

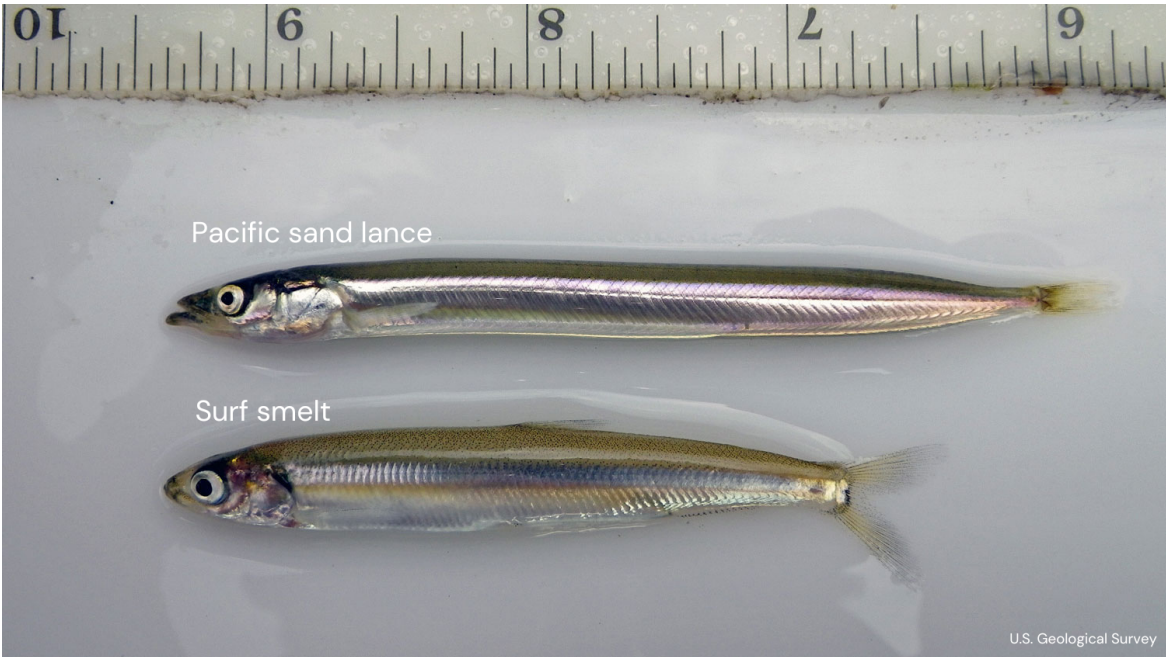


Happy New Year's Eve!

Welcome to **The Schooler: Issue 6**—the final 2025 edition of your bimonthly PSS newsletter for all things forage fish. As we wrap up the year, this issue provides key updates on recent survey findings and other program news.

Thanks for being part of another great year of monitoring and stewardship—we couldn't do this work without you. Here's to a strong finish to the season and an exciting year ahead.

Let's dive in!

