

Colin Grant, Endangered Species Biologist for the San Francisco Bay – Delta Fish and Wildlife Office answers questions about the Longfin smelt

Colin: My name is Colin Grant, I'm an endangered species biologist at the Fish and Wildlife Office in Sacramento, California the Bay-Delta Office. I was the lead biologist on the 12-month finding for longfin smelt.

[Question 1] What is the longfin smelt?

Colin: The longfin smelt is a small three and a half to four and a half inch fish and it's an anadromous species so spends most of its life in salt water and brackish water but it does go upstream to spawn in fresh water. It's also a pelagic species spending most of its life in open waters away from the shore lines.

[Question 2] Where are they found in the Bay-Delta?

Colin: Longfin smelt in the Bay-Delta are found all the way up the rivers to all the way out to the ocean. They'll spawn in fresh water in the San Joaquin and Sacramento rivers and their larvae will use the flow to make their way down into Suisun Bay, Suisun Marsh and San Pablo Bay. Then later in their life cycle they'll move out to the San Francisco Bay and even out into the Gulf of Farallones because they find more food out there later in their life cycle.

[Question 3] Where are longfin smelt found?

Colin: Longfin smelt are found in about 20 different areas. Those are lakes, rivers and estuaries that range all the way from the San Francisco Bay-Delta here all the way up to Cook Inlet in Alaska so it's a big range.

[Question 4] How are longfin smelt different from delta smelt?

Colin: Things that make longfin different from delta smelt are longfin smelt have longer pectoral fins than delta smelt. Longfin smelt can also tolerate a higher salinity than delta smelt so they can make their way out to the ocean which delta smelt can't do.

[Question 5] Why should people care about such a small fish species?

Colin: For the eco system to fully function you need all of the species in the eco system. When you take species out of the eco system it's kind of like taking pages out of a book. No longer can you fully understand the book and in the same way the eco system can no longer fully function. In the Bay-Delta here longfin smelt are historically a forage fish and a lot of different fish eat longfin smelt. You're taking food away from other fish when we lose the longfin smelt. Longfin smelt are also an indicator of the health here in the Bay-Delta eco system and if the longfin smelt and other species are declining which we're seeing then it means the whole eco system in general is declining.