

Steelhead in Mission Creek hints at possibilities for Carpinteria

David Pritchett, Southern California Steelhead Coalition

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Figure 1: A mature, 27-inch female steelhead in Mission Creek builds a nest with her powerful tail while her much younger suitor watches and waits. Photo by David Pritchett

For three days last month, a pair of steelhead trout tried to spawn (breed) in Santa Barbara's Mission Creek. It was a sight that many local steelhead supporters had never eye-witnessed before, because the fish are so rare. But the same spawning drama also could have been happening less conspicuously in Carpinteria Creek. Experts consider Carpinteria Creek to be one of the most fish-friendly streams in southern Santa Barbara County, because no major blockages to fish migration exist in the lowermost channel and good habitat for spawning lies in the upper watershed.

One reason why steelhead might be visiting is because the heavy rainfall in early January yielded the highest creek flows in the region since 1998. Although steelhead can migrate up from the ocean during any winter when the creeks are flowing and the beach sandbars are open, steelhead are more likely to be swimming during the first few weeks after heavy rain storms. These times of well-watered creeks every few years provide vital periods for steelhead to outrun extinction, considering the fish is an endangered species in southern California.

Although closely related to salmon, steelhead do not die after spawning as salmon do. Rather, within a day or two after spawning and before the water levels recede, they usually return to the ocean where food is far more plentiful. An adult steelhead coming from the ocean is typically 15 to 35 inches long.

On 19 January 2005, a Mission Creek neighbor noticed a pair of steelhead in the creek channel below her home in downtown Santa Barbara. Within an hour, a cadre of fish fans with their expensive cameras arrived to spend the rest of the afternoon watching those fish from a vantage point on one of the many bridges over Mission Creek. The fish were bright and silvery and obviously fresh from the ocean, and likely were enticed up the creek by the high flows that peaked only nine days earlier. Probably unable to swim further upstream because of impassable passage

barriers in the creek channel, especially the long flat concrete channel shortly upstream, the pair of steelhead seemed to be making do with the best habitat they could find in lower Mission Creek.

The larger of the two fish was a mature female estimated at nearly 27 inches long. Using powerful bursts from her tail every few minutes during the first day observed, she put on a spectacular show digging out a redd, or nest, in the gravel amidst urban stream debris that included concrete chunks and tile fragments. Her suitor, a young (for an oceangoing steelhead) 12-inch male fish, stayed close to her, frequently twitching and bumping her side as a telltale behavior that he was ready to spawn at any minute.

However, this piscine drama continued for two more days. The big female seemed to be making her potential mate prove his stamina and parental fitness as she led him up and down the creek several times in tandem, dodging a discarded shopping cart and darting under overhanging arundo, an invasive non-native plant.

Unfortunately, no one saw any actual spawning in the time available to watch these fish before they disappeared, but the redd did appear to show the gravel mounded up as if spawning occurred and the fertilized eggs were covered. Another theory proposed for the fish behavior is that the attentive young male may have been more interested in eating any errant eggs rather than actual spawning.

No one will know for sure about the final motivations and disposition of those endangered steelhead, but the presence of fish of different ages is an encouraging sign that the species is trying to return, if not spawn, in Mission Creek. They undoubtedly also are present this winter in Carpinteria Creek, but no sightings have been reported yet. Carpinteria Creek has its own fish passage barriers as Mission Creek does, but the efforts of the local Carpinteria Creek Watershed Coalition and many other partners are starting to resolve these steelhead habitat issues.

Photos and videos of the recent Mission Creek steelhead can be found at the water programs page of the Community Environmental Council web site (www.communityenvironmentalcouncil.org), and a Fact Sheet about Carpinteria Creek steelhead is available at the documents page of the Carpinteria Creek Watershed Coalition web site (www.carpinteriacreek.org).