Coastal Cutthroat Trout

Oncorhynchus clarki clarki

chances for survival: *average* **3**

1 2 3 4 5

PHOTO: THOMAS DUNKLIN

Coastal cutthroat trout are anadromous trout found in the coastal drainages of northern California, the southern end of their range. These fish are distinguished by their copious black spotting and the namesake red slash along the jaw. In salt water, cutthroat trout are silvery in coloration. Coastal cutthroat trout have a highly variable life history ranging from fully anadromous to resident. They are the most freshwater-dependent of the anadromous salmonids, migrating to the ocean for only a few months in the summer. They are competitively subordinate to nearly all other salmonids. Juveniles can emigrate to the sea at ages one to three years, but often spend time in estuaries as well. Environmental factors that affect their growth rate, such as food availability, water quality, and temperature, also markedly influence their migratory behavior and residency time. The maximum length of these fish in California is about 16 to 22 inches and they rarely exceed seven years in age.

DISTRIBUTION: Coastal cutthroat trout occur in coastal basins in several Humboldt Bay tributaries, Little River and Redwood Creek, as well as a number of coastal lagoons and ponds, such as Lake Earl, Big, and Stone Lagoons. However, most of these trout in California are found in the Smith, Mad, and Lower Klamath Rivers with the Smith River having the largest and most diverse population. There are currently no known populations of coastal cutthroat trout south of the Eel River. Their inland distribution is largely coincident with coastal rainforests.

ABUNDANCE: Population numbers in California streams are difficult to determine, but there are most likely less than 5,000 anadromous spawners each year. The lack of surveys for coastal cutthroat in California makes estimating abundance difficult, but they are apparently present in at least low numbers in about 700 miles of streams and in four lagoons.

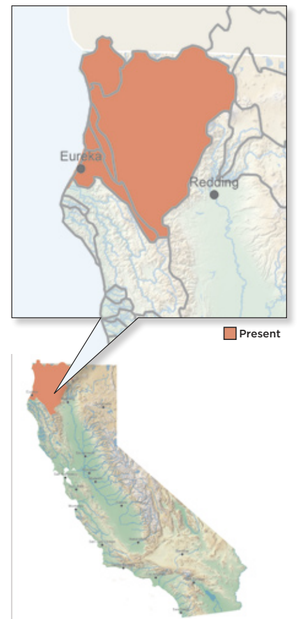
FACTORS AFFECTING STATUS: Major factors that have reduced coastal cutthroat trout populations include, (1) watershed degradation from logging activities, (2) estuarine alteration, (3) barriers to migration, and (4) hybridization. Most watersheds in which the trout occur are still recovering from the legacy of unrestricted logging in the 19th and early 20th centuries. Hatcheries play a minor role in the status of this species. Coastal cutthroat trout depend more on smaller tributaries than do steelhead, and these are the very watersheds most likely to be affected by logging and other disturbances. There are a number of small landlocked populations that may contribute migratory individuals to downstream populations.

STATUS 3: Coastal cutthroat trout are in no immediate danger of extinction, but the high degree of uncertainty due to lack of data calls for precaution in management. This species merits special attention because California is the southern end of its range, and it therefore may be strongly affected by climate change. Management of coastal watersheds to maintain diverse habitat and high water quality year round is critical to the fish. A 1999 National Marine Fisheries Service status review of coastal cutthroat trout in Washington, Oregon, and California concluded that "there is insufficient evidence to demonstrate that coastal cutthroat trout are at significant risk of extinction," and that, "there is insufficient evidence to demonstrate that coastal cutthroat trout are not at significant risk of extinction." The conservative course of action for this species is to protect watersheds where they are abundant, with a special focus on the Smith River.

CONSERVATION RECOMMENDATIONS: The single-most important need for coastal cutthroat trout is the protection and restoration of lagoons, estuaries and small tributaries, as well as removal of migrational barriers. Also important is the continued management of the Smith River as a free-flowing, wild river that is a refuge for all salmonids.

Smith River. PHOTO: TOM WESELOH

Most Populations Of Coastal Cutthroat Trout Are In The Lower Reaches Of Watershed Streams



CATEGORY	SCORE	EXPLANATION
Range	5	Found in most watersheds from the Eel River north to the Smith River
Population size	3	This is a '5' if we assumed all populations are genetically interconnected but most appear to be small and isolated
Intervention needs	3	Persistence requires improved management of heavily logged watersheds
Tolerance	3	Moderately tolerant of conditions in California streams
Genetic risk	4	Little information on genetics available
Climate change	2	Because most populations are in small streams, there is considerable range-wide vulnerability to climate change
Overall status	3	
Reliability	2	Most published data are ten or more years old with exception of the Smith River Alliance dive counts

California Trout is There for the Fish!

In 1990, the Smith River Alliance and California Trout convinced Congress to establish the Smith River National Recreation Area, thereby protecting 3,100 miles of pristine rivers for generations to come. As the largest single undammed Wild and Scenic River system in the U.S., the Smith River National Recreation Area plays a major role in preserving the quality and quantity of fish habitat, including that of coastal cutthroat trout.