PACIFIC WHALE WATCH ASSOCIATION

2025 SIGHTINGS & SENTINEL ACTIONS

Melisa Pinnow, San Juan Excursions

PUBLISHED:
April 2026

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Suggested Citation:
Gless, E.J., Krieger, J. (2026). *Pacific Whale Watch Association 2025 Sightings and Sentinel Actions.* Pacific Whale Watch Association Annual Report, pp. 1-36.

Sara Jenkins, Wild Whales Vancouver

INTRODUCTION

Bigg's killer whale T100C "Laurel". *Julia Adelsheim, Wild Whales Vancouver*

The Pacific Whale Watch Association

Established in 1994, the Pacific Whale Watch Association (PWWA) is a community of ecotourism professionals with a shared commitment to education, conservation, and responsible wildlife viewing in Washington state and British Columbia.

As members of the PWWA, operators are part of a highly collaborative community. PWWA members share real-time wildlife sightings internally with a variety of exclusive tools including, but not limited to, an encrypted UHF radio channel and the private PWWA App. In addition to shared sightings, other benefits of PWWA membership include advocacy, media representation, and access to educational resources such as private PWWA social media groups and an online literature library of relevant peer-reviewed scientific articles.

PWWA members agree to adhere to marine mammal regulations in Washington and British Columbia and additional PWWA best practices. PWWA captains receive annual training on those regulations and best practices each spring in addition to regular in-season communications.

During the 2025 whale watch season, there were **30** PWWA member companies departing from **24** different locations throughout Washington and BC. **14** PWWA member companies were based in BC, and **16** member companies were based in Washington. The PWWA fleet comprises a variety of vessel types including rigid hull inflatable boats (RHIBs), monohull vessels, catamarans, kayaks, and a sailboat. Tours vary in length from a few hours to full-day specialty excursions or even multi-day expeditions. While whales are present in the region all year, the PWWA's peak season is considered to be March through October. Some PWWA operators, however, offer wildlife tours year-round as conditions permit.

Each year, PWWA member companies welcome a combined total of approximately **400,000** guests. Roughly **75%** of those guests are out-of-town visitors, and of those out-of-town visitors, approximately **one-third** state their primary purpose for visiting the region is to partake in a professional whale watch tour (Sarbaugh & Martin 2024).

