

## Bringing back the leopard frog Waterton Lakes National Park of Canada

The northern leopard frog was once the most widespread frog in North America. Beginning in the 1960s, however, its numbers began to decline. No one knows exactly why.

It may be a combination of factors: habitat loss, introduced fish, changing climatic conditions.

Today, Canadians are trying to restore the leopard frog. As part of this effort, Parks Canada and partners are working to re-establish them in Waterton Lakes National Park of Canada.



With their spots, leopard frogs easily recognizable. © Parks Canada, Tawnya Hewitt, 2005.

## An ecological mystery

Leopard frogs are normally found along stream edges and in meadows or lightly wooded areas.

This aptly named frog is easily recognizable, having scattered dark spots with light borders.

Leopard frogs can measure from 50 to 130 mm long – as big as a child's palm. Their large size helps them conserve water as they hunt for food on land, and with their long legs, they can leap and zigzag away from predators.

Despite these survival advantages, the species has disappeared from many locations in Alberta. In Waterton, leopard frogs have not been spotted since 1980.

# Joining forces for the frog

To develop a conservation strategy for the frog, Parks Canada began working with Alberta Sustainable Resource Development and other interested organizations.

First, however, some important questions had to be answered. Was the habitat in the park still suitable for the leopard frog? If so, what sites might best suit the species?



Leopard frogs have not been seen in Waterton Lakes National Park since 1980. © Parks Canada, Lunn, S., 1981.







#### What makes a pond a home?

Parks Canada's team took to the field to examine potential habitats. They are analyzing the water quality of ponds.

- Do the ponds have enough dissolved oxygen in the water?
- Is the water a suitable pH not too acidic or too basic?
- Do the ponds have over-wintering areas that don't freeze to the bottom?
- Are the waters free of chemical pollutants and non-native predators which can harm eggs or tadpoles?

Once this research is complete, Parks Canada expects to select two or three of the best candidate sites.

Then the team will look for a thriving community of leopard frogs on provincial lands which can spare some eggs to hatch in the park.

#### Tried and true methods

Biologists will collect eggs from the source population. They will enclose the eggs in protective wire mesh cages, and then place them, cages and all, into ponds at the Waterton release sites.

Provincial biologists have used this method successfully to reintroduce leopard frogs outside the park.

The wire cages protect the eggs from predators as they mature into tadpoles. Then, biologists open the cages, releasing the tadpoles to populate their new home.

## Tracking the new arrivals



Parks Canada's team is examining potential leopard frog habitats and analyzing the water quality of ponds. © Parks Canada, Cyndi Smith, 2005.

Parks Canada will keep close track of the new arrivals, monitoring their numbers for at least three generations of frogs.

If all goes well, the leopard frog will rejoin the rich fauna of Waterton Lakes National Park and resume it important role in the Rocky Mountain ecosystem.

For more information visit www.pc.gc.ca/watertonlakes



