

**Jefferson County Marine Resources Committee
2023 Adelma Beach (Discovery Bay) Forage Fish Project Summary Report**

Project Lead: Jeff Taylor

Subcommittee Members: Troy McKelvey, Janette Mestre

Additional Volunteers: Cindy Jayne

Project Overview

Forage fish are a vital link in the marine food web, and the monitoring of their status is important for informing recovery efforts of the Salish Sea. Sampling to identify spawning of forage fish, specifically surf smelt (*Hypomesus pretiosus*) and Pacific sand lance (*Ammodytes hexapterus*), is conducted by the MRC and other community volunteers who have received training, following WDFW protocols detailed in the Forage Fish QAPP. This survey is designed to establish continuity with existing WDFW data in an effort to measure seasonal and temporal trends of spawning and to develop an understanding of the conditions and processes affecting each monitoring site over time. Volunteers collect data through the iForm app and send beach samples to WDFW to identify and count presence of eggs. To date, the Jefferson MRC has monitored forage fish spawning at the Adelma Beach site in Discovery Bay for about seven years (since November 2016). As of July 2023, the MRC has decided to discontinue monitoring this site.

Volunteer Engagement

Monitoring at Adelma Beach occurred from October 2022 through June 2023. During this period, Jefferson County MRC member Jeff Taylor took on project lead responsibilities, organizing sampling days, filling out data sheets and volunteer reporting forms, and overseeing delivery of samples to our WDFW partners who process the beach samples. Throughout the season, two volunteers (Jeff and Cindy) participated in monitoring, **contributing a total of 18.5 hours of volunteer survey time** (see Table 1 below). **In total, MRC members and community volunteers contributed 127.5 hours to forage fish monitoring** (18.5-Adelma, 45.5-Dabob, 54.5-Fort Townsend, and 9-forage fish education workshops).

Table 1: Volunteer hours contributed between October 2022 and June 2023.

Date	Volunteers	Hours
10/22/2022	Jeff Taylor Cindy Jayne	2.5 0.5
12/1/2022	Jeff Taylor Cindy Jayne	2 0.5
1/13/2023	Jeff Taylor Cindy	2 0.5
2/28/2023	Jeff Taylor Cindy	2 0.5

3/29/2023	Jeff Taylor Cindy	2 0.5
5/31/2023	Jeff Taylor Cindy	2.5 0.5
6/29/2023	Jeff Taylor Cindy	2 0.5
Total Hours Volunteered		18.5

Data Results

A total of seven surveys were conducted during the 2022-2023 forage fish monitoring season. Pacific sand lance eggs were found in December 2022 (58 eggs) and January 2023 (126 eggs). No eggs were found in the October, February or March surveys. Results are still pending for the 5/31/2023 and 6/29/2023 surveys. The last seven years of surveys conducted by the Jefferson County MRC have established Adelma Beach as an active forage fish spawning site within WDFW's network of index sites.