

Focus:

Alberta's Species-at-Risk Yellow-bellied Racer

By Nigel Douglas



When is an endangered species not an endangered species? A snake called the yellow-bellied racer is so rare in Alberta – you could count the number of confirmed records on the fingers of two hands – that in the past it has fallen between the cracks of provincial endangered species protection. A search for the yellow-bellied racer on the website for Alberta Environment and Sustainable Resource Development (ESRD) did not even acknowledge that the species occurs in Alberta. It currently has no official status – endangered, threatened or secure for example – in the province.

AWA hopes the 2014 discoveries of hibernacula – overwintering grounds – for yellow-bellied racers near Onefour in southeastern Alberta will open a new and more optimistic chapter in the recovery of this fascinating reptile. In 2013, AWA reacted swiftly to the news that the federal government was proposing to close the Onefour Research Station in southeastern Alberta (a small proportion of the research station is on federal land, but most of it sits on provincial land leased to the federal government). AWA called at the time for full legislated protection for the Onefour Research Station and the recent discoveries can only strengthen these calls.

Eastern yellow-bellied racers are one of 11 sub-species of the Eastern racer, *Coluber constrictor*, all of which are endemic to (occurring only in) North America (the closely-related western yellow-bellied racer occurs in British Columbia). They are thin-bodied and active snakes, growing up to 1.5 metres in length. The yellow belly is only found in adults. They are an olive-green colour on the upper part of their bodies with, as the name suggests, a noticeable yellow belly. Juveniles are quite different, being pale tan or cream, with brownish blotches. As the name suggests also, racers are fast-moving snakes and, as researchers know to their cost, if cornered they are quite prepared to bite and to fight back.

Yellow-bellied racers eat small rodents, lizards and amphibians as well as insects such as crickets and grasshoppers. Given the chance they will even eat juvenile snakes of other species. Despite the scientific name *constrictor*, yellow-bellied racers are not true constrictors; they are more likely to hold prey in their mouths and use one or two coils of the body to hold it in place until they can swallow it whole. Eastern yellow-bellied racers inhabit mixed-grass prairie grassland. During the winter, they hibernate in traditional hibernacula; south-facing slopes are preferred, usually in rock piles and crevices, or in burrows belonging to mammals or other snakes.

According to COSEWIC in 2004 (the Committee on the Status of Endangered Wildlife in Canada), eastern yellow-bellied racers are widely, if sparsely, distribut-



Yellow-bellied Racer. PHOTO: © C. WALLIS

ed across northern North America “from Maine to southern British Columbia, south to the Florida Keys and northern Guatemala.” In Canada they are restricted to south central Saskatchewan and now southeastern Alberta. The 2010 Parks Canada report, *Recovery Strategy for the Eastern Yellow-bellied Racer* (*Coluber constrictor flaviventris*) in *Canada* lists just four confirmed and one probable record in Alberta between 1975 and 2010.

In an exciting development, in October 2014 Alberta government biologists surveying for reptiles on a ranch in southeastern Alberta found a yellow-bellied racer hibernaculum. Seven sightings of the species were eventually made over the next few weeks.

The 2010 recovery strategy notes that the primary threats to the species include “habitat loss due to human activities, small population size, road mortality, and human disturbance of hibernacula.” It also points out that there are a number of information gaps in what we know about the distribution and behaviour of racers. The strategy recognizes that the primary

threats to racers or their habitat can be effectively avoided or mitigated through:

- (1) the use of management and stewardship actions to protect habitat;
- (2) education, research and monitoring to support conservation and management decisions;
- (3) public outreach and awareness programs; and
- (4) cooperative approaches to agricultural, industrial and other anthropogenic development.”

There are, however, some serious shortcomings in the recovery strategy. Disappointingly, the population and distribution objective for eastern yellow-bellied racers is “to *maintain* the species’ distribution within Canada,” with apparently no intention to increase its range. Like any endangered species recovery strategy, recovery is dependent on the identification and protection of critical habitat. Critical habitat is defined in the strategy as “seven currently used hibernacula and the immediate adjacent areas within a 500 metre radius of those hibernacula.” All of the identified areas of critical habitat are

within Grasslands National Park and the AAFC Val Marie Community Pasture in southwestern Saskatchewan; it remains unclear if there are plans to designate critical habitat around the newly-identified hibernacula in southern Alberta. There certainly should be. The opportunity is clearly there for both federal and provincial governments to step up to the plate and ensure that habitat for these threatened reptiles – and indeed for 22 other federally-listed species at risk which are found at Onefour Research Station – is protected forever. 🐍

Quick Facts:

- Eastern yellow-bellied racer, *Coluber constrictor flaviventris*
- Federal status: Threatened (Saskatchewan)
- Provincial status: Not yet listed
- Length: up to 1.5 metres (60 inches)
- Surprising fact: Female yellow-bellied racers are slightly larger than males.