

**Presentation style:** In person, oral

**Title:** Hybridization and population structure of Coastal Cutthroat Trout at the southern tip of their range

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**Abstract:**

Assessing the amount and type of hybridization between Coastal Cutthroat Trout (*Oncorhynchus clarkii*) and Steelhead/Rainbow Trout (*Oncorhynchus mykiss*) is important for the conservation and management of these species. We sampled Coastal Cutthroat Trout and Steelhead/Rainbow Trout from the southern tip of their range, in the Eel River, CA, to the Umpqua River, OR to evaluate hybridization and population structure of Coastal Cutthroat Trout. We successfully sequenced 964 individuals across 56 sampling locations using restriction site-associated DNA sequencing (RADseq). This study highlights sampling locations with a high incidence of F1 hybrids, and locations where putative Coastal Cutthroat Trout above barriers show varying degrees of *O. mykiss* introgression. Additionally, the analysis of Coastal Cutthroat Trout population structure showed three distinct groups within our study area. This information is valuable to aiding the understanding of where to prioritize resources, and how populations of Coastal Cutthroat Trout are related.