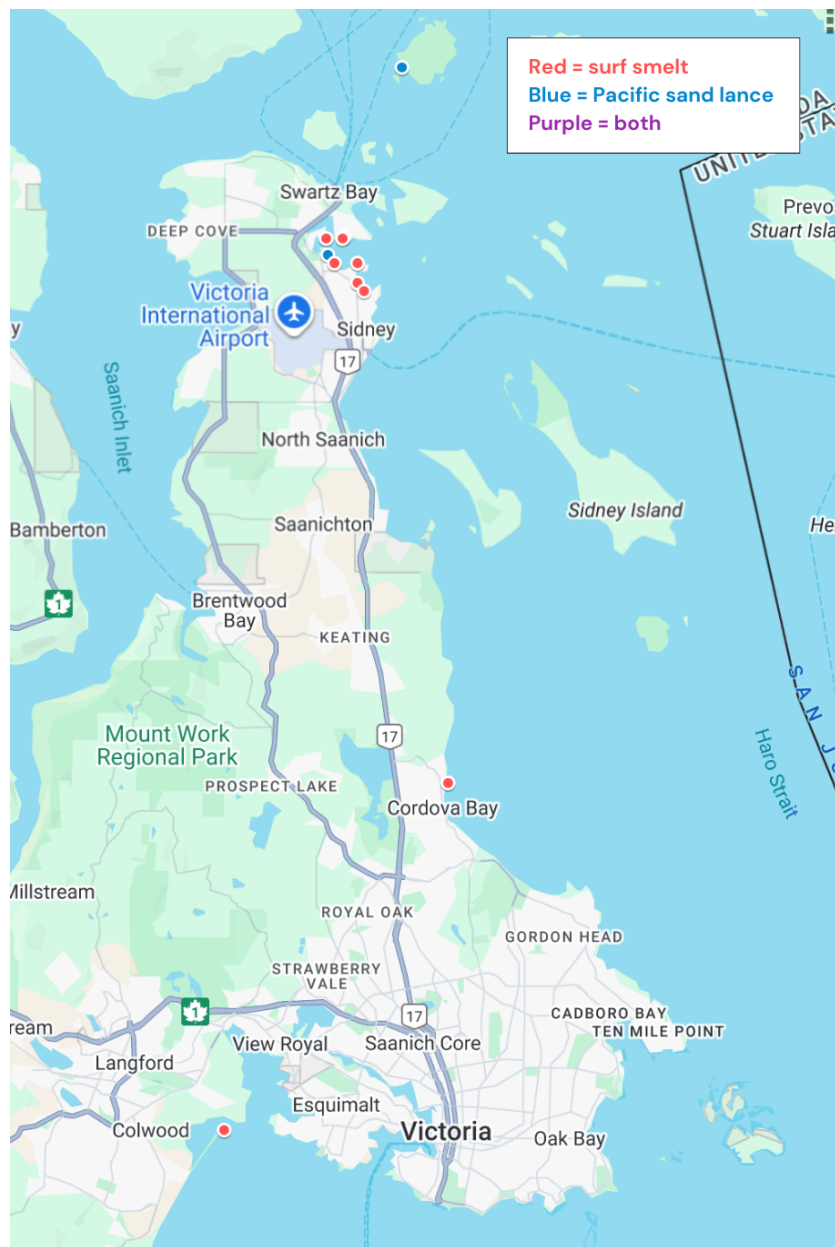


Here are the results for surveys completed **since the last edition** in October 2025:

Location	Date	Surf smelt	Pacific sand lance
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Willows Park Beach: Site 5	Oct 10, 2025	0	0
Willows Park Beach: Site 6	Oct 10, 2025	0	0
Tulista Park Beach: Site 5	Oct 30, 2025	0	0
Tryon Beach: Site 1	Oct 31, 2025	110	0
Amherst Beach: Site 3	Nov 2, 2025	0	0
Sidney North Saanich Yacht Club Beach: Site 3	Nov 4, 2025	0	0
Sidney North Saanich Yacht Club Beach: Site 2	Nov 4, 2025	43	0
Cordova Bay Beach: Site 1 (Agate Park)	Nov 10, 2025	28	0
Siaosun Beach: Site 1	Nov 12, 2025	0	0
Roberts Bay Beach: Site 5	Nov 13, 2025	0	0
Willows Park Beach: Site 2	Nov 13, 2025	0	0
Lillian Hoffar Park Beach: Site 2	Nov 14, 2025	0	4
Rothesay Beach: Site 1	Nov 16, 2025	0	0
Arthur Drive Beach: Site 1	Nov 17, 2025	0	0
Tulista Park Beach: Site 1	Nov 17, 2025	0	0
Royal Beach: Site 4	Nov 17, 2025	0	0
Esquimalt Lagoon Beach: Site 5	Nov 17, 2025	2	0
McMicking Point: Site 2	Nov 18, 2025	0	0
McMicking Point: Site 1	Nov 18, 2025	0	0
Victoria International Marina: Site 1	Nov 20, 2025	0	0
Willows Park Beach: Site 1	Nov 21, 2025	0	0
Esquimalt Lagoon Beach: Site 5	Nov 26, 2025	0	0
Willows Park Beach: Site 1	Nov 26, 2025	0	0
Amherst Beach: Site 1	Nov 28, 2025	0	0
Arthur Drive Beach: Site 2	Nov 29, 2025	0	0
Resthaven Island Beach: Site 1	Nov 29, 2025	0	0
Roberts Bay Beach: Site 4	Nov 30, 2025	0	0
Little Group Islands: Site 1	Nov 30, 2025	0	0
Sidney Spit: Site 6	Dec 2, 2025	0	0
Shell Beach: Site 1	Dec 2, 2025	0	1
Arbutus Point: Site 1	Dec 2, 2025	0	0

