

# Summary of Fish Catch Results for Odlin County Park, 2009

Skagit River System Cooperative Research Program

January 2013

Beach seine sampling for fish was conducted at Odlin County Park 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*.

Odlin County Park is located along Upright Channel on the north side of Lopez Island within the San Juan Islands (Figure 1). Large and small net beach seines were used at Odlin County Park after methods described in Skagit System Cooperative Research Department (2003). We made 10 beach seine sets (5 large net and 5 small net sets) over the one-year study period. Beach seining occurred monthly April through September 2009.

The beach seine site within Odlin County Park varied from sand to gravel to mixed coarse substrate, without any vegetative cover 60% of the time, with detritus as the dominant vegetative cover 40% of the time. Average maximum water depth was 1.72 meters deep and average salinity was 27.9 parts per thousand within the area seined. The water temperature varied by month, ranging from a low of 8.0 °C in May to a high of 13.5 °C in August.

At Odlin County Park we caught a total of 1,003 fish from 21 different species or species groupings over the one-year study period, including one species of juvenile salmon (Table 1). Forage fish were not caught. The most abundant fish species was saddleback gunnel, with a catch of 296 fish, present in 50.0% of the beach seine sets. They accounted for 29.50% of the total catch. We kept count of Dungeness crab (66) and red rock crab (2) caught by seines, as these species are 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 Odlin County Park beach seine site.

Table 1. Fish catch summary for Odlin County Park beach seining, 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 productus	Red rock crab	RED ROCK CRAB	2	0.20	10.0%
		Cancer magister >6.5"	Dungeness crab, legal size	DUNGI legal	4	0.40	20.0%
		Cancer magister <6.5"	Dungeness crab, sublegal size	DUNGI small	62	6.20	50.0%
Flatfish	Pleuronectiformes	Inopsetta ischyra	Hybrid sole	HYBRID SOLE	1	0.10	10.0%
		Other or unknown flatfish	Unidentified flatfish species	O/U FLAT	1	0.10	10.0%
		Other or unknown flatfish post larval	Unidentified post larval flatfish species	O/U FLAT pl	7	0.70	20.0%
		Lepidopsetta bilineata	Rock sole	ROCK SOLE	1	0.10	10.0%
		Platichthys stellatus	Starry flounder	STARRY	5	0.50	40.0%
		Parophrys vetulus	English sole	ENG SOLE	49	4.90	70.0%
Greenlings/lingcod	Hexagrammidae	Hexagrammos stelleri	Whitespot greenling	WHITESPOT GR	22	2.20	20.0%
Gunnels and Pricklebacks	Pholidae	Pholis laeta	Crescent gunnel	CRES GUNL	18	1.80	50.0%
		Apodichthys flavidus	Penpoint gunnel	PENPT GUNL	20	2.00	40.0%
		Pholis ornata	Saddleback gunnel	SADLBCK GUNL	296	29.60	50.0%
	Stichaeidae	Lumpenus sagitta	Snake prickleback	SNAKE	265	26.50	30.0%
Other - marine	Agonidae	Agonopsis emmelane	Spearnose poacher	SPEARNOSE POACHER	1	0.10	10.0%
Pacific salmon	Salmonidae	Oncorhynchus keta age 0+	Chum salmon, subyearling	CH 0+	1	0.10	10.0%
Sculpins	Cottidae	Enophrys bison	Buffalo sculpin	BUFF	1	0.10	10.0%
		Clinocottus acuticeps	Sharpnose sculpin	SHARPNOSE	3	0.30	30.0%
		Artedius fenestralis	Padded sculpin	PADD SCULP	11	1.10	40.0%
		Myoxocephalus polyacanthocephalus	Great sculpin	GRT SCULP	38	3.80	50.0%
		Leptocottus armatus	Pacific staghorn sculpin	STAG	248	24.80	100.0%
	Liparidae	Snailfish spp	Unidentified snailfish species	SNAILFISH	4	0.40	20.0%
Sea perches	Embiotocidae	Cymatogaster aggregata	Shiner perch	SHINER	4	0.40	20.0%
Sticklebacks	Gasterosteidae	Gasterosteus aculeatus	Three spined stickleback	STICKL	6	0.60	30.0%
True cods	Gadidae	Other or unknown Cod	Unidentified true cod species	O/U COD	1	0.10	10.0%