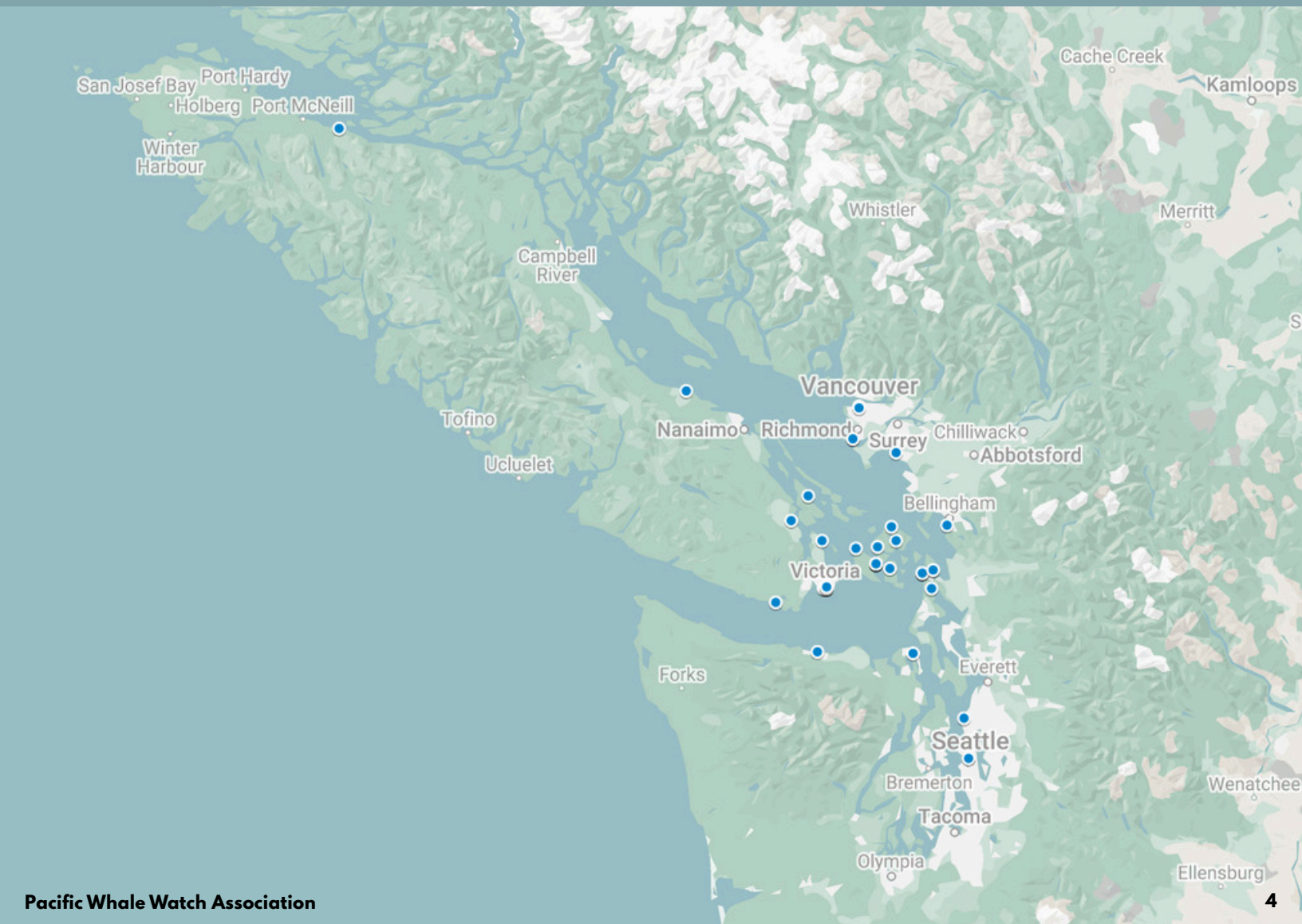
2025 PWWA Members

Washington

- All Aboard Sailing
- Anacortes Whale Watching Tours
- Blue Kingdom Tours
- Deception Pass Tours
- Deer Harbor Charters
- FRS Clipper
- Island Adventures Whale Watching
- Maya's Legacy Whale Watching
- Outer Island Excursions
- Puget Sound Express
- San Juan Cruises
- San Juan Excursions
- San Juan Outfitters
- San Juan Safaris
- Spirit of Orca Whale & Wildlife Tours
- Western Prince Whale & Wildlife Tours

British Columbia

- BC Whale Tours
- Eagle Wing Whale & Wildlife Tours
- Five Star Whale Watching
- Ocean EcoVentures
- Orca Spirit Adventures
- Prince of Whales Whale Watching
- Salt Spring Adventures
- Seabreeze Adventures
- Sidney Whale Watching
- Sooke Coastal Explorations
- SpringTide Whale Watching & Eco Tours
- Vancouver Whale Watch
- White Rock Sea Tours
- Wild Whales Vancouver



THE PWWA APP

A surfacing Bigg's killer whale. *Tyson Reed, Island Adventures*

The PWWA App

One of the most valuable tools utilized by PWWA operators is the PWWA App. This private app, developed in 2018 by Johannes Krieger, co-owner of PWWA member company San Juan Excursions, has revolutionized professional whale watching within the Salish Sea. Designed to efficiently share wildlife information among members, and to coordinate the PWWA fleet's viewing activity, the PWWA App allows users to receive and report real-time wildlife sightings, sentinel actions (detailed later in this report), and important navigational alerts.