Bruce Bight: Site 1	Dec 2, 2025	0	0
Tumbo Island: Site 1	Dec 2, 2025	0	0
Tryon Beach: Site 1	Dec 2, 2025	317	0
Esquimalt Lagoon Beach: Site 6	Dec 2, 2025	0	0
Tryon Beach: Site 2	Dec 9, 2025	508	0
Roberts Bay Beach: Site 1	Dec 10, 2025	5	0
McMicken Beach: Site 1	Dec 11, 2025	0	0
Roberts Bay Beach: Site 5	Dec 12, 2025	1	0
Sand Pebble Beach: Site 1	Dec 13, 2025	1	0
Seaspan Beach: Site 1	Dec 16, 2025	0	0
Tulista Park Beach: Site 4	Dec 17, 2025	0	0
Breakwater Beach: Site 1	Dec 27, 2025	24	0
Sidney North Saanich Yacht Club Beach: Site 2	Dec 29, 2025	51	0



**That's a total of 43 surveys, 13 positive for eggs.** 240 volunteer hours went into these results—a huge thank you to each and every community scientist who contributed their time and hard work!

*Don't see one of your submitted surveys? If it was towards the end of the month, it likely didn't make the cutoff for the issue and will be included in the next. If not, please email [chloe.kraemer@peninsulastreams.ca](mailto:chloe.kraemer@peninsulastreams.ca).*





The **Beach Bulletin** is a living space for sampling tips & tricks, program updates, volunteer features, and any other tidbits ("beach bites"). This is open to all volunteers for contribution; if there's anything you'd like to share with your fellow forage fish community scientists—some sampling/microscoping advice, a survey anecdote, team member feature, or cool wildlife sighting—we warmly encourage you to send it our way at [chloe.kraemer@peninsulastreams.ca](mailto:chloe.kraemer@peninsulastreams.ca)!

### This issue's beach bites:

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**Team expansion:** To fill gaps in our sampling coverage and help strengthen the effort of our existing teams, we conducted 4 training sessions for new volunteers throughout November, hitting Cordova Bay, Willows Beach, Tulista Park Beach, and Esquimalt Lagoon, successfully training 24 new volunteers, including 3 new team leads! Welcome aboard! 😊

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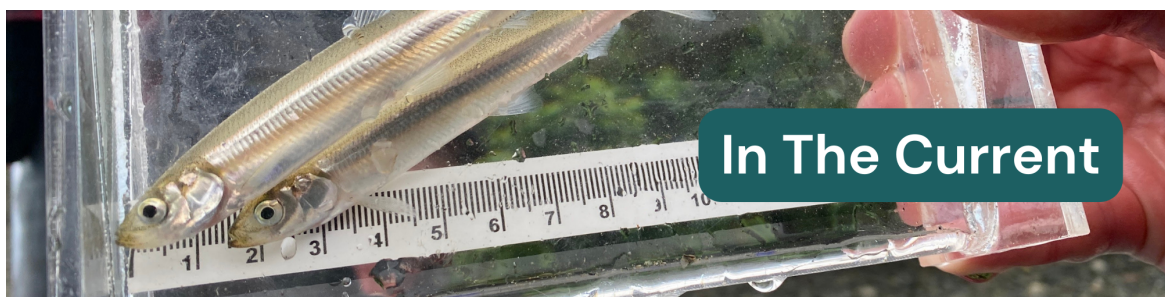
**Pacific Sand Lance Week Celebrations:** The [Coastal Forage Fish Network \(CFFN\)](#) celebrated Pacific Sand Lance Week Nov. 30th to Dec. 6th, aiming to raise public awareness of this vital yet poorly-understood species and for CFFN groups to align sampling efforts for coast-wide comparable data. And were we ever busy! 🐟

Check out the list of activities we got up to:

