

**Alberta Conservation Association  
2009/10 Project Summary Report**

**Project Name:** *Alberta Volunteer Amphibian Monitoring Program*

**Wildlife Program Manager:** Doug Manzer

**Project Leader:** Kris Kendell

**Primary ACA staff on project:**

Kris Kendell

**Partnerships**

Alberta Sustainable Resource Development  
TD Friends of the Environment Foundation

**Key Findings**

- 34 individuals, organizations and families contributed 217 amphibian observations and six reptile observations.
- Volunteers submitted records for seven species of amphibians and two species of reptiles native to Alberta.
- Volunteers provided information on two snake hibernacula locations and reports of two non-native reptiles.
- Over 800 individuals, families, organizations and groups are currently on the mailing list for the program's biannual newsletter *Croaks and Trills*.
- Created a new banner display featuring the program that will help promote it at various public events.

**Introduction**

Throughout history, amateur citizen scientists have contributed to the advancement of conservation through their volunteer activities. The Alberta Volunteer Amphibian Monitoring Program (AVAMP) is a long-term community survey of amphibians that was implemented in 1992, under the auspices of the Declining Amphibian Population Task Force established by the Species Survival Commission of the International Union for Conservation of Nature.

The program strives to foster an increased awareness of the ecological world and assists biologists with the detection of new amphibian and reptile populations in the province. Data collected by volunteers contributes to an increased understanding of the distribution and the general status of Alberta's amphibian and reptile species and is used, along with other data, to

assist in updating the general status of amphibians in Alberta (see Alberta Sustainable Resource Development 2005). AVAMP acts as a centre for data and information exchange with government, consultants, interpreters, academic institutes, non government organizations and the general public.

## **Methods**

We provided participants of AVAMP a peer-reviewed monitoring manual and a CD featuring the calls of the frogs and toads of Alberta. Within the manual are approved and recognized instructions and guidance on how to monitor amphibians, as well as how to record and submit observations. A dedicated toll-free phone number (1-877-777-FROG) and email address is available for participants to conveniently contact the program co-ordinator if they have questions about the program, amphibian identification, or conservation issues relating to amphibians and reptiles in Alberta. We distributed *Croaks and Trills*, the program's biannual newsletter, to help increase awareness of amphibians and to assist in maintaining relationships with program volunteers and other interested parties.

At sites of their own choice, we encouraged volunteers to listen for calling frogs and toads in the spring and search for individual amphibians during the spring, summer and early fall. The time and effort volunteers put into the program was entirely up to them. We reviewed, verified and compiled the volunteer data and then forwarded it to the Alberta Government for upload into the Fisheries and Wildlife Management Information System (FWMIS), a province-wide database of fisheries and wildlife observations.

## **Results**

In 2009, 26 individuals, families, organizations and/or groups signed up to become members of AVAMP, bringing the total number of program members to over 800. All program members received the biannual newsletter, *Croaks and Trills*.

AVAMP participants submitted a total of 217 amphibian and six reptile observations; including two hibernacula locations and two non-native reptile reports: snapping turtle (*Chelydra serpentina*) and red-eared slider (*Trachemys scripta*). Data submitted by volunteers represented 70% of the amphibian and 22% of the reptile species native to Alberta (Table 1).

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Table 1. Number of records of each amphibian and reptile species observed by AVAMP participants in 2009-10.