In an effort to better understand and monitor whale movements throughout the region, the PWWA collaborates with professional whale watch operators within the North Island Marine Mammal Stewardship Association (NIMMSA) and Campbell River Association of Tour Operators (CRATO) by granting them access to the PWWA App as well.

Additionally, the PWWA provides complimentary PWWA App access to qualified professionals who demonstrate that their knowledge of real-time whale sightings would meaningfully benefit local whales. These authorized users include scientific researchers, commercial vessel pilots, ferry captains, marine mammal observers, emergency response teams, the Canadian Coast Guard's Marine Mammal Desk in British Columbia, and the United States Coast Guard's Cetacean Desk in Washington state.

PWWA App Reporting Procedures

All users of the PWWA App are expected to contribute real-time wildlife sightings. PWWA operators are advised, at minimum, to log in the PWWA App when they first arrive on scene with whales and immediately before they depart. Additional updates during wildlife encounters are strongly encouraged. Operators are asked to log all sightings, even if another vessel has already reported a whale or group of whales. This keeps the PWWA fleet updated on whale locations, IDs, and interesting behavioral notes. Providing frequent updates also helps PWWA operators to voluntarily regulate the number of professional vessels in the vicinity of a whale or group of whales at any given time.

Wildlife entries in the PWWA App are ***not*** unique sightings. The same animal or group of animals may be reported multiple times in one day. The primary goal of the PWWA App is to provide real-time sightings of cetaceans and other notable wildlife, not to estimate wildlife abundance.

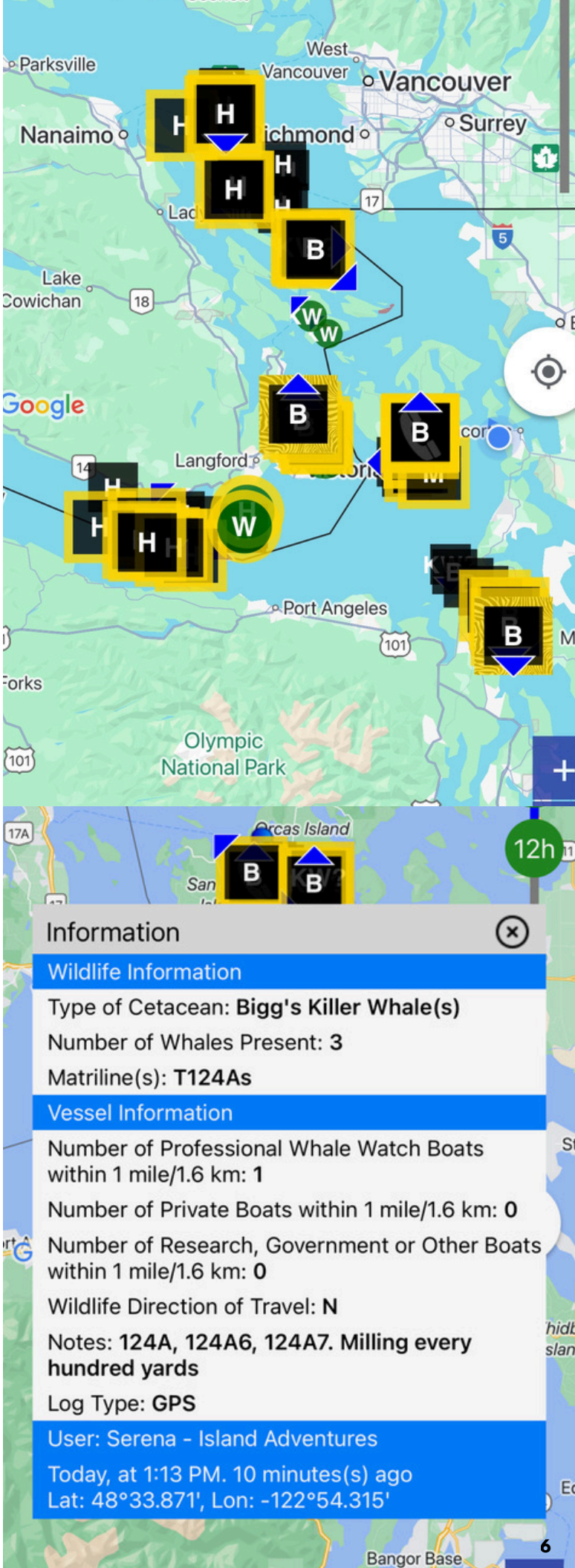
There are two types of entries in the PWWA App — ***GPS*** entries and ***manual*** entries. GPS entries are typically made from aboard vessels and include the time, date, and GPS coordinates of the reporter at the time of the sighting. If a user is in an area with poor cellular reception, the details of the sighting are saved when the report is made and uploaded once reception is restored. Manual entries are used to share secondhand or shore-based sightings. Manual entries allow PWWA App users to select an approximate location for a sighting on the map. Users are encouraged to make manual entries only if the information is obtained from a reliable source, or if they are viewing nearby whales from shore. Manual reports are distinguished in the PWWA App from GPS reports by the shape of icon on the screen (square for GPS, circle for manual).

