

Westslope Cutthroat Trout (*Oncorhynchus clarki lewisi*) Fact Sheet

What is the westslope cutthroat trout? Westslope cutthroat trout (WCT) is one of several subspecies of cutthroat trout native to the Rocky Mountain region. It often exhibits bright yellow, orange, and red colors and is generally distinguishable from other inland subspecies of cutthroat trout by the particular pattern of black spots that appear on the body. Lewis and Clark's Corps of Discovery caught westslope cutthroat from the Missouri River near present-day Great Falls, Montana, in 1805.

Where are WCT found? WCT are native to streams and lakes in western and central Montana (Columbia, Missouri, and Saskatchewan River drainages), northern and central Idaho (Columbia and Snake River drainages), and a few small, scattered river drainages in Washington and Oregon and British Columbia and Alberta, Canada. Today, populations of WCT occur almost exclusively in small, isolated streams in mountainous areas.

What do WCT eat? WCT feed primarily on macroinvertebrates, particularly immature and mature forms of aquatic insects, terrestrial insects, and, in lakes, zooplankton. These preferences for macroinvertebrates occur at all ages in both streams and lakes. WCT rarely feed on other fishes.

What is the life cycle of WCT? WCT usually reach maturity at 4 or 5 years of age. Spawning occurs primarily in small tributary streams between March and July, when water temperatures reach about 50 F. Fertilized westslope cutthroat eggs are deposited in stream gravels where they incubate for several weeks, the actual period of time dependent upon water temperature. Several days after hatching from the egg, when about one inch long, the fry emerge from the gravel and disperse into the stream. The fry may grow to maturity in the spawning stream or they may move downstream and mature in larger rivers or lakes. Thus three WCT life-history types are recognized: *Resident* fish spend their lives entirely in the tributary; *fluvial* fish spawn in small tributaries and their resulting young migrate downstream to larger rivers where they grow and mature; and *adfluvial* fish spawn in streams but grow and mature in lakes.

How big do WCT get? Growth of individual WCT, like that of fish of other species, depends largely upon the interaction of food availability and water temperature. Resident WCT usually do not grow longer than 30 cm (12 inches), presumably because they spend their entire lives in small, coldwater tributaries. In contrast, fluvial and adfluvial WCT often grow longer than 30 cm (12 inches) and attain weights of 0.9-1.4 kg (2-3 pounds). Such rapid growth results from the warmer, more-productive environments afforded by large rivers, lakes, and reservoirs.

Why do the petitioners believe the WCT in trouble? Populations of WCT have declined from historic levels due to a variety of factors that include habitat destruction from logging and associated road building; adverse effects on habitat resulting from livestock grazing, mining, urban development, agricultural practices, and the operation of dams; historic and ongoing stocking of nonnative fish species that compete with or prey upon WCT or jeopardize the genetic integrity of the subspecies through hybridization; and excessive harvest by anglers. The petitioners believe that the decline in WCT is continuing unabated.

Where do most WCT remain today? The Service found that most of the habitat for extant WCT stocks lies on lands administered by federal agencies, particularly the U.S. Forest Service. Moreover, many of the strongholds for WCT stocks occur within roadless or wilderness areas or national parks, all of which afford considerable protection to WCT.

What is being done to protect WCT? As the results of the status review for WCT, the Service found that there are numerous federal and state regulatory mechanisms that, if properly administered and implemented, protect WCT and their habitats throughout the range of the subspecies. In addition, the U.S. Forest Service, state game and fish departments, and National Park Service reported more than 700 ongoing projects directed toward the protection and restoration of WCT and their habitats. Finally, WCT accrue some level of protection from the ESA's Section 7 consultation process in geographic areas where WCT distribution overlaps with the distributions of one or more ESA-listed fish species, specifically, bull trout *Salvelinus confluentus*, steelhead *O. mykiss*, and Pacific salmon *Oncorhynchus* species and their habitats on federal lands in the Columbia River basin.

Why did the Service decide that the listing of WCT as a threatened or endangered species was not warranted at this time? The status review revealed that WCT presently inhabit about 4,275 tributaries or stream reaches that collectively encompass more than 23,000 linear miles of stream habitat, distributed among 12 major drainages and 62 component watersheds in the Columbia, Missouri, and Saskatchewan River basins. In addition, WCT presently inhabit 6 lakes in Idaho and Washington and at least 20 lakes in Glacier National Park, Montana. Although WCT stocks that formerly occupied large, mainstem rivers and lakes and their principal tributaries are reduced from their historic levels, the Service found that viable, self-sustaining WCT stocks remain widely distributed throughout the historic range of the subspecies, most notably in headwater areas. On the basis of the available information, the Service concluded that the WCT is not likely to become a threatened or endangered species within the foreseeable future. Therefore, listing of the WCT as a threatened or endangered species under the ESA is not warranted at this time.

Did the Service offer any recommendations regarding the management of WCT? The Service strongly recommends that state game and fish departments, federal land-management agencies, tribal governments, private groups, and other concerned entities continue to work individually and cooperatively to develop and implement programs to protect and restore stocks of WCT throughout the historic range of the subspecies. The Service believes additional actions should be taken (e.g., selective placement of barriers to prevent the upstream movement of nonnative fishes) to further protect extant WCT stocks throughout their historic range from the adverse effects of nonnative fishes. The Service is encouraged by ongoing and planned state and local programs, most notably those in Montana, to protect and restore WCT within its historic range.

April 2000