

Species At Risk

Westslope Cutthroat Trout

By Nigel Douglas



Alberta's native westslope cutthroat trout were in the news once again in September, as AWA and Timberwolf Wilderness Society announced that they will be taking the Minister of Fisheries and Oceans Canada to Federal Court over the department's failure to issue a critical habitat order for Alberta's population of this threatened species. Such an order is required by law under the Species at Risk Act (SARA) because such legal protection is vital to restoring the species. AWA has long focused on the cutthroat as an indicator of the health of our headwaters and, for many years, the signs have not been good.

Cutthroat trout belong to the *Salmonidae* family of fish, which live throughout much of western North America. As there is a great deal of variation in the species,

splitting them up into different subspecies is a sometimes contentious business. Up to fourteen different subspecies are recognized, differing in appearance in various ways, including size, colour, and life history. The name *cutthroat*, as Lorne Fitch pointed out earlier in this issue, refers to the distinctive blood red or orange slash on the underside of the lower jaw.

Of the numerous subspecies, the westslope cutthroat trout is the only subspecies native to Alberta and is now restricted to the uppermost reaches and extreme headwaters of the Rocky Mountains and foothills. Though once a widespread species throughout southern Alberta, pure strain westslope cutthroat trout are now found only in the Bow and Oldman drainages. They may still exist in the headwaters of the Milk River.

In Alberta, the name "westslope" is

a little confusing for a species that is found on the eastern slopes of the Rocky Mountains. But of course Alberta is only a part of the range of this subspecies, which formerly occurred across northern Idaho, Montana, British Columbia, as well as Alberta. Like all cutthroat trout, they are highly streamlined; bold black spots are scattered liberally across a silver background. The belly of the males can brighten to a rich red at spawning time. More than other species, westslope cutthroats have a preference for colder, higher gradient streams with clear, clean water. Spawning generally takes place in smaller, gravel-bottomed streams which must be free of siltation.

Westslope cutthroat trout have now disappeared from approximately 95 percent of their historic range. They were first recommended for designation as a threat-



Westslope Cutthroat Trout PHOTO: © S. PETRY

ened species by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) in 2006. Seven years later that recommendation was finally acted upon. The designation was made because native populations of this fish had been, in the words of the *Canada Gazette*, “drastically reduced, by almost 80%, due to over-exploitation, habitat degradation and hybridization/competition with non-native trout.” It went on to say: “Forestry, hydroelectric development, mining, urbanization and agriculture have all contributed to the loss of habitat.”

Historically, some would argue that the over-exploitation of fish stocks would have been the major factor behind disappearing populations. But in more recent years multiple developments resulting in significant losses in trout habitat have continued the process. Inter-breeding with closely-related introduced species such as rainbow trout or even other cutthroat trout is certainly another significant threat to the persistence of native westslope cutthroat trout in Alberta. But hybridization is certainly not the only threat to the species. The Alberta government website states, misleadingly, that “(n)ative stocks of cutthroat trout are in decline in their traditional range due to breeding with introduced populations of rainbow trout and non-native cutthroat trout.” The government fails to mention additional threats such as those posed by industrial development and poorly managed motorized recreation.

Although the westslope cutthroat trout is designated as threatened, provincially and federally, and a recovery plan is in place, threats to trout habitat are as pressing as ever. A June 2015 review by AWA and Timberwolf Wilderness Society of overlapping human impacts throughout the Oldman watershed found that virtually every creek and river home to native trout has been negatively impacted or is threatened by logging, off-highway vehicle use, stream crossings, oil and gas development, coal mining, roads, dam operations or combinations of these

damaging activities. And the continuing refusal of the Minister of Fisheries and Oceans Canada to designate critical habitat for the species suggests a distinct lack of urgency. AWA hopes the new Liberal government will take this crucial step in the near future.

All is not doom and gloom though, and there are some signs for cautious optimism for the future prospects of westslope cutthroat trout. The recent designation of the Castle Wildland and Provincial Parks might offer the opportunity for meaningful protection of headwater habitat for cutthroats. But, we'll

need the government to walk its “full protection for the Castle” talk much more seriously in order for this to happen.

“Morally, to allow a species like cutthroat trout to disappear through apathy, ignorance, inactivity or greed would be a blot on our record as stewards of shared resources.” Those are the words Lorne Fitch used in his introduction to the *Alberta Westslope cutthroat trout recovery plan 2012-2017*. “These resources have been entrusted to our care,” he wrote, “not for our exclusive use and disposal but to pass on, unimpaired to subsequent generations.” Amen. ♣

Quick Facts:

- Westslope cutthroat trout, *Oncorhynchus clarkii lewisi*
- Federal status: Threatened (Alberta, British Columbia populations)
- Provincial status: Threatened (Alberta Wildlife Act)
- Length: 6 to 40 inches (15 to 102 cm) in length, depending on habitat and food availability
- Surprising fact: Only five percent of the species' historic range in Alberta is occupied by cutthroat trout today

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