Reporting Wildlife Sightings

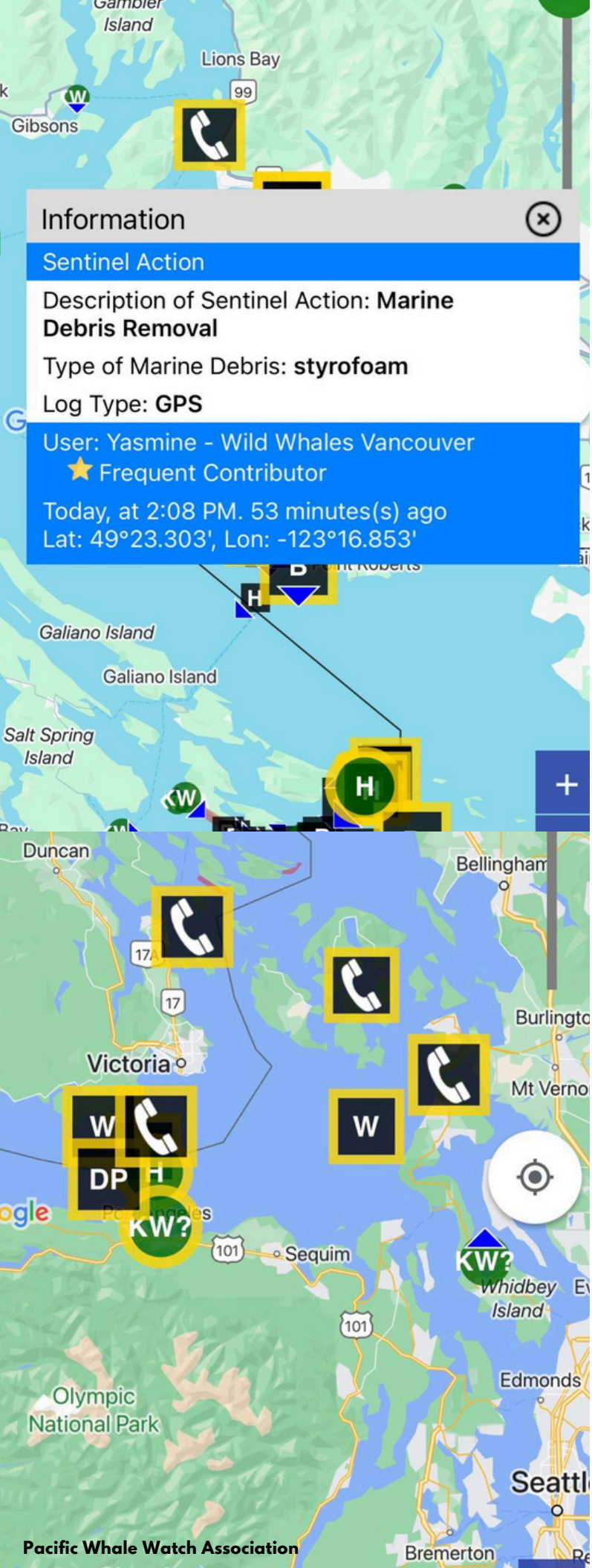
Most reports to the PWWA App are wildlife sightings. While larger cetaceans (killer whales, humpback whales, minke whales, and gray whales) are the predominant species reported, smaller cetaceans, such as Dall's porpoise, harbor porpoise, and Pacific white-sided dolphins, and other noteworthy marine mammals, such as sea otters and elephant seals, are also reported when appropriate. Reports of rare birds are also encouraged in the PWWA App.

