

Rainbow Trout – *Oncorhynchus mykiss*

Range - Rainbow trout are native to streams west of the North American Continental Divide from northern Mexico to Alaska. They are also found in waters on the east coast of Siberia. Rainbow trout have been domesticated for over 100 years and One of the first national fish hatcheries, McCloud River, California, was built in the 1880's at McCloud River California. The facility was designed to produce eggs for shipment across the United States. Today, the rainbow trout is probably one of the most widely distributed trouts in the world. Rainbow trout are found in all fifty states and are widely distributed throughout North America. The widespread introduction of this species has caused the decline and extirpation of native cutthroat, Apache, Gila, and undescribed Mexican *Oncorhynchus* throughout the United States, Canada, and Mexico. Rainbow trout have also caused the extirpation of native brook trout populations in the Upper Midwest and east coast of the United States.

Food Habits – For the most part rainbow trout feed on aquatic and terrestrial insects. Unlike other trout, rainbows are a little less secretive in their feeding habits. They will feed in broad daylight, in open water, on insects, fish, frogs, and even small mammals. Mammals are reserved for only the bigger rainbow trout. But fish figure prominently in a rainbow's diet, and they develop a taste for meat earlier than other fish-eating trout, like the brown. Rainbows have an eclectic appetite. Dietary studies have turned up the unusual in rainbow trout stomachs -- blackberries, algae, pine needles, chicken feathers, baby birds, and lizards. In summer, stoneflies and mayflies, both in the adult and nymph stages are sought by rainbow trout. Insects may be what gets them through winter, even in ice conditions, rainbows eat aquatic insects. Rainbows have a tendency to eat less from the surface than brookies or browns. Some strains, like the Kamaloopt trout, feed on fish, which in turn allows them to grow larger.

Life History – Rainbow trout from February to June depending upon elevation and latitude. Migrations to spawning habitat are highly variable. Clean gravels in streams are a requisite to a successful spawn. Rarely do rainbows spawn in lakes, and if they do, there is minimal success. Females clean gravels in riffles of sediment where she drops her eggs over a 20 square-foot area. A rainbow trout of five pounds may lay up to 6,000 eggs. Oxygen-bearing water pours over the incubating eggs lying in between the gravels. The eggs incubate for about three weeks. By the time a rainbow trout reaches two years of age, it may be up to six or seven inches long. Growth slows after that, and on average, rainbows may put on about two inches per year thereafter. Some fish move only a few hundred feet to spawn whereas other strains move for hundreds of miles. This includes both resident stream forms and coastal forms. Steelhead are the anadromous form of this species. It takes three years for rainbow trout to become sexually mature. After their first spawn, they may go on an hiatus and spawn at two-year intervals, two, maybe three times more. The number of repeat spawners though is minimal, less than 30 percent.

Life Span - Rainbow trout usually live no longer than 11 years, and the females usually outlive the males.

Threats – It appears that rainbow trout do well in most environments into which they are introduced. Introduction of brown trout and brook trout into the native range of the rainbow trout have caused some populations to decline and even to be extirpated.