip from a landowner, identified a breeding site for northern leopard frogs that was previously unknown to us. The site is in an area northern leopard frog populations are considered rare.
- Observed frogs at four reintroduction sites, including an observation of an egg mass at Wyndham-Carseland Provincial Park.
- Created a brochure that explains amphibian habitat needs with the goal of helping landholders voluntarily protect, enhance and create northern leopard frog habitat.

Introduction

The northern leopard frog (NLF) (*Lithobates pipiens*) has suffered dramatic population declines in many parts of its range in Alberta. Although little studied, the decline in Alberta does not appear to be part of a natural cycle. The species' reduced area of occupancy and fragmented populations led to its listing as *Threatened* under Alberta's *Wildlife Act* in 1996. The status of NLF was re-evaluated in 2003, and confirmed to be *Threatened*.

Alberta Conservation Association (ACA) is a member of the Alberta Northern Leopard Frog Recovery Team (ANLFRT) and is involved in the delivery of strategic actions outlined in the species' recovery plan (ANLFRT 2005). ACA is playing a key role in the implementation of NLF stewardship projects, the identification of NLF source and reintroduction sites, disease monitoring, population inventories and habitat assessments.

Methods

We translocated NLF eggs from source sites to reintroduction sites in Waterton Lakes National Park and Beauvais Lake Provincial Park following methods outlined in the Northern Leopard Frog Reintroduction Strategy for Alberta (Kendell and Prescott 2007). We conducted NLF surveys at reintroduction sites initiated in 2007 and 2008 and assessed stewardship sites for maintenance needs and presence of NLF. We also conducted NLF surveys at potentially occupied, but never before surveyed sites. For all NLF surveys, we followed survey guidelines described in Kendell (2002). We took photographs of sites and recorded the number and age class of individuals observed.

We canvassed landowners for local sightings and identification of potential habitat in an area between Highway 22 and Highway 2, south of Stavelly and north of Fort McLeod. We also led the development of a habitat stewardship brochure, in association with the Northwest Partners for Amphibian and Reptile Conservation, to be used as a tool for the ANLFRT to introduce stewardship concepts for conserving, enhancing and creating NLF habitat.

Results

Between April 26 and May 19, field staff spent 17 days conducting visual encounter surveys for NLF eggs at 10 egg source sites. We located a total of 55 NLF egg masses, with the first observed near Magrath on April 28. We collected 15 egg masses from three of 10 potential source sites (Magrath, Eagles Nest Ranch and Michel Reservoir) and introduced these at 10 sites split between Waterton Lakes National Park and Beauvais Lake Provincial Park.

Between August 5 and 27, we visited 16 sites to search for adult and young NLF. Of these survey locations, eight were reintroduction sites, three stewardship sites and five were selected as suitable NLF habitat but had not been surveyed before. We detected at least 135 NLF at four sites, including 37 adults and 98 young (Table 1).

We spoke with 12 landowners in their homes and provided information about NLF so that residents could become more aware of the species, as well as be able to contact us should they see NLF on or near their land in the future. We surveyed the Taber Trout Pond at the Taber stewardship site for NLF and we confirmed the waterbody as a breeding site. We provided advice to the Town of Taber to ensure that a proposal to eliminate northern pike (*Esox lucius*) and yellow perch (*Perca flavescens*) from the Taber Trout Pond would have as little impact as possible on resident NLF.

Conclusions

Alberta Conservation Association is working co-operatively with a number of partners and stakeholders to ensure that the NLF remains a part of Alberta's natural heritage. This work includes NLF population and habitat monitoring, the co-ordination of reintroductions and implementing stewardship activities. We hope this combination of activities will help to alleviate concerns associated with current populations, such as vulnerability to disease, human disturbance

and threats to habitat. ACA continues to provide advice and information to help facilitate a variety of NLR related conservation initiatives in the province.

Communications

- Presentation to Ardrossan Junior and Senior High School, Ardrossan, Alberta. Worldwide crisis, local concern: amphibian conservation in Alberta. October 22, 2010.
- Presentation at the Strathcona Wilderness Centre. Worldwide crisis, local concern: amphibian conservation in Alberta. Strathcona County, Alberta. September 26, 2010.
- Presentation to the Alberta Society of Professional Biologists. Worldwide crisis, local concern: amphibian conservation in Alberta. Great West Life Building, Edmonton, Alberta. September 22, 2010.
- Presentation to Ardrossan Junior and Senior High School. Helping our cold-blooded neighbours. Ardrossan, Alberta. June 24, 2010.
- Presentation at the Onoway Public Library. It's not easy being green...or legless: introducing Alberta's amazing amphibians and remarkable reptiles. Onoway Public Library, Onoway, Alberta. April 22, 2010.
- Amphibian habitat stewardship brochure.

Literature Cited

Alberta Northern Leopard Frog Recovery Team. 2005. Alberta Northern Leopard Frog Recovery Plan, 2005 – 2010. Alberta Sustainable Resource Development, Fish and Wildlife Division, Alberta Species at Risk Recovery Plan No. 7, Edmonton, Alberta. 26 pp.

Kendell, K. 2002. Survey protocol for the northern leopard frog. Alberta Sustainable Resource Development, Fish and Wildlife Division, Alberta Species at Risk Report No. 43, Edmonton, Alberta. 30 pp.

Kendell, K., and D. Prescott. 2007. Northern leopard frog reintroduction strategy for Alberta. Technical Report, T-2007-002, produced by Alberta Conservation Association, Edmonton, Alberta, Canada. 31 pp + App.

Photos:

Alberta Conservation Association field technician, Charmaine Trottier, acclimatizes northern leopard frog eggs at the Waterton Lakes National Park reintroduction site following egg translocations. (Photo: Adam Moltzahn)

A northern leopard frog egg mass at a source site used for reintroduction activities. (Photo: Adam Moltzahn)

The northern leopard frog. (Photo: Kris Kendell)