Wildlife sighting reports to the PWWA App include:

- Type of wildlife
- Approximate number of animals present
- Individual IDs of animal(s) if known
- Travel direction of animal(s)
- Interesting behavioral notes
- Number of vessels within 1 mile
- If law enforcement is present



Screenshots of the PWWA App showing wildlife sightings.
PWWA App



Reporting Sentinel Actions

Sentinel actions are defined by the PWWA as protective actions taken by professional whale watchers during the course of a tour. Below are some examples of sentinel actions:

- Stopping other vessels from speeding in the vicinity of whales
- Proactively warning vessels of whales nearby so they can adjust speed and/or alter course
- Reporting sick, injured, or entangled animals to proper authorities
- Removing harmful debris from the water

Sentinel action reports to the PWWA App include:

- Description of the sentinel action
- Wildlife species nearby (if vessel-related)
- Means of contact used
- Whether a positive change in behavior was observed as a result of the intervention
- Description of the vessel(s) contacted (if vessel-related)

Reporting "Important" Alerts

The final type of report in the PWWA App is an "important" alert. This is a notification of urgent interest to the fleet. Examples of "important" alerts include:

- Logs or other hazards in the water
- Swimmers or divers in the vicinity
- Fishing gear set in high-traffic areas
- Advisories of scheduled military exercises
- Notifications of research or rescue activities
- Locations of entangled or injured animals

Reporting Accuracy

Due to the volume of reports received by the PWWA App, it is not possible to verify all sightings, especially those received by non-PWWA users. A high rate of accuracy should be assumed, but not 100%. Sightings shared in this report are presented in good faith.

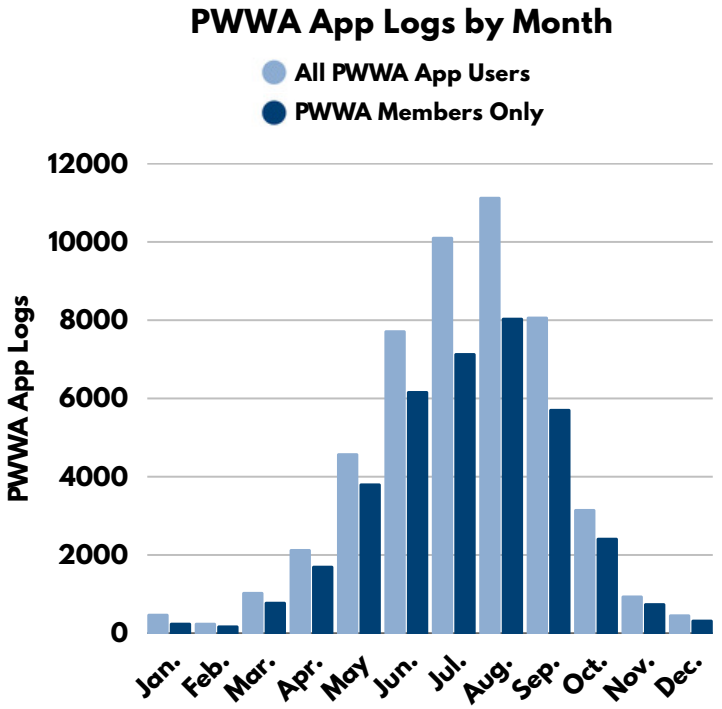
Screenshots of the PWWA App showing sentinel actions.
PWWA App