Species	Taxonomic name	Number of Records
Boreal Chorus Frog	<i>Pseudacris maculata</i>	60
Boreal Toad	<i>Anaxyrus boreas</i>	10
Bullsnake	<i>Pituophis catenifer sayi</i>	0
Canadian Toad	<i>Anaxyrus hemiophrys</i>	24
Columbia Spotted Frog	<i>Rana luteiventris</i>	0
Great Plains Toad	<i>Anaxyrus cognatus</i>	0
Long-toed Salamander	<i>Ambystoma macrodactylum</i>	0
Mountain Short-horned Lizard	<i>Phrynosoma hernandesi</i>	0
Northern Leopard Frog	<i>Lithobates pipiens</i>	20
Plains Garter Snake	<i>Thamnophis radix</i>	1
Plains Spadefoot	<i>Spea bombifrons</i>	7
Prairie Rattlesnake	<i>Crotalus viridis</i>	0
Red-sided Garter Snake	<i>Thamnophis sirtalis</i>	3
Tiger Salamander	<i>Ambystoma mavortium</i>	11
Wandering Garter Snake	<i>Thamnophis elegans</i>	0
Western Hog-nosed Snake	<i>Heterodon nasicus</i>	0
Western Painted Turtle	<i>Chrysemys picta</i>	0
Wood Frog	<i>Lithobates sylvaticus</i>	85
Snapping Turtle (non-native)	<i>Chelydra serpentina</i>	1
Red-eared slider (non-native)	<i>Trachemys scripta</i>	1
Total		223

We provided advice on the natural history, distribution, monitoring techniques and methodologies relating to Alberta's amphibian and reptiles to more than 90 individuals, agencies

and organizations to help facilitate a variety of research projects and initiatives in the province as well as in other jurisdictions.

## **Conclusions**

The AVAMP positively impacts conservation in Alberta through increased public awareness, understanding and appreciation of Alberta's biodiversity. Programs such as AVAMP also recognize and embrace the valuable resource of public involvement and offer the general public an opportunity to become directly involved with conservation and provide value-added opportunities to a number of outdoor recreational activities.

The AVAMP is a plausible and cost-effective program that assists biologists in the detection of new amphibian and reptile populations in the province that may otherwise go undetected. Data collected by volunteers ultimately provides a better understanding of the distribution and general status of Alberta's amphibian and reptile species.

## **Communications**

- Invited speaker – Ardrossan Junior and Senior High School, Ardrossan, Alberta. December 16, 2009.
- Invited speaker – Alberta Research Council, Vegreville, Alberta. November 12, 2009.
- Invited speaker – Edmonton Nature Club, Royal Provincial Museum, Edmonton, Alberta. October 16, 2009.
- Invited speaker – Blood Indian Reservation. Approaches and considerations for the inventory and monitoring of Alberta's herpetofauna. Lethbridge, Alberta. July 23, 2009.
- Invited speaker – Helen Schuler Nature Centre, Lethbridge, Alberta. May 27, 2009.
- Invited speaker – Grassland Naturalists, Medicine Hat, Alberta. May 26, 2009.
- Invited speaker – Miquelon Lake Provincial Park, Alberta. May 16, 2009.
- Invited speaker – Ardrossan Elementary School. Earth Week / Conserving wet homes for our amphibian and reptile friends. Ardrossan, Alberta. April 22, 2009.
- Invited speaker – St. Mary Elementary School. Earth Week / Helping our cold-blooded neighbours. Edmonton, Alberta. April 20, 2009.
- Newsletter article – K. Kendell. 2009. Eggs or babies? *Croaks and Trills* 13(2).
- Newsletter article – S. Stevens, K. Kendell, and D. Prescott. 2009. Participate in species at risk stewardship right in your own backyard! *Croaks and Trills* 13(2).
- Journal article – D.H. Olson (co-ordinating editor). 2009. Herpetological conservation in northwestern North America. *Northwestern Naturalist* 90:61–96.
- Conference poster presentation – Joint Annual Meeting of the Idaho Chapter of the Wildlife Society and Partners in Amphibian and Reptile Conservation – NW Chapter. Alberta Volunteer Amphibian Monitoring Program display banner. Boise Idaho, USA. March 9 – 11, 2010.

## Literature Cited

Alberta Sustainable Resource Development. 2005. The general status of Alberta wild species 2005. Alberta Sustainable Resource Development, Fish and Wildlife Division, Edmonton, Alberta. Available online at [www.srd.alberta.ca/BioDiversityStewardship/SpeciesAtRisk/GeneralStatus/Default.aspx](http://www.srd.alberta.ca/BioDiversityStewardship/SpeciesAtRisk/GeneralStatus/Default.aspx)