

Summary of Fish Catch Results for Currin Cove, 2008 and 2009

Skagit River System Cooperative Research Program

December 2012

Beach seine sampling for fish was conducted at Currin Cove as part of Washington State's Salmon Recovery Funding Board Project # 07-1863 N: *WRIA2 Habitat Based Assessment of Juvenile Salmon*, also locally known as the *Big Picture Project*.

Currin Cove is located on the southwest shore of East Sound at Orcas Island within the San Juan Islands (Figure 1). Small net beach seines were used at Currin Cove after methods described in Skagit System Cooperative Research Department (2003). We made 24 beach seine sets over the two-year study period. Beach seining occurred monthly from March through September in both 2008 and 2009.

The beach seine site within Currin Cove consisted of gravel to mixed coarse substrate, usually without vegetative cover (such as eelgrass, kelp or other macro algae). Average maximum water depth was 0.73 meters deep and average salinity was 29.1 parts per thousand within the area seined. Water temperature varied by month, but ranged from a low of 6.6 °C in March 2009 to a high of 20.4 °C in August 2009. Water temperatures cooled after the summer highs to 13.9 °C in September 2008 and 13.8 °C in September 2009.

We caught a total of 2,533 fish from 15 different species or species groupings over the two-year study period, including two species of juvenile salmon and one species of forage fish (Table 1). The most abundant fish species was an "unidentified sculpin" with a catch of 1,095 fish, present in 33.3 % of beach seine sets. The most abundant fish identified was sharpnose sculpin with a catch of 971 fish, present in 91.7% of beach seine sets. We kept count of Dungeness crab (8) caught by seines, as this species is of commercial and recreational interest.

Please refer to Beamer and Fresh (2012) for more information regarding timing, abundance, and habitat selection of focal fish species for the Big Picture Project. The focal species are: Chinook salmon, chum salmon, pink salmon, Pacific herring, surf smelt, Pacific sand lance, and hexagrammids (greenlings and lingcod).

References

Beamer, EM and KL Fresh. 2012. Juvenile Salmon and Forage Fish Presence and Abundance in Shoreline Habitats of the San Juan Islands, 2008-2009: Map Applications for selected fish species. Report to San Juan County Department of Community Development and Planning and San Juan County Marine Resources Committee. Friday Harbor, WA.

Skagit System Cooperative Research Department. 2003. Estuarine fish sampling methods. Skagit River System Cooperative. LaConner, WA. Available: <http://www.skagitcoop.org/documents>