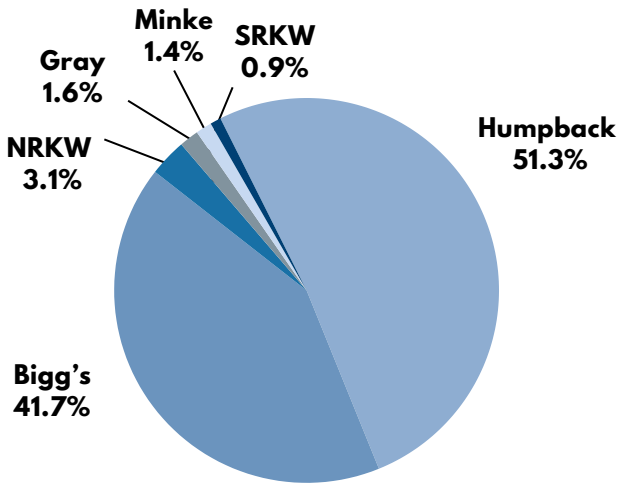
WILDLIFE SIGHTINGS

Bigg's killer whales from a distance. *Ian Roberts, SpringTide Tours*

2025 PWWA App Usage

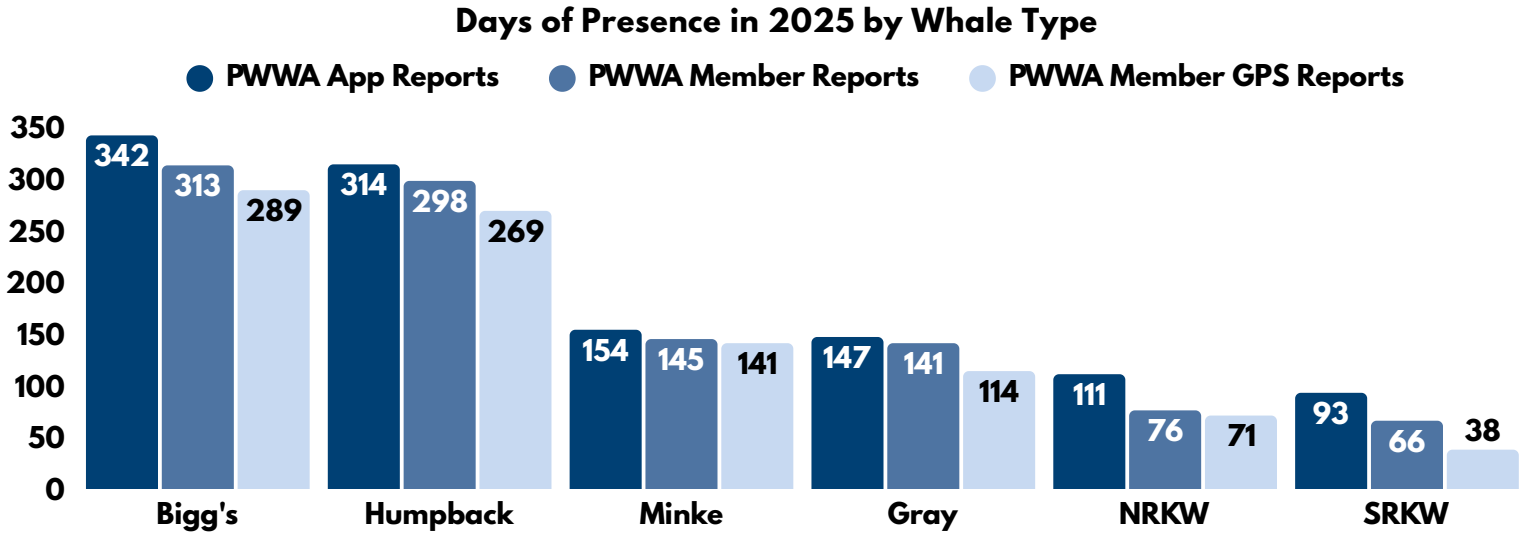
Throughout 2025, PWWA App users entered a total of **50,323** logs into the PWWA App. This was an increase of **12.0%** over 2024's total of **44,933** PWWA App logs. Of all logs entered into the PWWA App in 2025, **37,535** (**74.6%**) were created by PWWA captains, naturalists, crew members, and support staff, and **12,788** entries (**25.4%**) were made by authorized non-PWWA users of the PWWA App. These authorized users included members of NIMMSA and CRATO as well as qualified members of the research, education, commercial shipping, marine transportation, and emergency response sectors in Washington and British Columbia. The majority of reports to the PWWA App were made during the spring, summer, and fall months. Relatively few reports were made during winter months due primarily to inclement weather and reduced operating schedules.





