



Klamath Network Featured Creature

October 2011

Rainbow Trout (*Oncorhynchus mykiss*)

FIELD NOTES:

General Description:

The key characteristic of a rainbow trout is its variability. The rainbow is the most abundant and widespread native salmonid in western North America. And we all recognize it as a typical silvery trout with black spots on its tail, dorsum, dorsal and adipose fins (the adipose fin is the fin in between the tail and dorsal fin), and pinkish or red lateral lines.

However, the simplistic version of “What is a rainbow trout?” ends there. The reality is that the rainbow trout is a highly variable species with many distinct sub-species, including steelhead, coastal rainbows, and redband trouts (general interior basin forms). And this further raises the question of what is the difference between steelhead and coastal rainbow trouts? The answer is that they are genetic twins – the same species/subspecies, but that steelhead are anadromous, having spent 15 to 30 months at sea before returning to spawn. Coastal rainbow trout, however, spend their entire life cycle with the creek.

Within these classifications, there are “Evolutionary Significant Units” (aka ESUs) based on life history or genetic considerations that separate populations from each other. Furthermore, large amounts of stocking of hatchery fish have blurred the line between these ESUs, forming mongrel fish throughout the western US.

Habitat:

Habitat is also variable, with rainbow trout inhabiting streams, lakes, and reservoirs. One constant of these habitats is the need for cold water, as water temperatures higher than 23°C are stressful to the trout.



Rainbow Trout

Photo Credit:
<http://pond.dnr.cornell.edu/nyfish/Salmonidae/steelhead.html>



Angler Heaven

Credit: <http://www.deneki.com>



Steelhead – anadromous rainbow trout

Credit: <http://www.martinsbigfish.com/>



Redband Trout

Credit: <http://www.flyfishusa.com>

Reproduction:

The rainbow trout can be divided into two basic life history forms, although these are highly variable as well: 1) migratory and 2) resident. The migratory forms can be separated into sea-run, lake-run, or even within-river traits.

Reproduction is similar to most other salmonids, with the female digging a redd in coarse gravel. The male spawns behind, although sneaker males are known to live up to their name. The female can lay between 200 and 12,000 eggs, and the eggs hatch within 3-4 weeks, although the fry don't emerge from the gravel for another couple of weeks.

Within CRLA, the introduced rainbow is one of the few examples of a shoal spawning rainbow trout, where spawning occurs in lake habitat without streams.

Where to See It in the Klamath Parks:

Rainbow trout occur as native coastal and steelhead in REDW, but widespread historic introductions make it hard to ascertain which other parks have native populations. In fact, the rainbow trout is probably the most commonly introduced trout throughout the globe. Rainbow trout populations are also in LAVO, CRLA, WHIS, and certainly around ORCA, if not in Cave Creek itself.

More Reading:

If this sparks your curiosity on the fine details of rainbow trout (and their inherent variability!), consider the following:

McGinnis, S.M. 2006. Field Guide to Freshwater Fishes of California. California Natural History Guide Series 77. University of California Press, Berkeley, CA.

Moyle, P.B. 2002. Inland Fishes of California. Revised and Expanded. University of California Press, Berkeley, CA.