Summarizing catch/timing, diet and distribution of steelhead from ocean surveys in the California portion of the California current.

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Abstract

The ocean ecology of steelhead in the California Current is poorly understood, with most data suggesting this species spends little time in this portion of the ocean. Most survey effort has focused along the Oregon and Washington coasts, first with purse seines in the early 80’s, and then with surface trawls during the late 90’s through 2013. In general steelhead are present during May and June, and then rarely observed during later summer months, when it is thought they typically migrate to the Gulf of Alaska and Central North Pacific. However recent surveys by the NOAA SWFSC of the Southern Oregon and Northern California Coasts have revealed a different pattern. A formal survey of this section of coast in 2010 captured only 1 steelhead. However repeated surveys with similar efforts between 2011-2013 have averaged 53 fish per survey in late June through mid-July. Most appear to be early ocean fish with mean fork length of 274mm, (range 191-540mm) caught primarily in the Klamath region of Northern California. It is unclear if this increased catch resulted from a change in distribution, or gear changes. Regardless, these observations were unexpected based on previous surveys, perceived migratory patterns and ocean distribution for the species, and timing of out-migration for fish along this section of coast. Surveys later in the year have been more opportunistic, with 2 surveys in September reporting only 1 steelhead. Diet data will be compared with previous studies from the California Current as well as the Gulf of Alaska and Central North Pacific. We will present the water temperature for where these fish were collected with what is known about steelhead thermal preferences while at sea. Finally we will speculate on stock(s?) of origin, whether these fish represent an alternative life history type, where they might be during fall surveys and the greater implications for steelhead use of the California Current.