**(1) Sampling Blitz with Parks Canada** — On Dec. 2nd, we joined the Parks Canada Southern Resident Killer Whale team of the Gulf Islands National Park Reserve for a sampling blitz at 5 different beaches. We hit Sidney Spit, Portland Island, Saturna Island, and Tumbo Island, finding Pacific sand lance on Shell Beach on Portland Island! Huge thank you to the team for having us out on their boat—we hope to continue more sampling days like this in the new year! 🐟

**(2) Forage Fish Social** — In collaboration with the [Gorge Waterway Action Society \(GWAS\)](#), who will be sampling throughout the Gorge Waterway this winter for a habitat suitability and toxicology project, we hosted a forage fish social event at the Victoria Canoe & Kayak Club. We brought together 17 community members for presentations, egg viewing, mingling, and a demonstration survey. Big thank you to PSS Sustainability Scholar Lily Charette for coming out to present on her stormwater policy work she did for us this summer! 🌧️

**(3) Forage Fish Egg Microscopy Workshops** — In collaboration with Moira Galbraith, DFO Zooplankton Taxonomist and PSS program collaborator, we hosted two sessions of a small workshop in the zooplankton laboratory at the Institute of Ocean Sciences in Sidney. This workshop brought together our program microscopists for a review of forage fish egg identification, staging embryo development, and microscopy best practices.



**Wanting to dive deeper? Wade into this issue's current events and news below:**

### **Hard armoring of shorelines is putting public beaches at risk**

Across the Saanich Peninsula, private shoreline armoring—such as rock walls and foreshore excavation—is increasingly replacing natural beaches that support forage fish, salmon, wildlife, and public access. These changes disrupt natural coastal processes, reduce resilience to sea-level rise and storms, and erode the cultural and recreational value of shared shorelines. [Recent enforcement action by the Town of Sidney at an Allbay Road property in Roberts Bay](#) highlights this growing concern, where unauthorized foreshore alterations occurred within an Environmentally Sensitive Area. As outlined in our [recent press release](#) and a [letter in the news](#) by our own forage fish volunteer Sandra Foss, stronger protections and greater use of nature-based shoreline solutions are urgently needed to safeguard the shoreline commons.

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## Drift logs posing risk to intertidal habitats

Recent [research out of UVic](#) has found that drifting logs along BC's coastline are causing significant damage to intertidal ecosystems. While often considered natural features, these logs are frequently remobilized by tides and storms, scouring rocky shorelines and dramatically reducing barnacles and other invertebrates that form the foundation of coastal food webs. The study found 20-80% lower barnacle cover in areas exposed to log movement and documented a more than 500% increase in drift logs along parts of Vancouver Island since the late 1800s—many linked to human activities. Researchers warn that this disturbance may be contributing to declines in shorebirds and call for stronger coastal protection measures and greater recognition of drift logs as an ecological stressor.

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## Forage fish in archaeological remains

Not a recent article, but an important one! Published in 2020, [archaeological research in the southern Gulf Islands](#) shows that forage fish have long been foundational to coastal food systems and social organization. Analysis of fish remains from ancient Coast Salish sites found that Pacific herring dominated the assemblage (~77%), followed by surf smelt (~5.6%), northern anchovy, surfperch, and salmonids. The presence of small, schooling forage fish like herring, smelt, and anchovy indicates the use of specialized net-based fishing technologies and highly cooperative harvesting practices, reflecting strong social organization and shared labour. These species became especially abundant between 800–450 BC, coinciding with periods of village aggregation, and declined around AD 550–650, aligning with regional shifts toward more mobile, smaller-group subsistence patterns. The findings highlight how healthy nearshore habitats supporting forage fish were central to food security, culture, and community life for millennia, underscoring the deep connections between beaches, fish, and people.

Thanks so much for tuning in! Wishing everyone a safe and joyous New Year, and we'll see you in 2026!

**Chloe Kraemer**

*BEACH Program Coordinator*

Peninsula Streams & Shorelines

Living and working within Coast and Straits Salish territory, the territories of the Lekwungen peoples, known today as Songhees and Esquimalt Nations, the T'Sou-ke Nation, and the WSÁNEĆ peoples, known today as WJOLELP (Tsartlip), BOKECEN (Pauquachin), SÁUTW (Tsawout), WSIKEM (Tseycum), and MÁLEXEL (Malahat) Nations.

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