

Fidalgo Bay Aquatic Reserve Forage Fish Surveys Results – 2023 (Surf Smelt) – (01-02-2024)

18 surveys were conducted. (usually 2/month)

(No surveys Jan, Mar, Oct)

72 different sample locations.

74 samples were collected.

65 samples had eggs. (88%)

42 samples had more than 100 eggs.

(57% of all samples, 65% of egg samples.)

13 (31%) were Jan-Mar + Oct-Dec, 51 (70%) were Apr-Sept.

17 samples had 20 or more “ready to hatch” eggs.

(23% of all samples, 26% of egg samples, 40% of 100+ egg samples.)

14 (82%) were Jan-Mar + Oct-Dec, 3 (18%) were Apr-Sept

The **east side** has 3300 feet of beach with 34 possible sample sites.

(9 surveys.)

25 samples collected from the **east side**.

24 samples had eggs. (96%.)

21 samples had more than 100 eggs.

(84% of all samples, 88% of egg samples.)

6 samples had 20 or more “ready to hatch” eggs.

(24% of all samples, 25% of egg samples, 29% of 100+ egg samples.)

The **west side** has 3600 feet of beach with 38 possible sample sites. (9 surveys.)

49 samples collected from the **west side**.

41 samples had eggs. (84%.)

21 samples had more than 100 eggs.

(43% of all samples, 51% of egg samples.)

11 samples had 20 or more “ready to hatch” eggs.

(22% of all samples, 27% of egg samples, 52% of 100+ egg samples.)

The **east side** has a higher rate of samples with eggs (96% vs. 84%) and a similar rate of samples with 20 or more “ready to hatch” eggs (24% vs. 22%.)

27 different volunteers contributed more than 170 volunteer hours.

4 different school groups (elementary – undergrad college) were hosted at Fidalgo Bay for learning about Forage Fish and searching for eggs.

Many other questions can be asked of the data. 2023 marks 11 full years of consistent surveys.

Below is a chart showing the percentage of samples of eggs by month – for 2016 through 2023. You can see that 2023 was quite a prolific year – especially in the colder months. That is good news because, although the amounts of eggs spawned then is smaller than in the summer, the survival rate is much enhanced by cooler weather. (Note – no surveys in Jan, Mar, Oct of 2023 – hence no data.)

