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.

Figure 1. Location of Odlin County Park beach seine site.
Table 1. Fish catch summary for Odlin County Park beach seining, 2009.

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