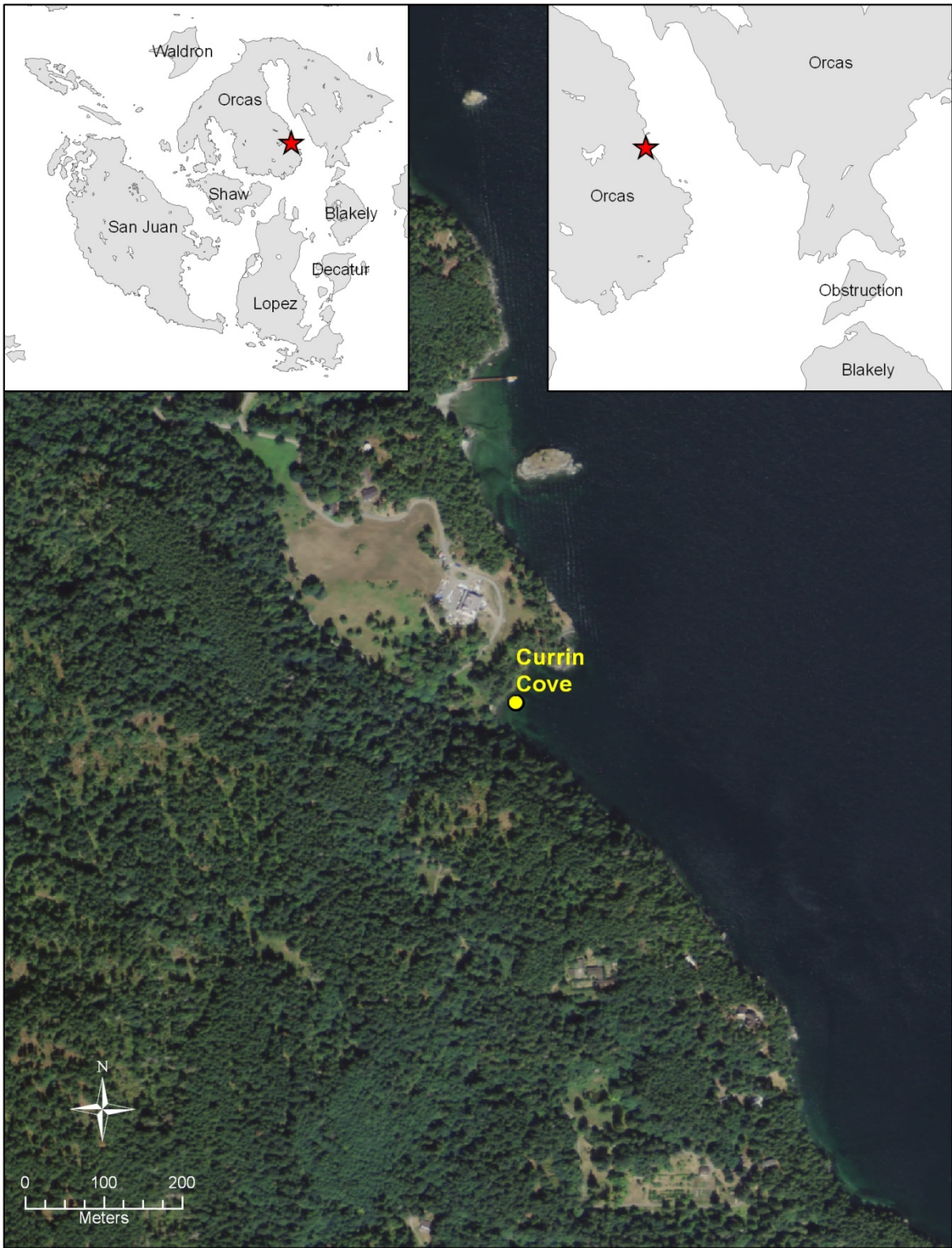


Figure 1. Location of Currin Cove beach seine site.

Table 1. Fish catch summary for Currin Cove beach seining, 2008 and 2009.

Assemblage Groupings	Taxonomic group	Genus species, age & mark	Common name	Species abbreviation	Total catch	Catch per set	Frequency in catch
Crabs and shrimp	Cancridae	Cancer magister <6.5"	Dungeness crab, sublegal size	DUNGI small	8	0.33	8.3%
Flatfish	Bothidae	Psettichthys melanostictus	Sand sole	SAND SOLE	1	0.04	4.2%
	Pleuronectiformes	Other or unknown flatfish	Unidentified flatfish species	O/U FLAT	10	0.42	8.3%
Forage fishes	Ammodytidae	Ammodytes hexapterus post larval	Pacific sand lance, post larval juvenile	LANCE pl	1	0.04	4.2%
Gunnels and Pricklebacks	Pholidae	Pholis ornata	Saddleback gunnel	SADLBCK GUNL	4	0.17	8.3%
		Unidentified Gunnel Species	Unidentified gunnel species	GUNNEL	6	0.25	16.7%
		Pholis laeta	Crescent gunnel	CRES GUNL	7	0.29	8.3%
Pacific salmon	Salmonidae	Oncorhynchus tshawytscha age 0+ external mark	Chinook salmon, hatchery marked subyearling	CK 0+ em	1	0.04	4.2%
		Oncorhynchus gorbuscha 0+	Pink salmon, subyearling	PK 0+	3	0.13	4.2%
Sculpins	Cottidae	Blepsias cirrhosus	Silverspotted sculpin	SILVER SPOT SC	1	0.04	4.2%
		Oligocottus maculosus	Tidepool sculpin	TIDEPOOL SCULP	1	0.04	4.2%
		Myoxocephalus polyacanthocephalus	Great sculpin	GRT SCULP	4	0.17	8.3%
		Leptocottus armatus	Pacific staghorn sculpin	STAG	88	3.67	54.2%
		Clinocottus acuticeps	Sharpnose sculpin	SHARP-NOSE	971	40.46	91.7%
		Other or unknown Cottid	Unidentified sculpin species	O/U SCULP	1095	45.63	33.3%
Sea perches	Embiotocidae	Cymatogaster aggregata	Shiner perch	SHINER	340	14.17	16.7%