PWWA App Reports by Species

Of all reports to the PWWA App in 2025, **42,072** (**83.6%**) were of the region's six primary whale species/subspecies. Of these reports, **21,565** (**51.3%**) were of humpback whales, **17,545** (**41.7%**) were of Bigg's killer whales, **1,324** (**3.1%**) were of Northern Resident killer whales (NRKW), **686** (**1.6%**) were of gray whales, **569** (**1.4%**) were of minke whales, and **383** (**0.9%**) were of Southern Resident killer whales (SRKW).



2025 Whale Presence

Bigg's killer whales were reported to the PWWA App on more days of 2025 than any other whale type, reported present on **342** days. Humpback whales were reported on **314** days, followed by minke whales on **154** days and gray whales on **147** days. Northern Resident killer whales (NRKW) were reported on **111** days, and Southern Resident killer whales (SRKW) were reported on **93** days. These totals include reports made by PWWA members as well as those made by authorized non-PWWA users. It is important to emphasize that whales may have been present within the PWWA operating range on more days of the year than were reported to the PWWA App.

When examining only those reports made to the PWWA App by PWWA captains, naturalists, and crew members, Bigg's killer whales were reported on **313** days, humpback whales on **298** days, minke whales on **145** days, gray whales on **141** days, NRKW on **76** days, and SRKW on **66** days.

If including only GPS-based PWWA App entries made by PWWA members during their professional whale watch tours, Bigg's killer whales were reported on **289** days, humpback whales on **269** days, minke whales on **141** days, gray whales on **114** days, NRKW on **71** days, and SRKW on **38** days.

A breaching Bigg's killer whale. *April Ryan, Maya's Legacy*

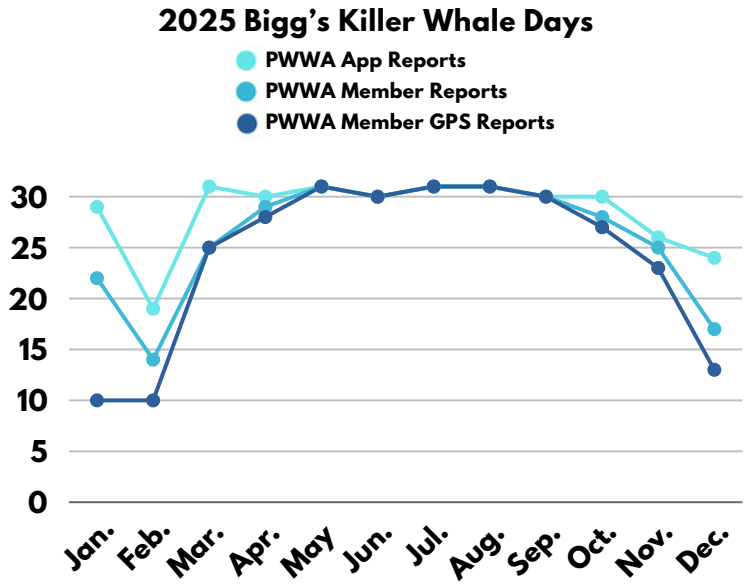
BIGG'S KILLER WHALES

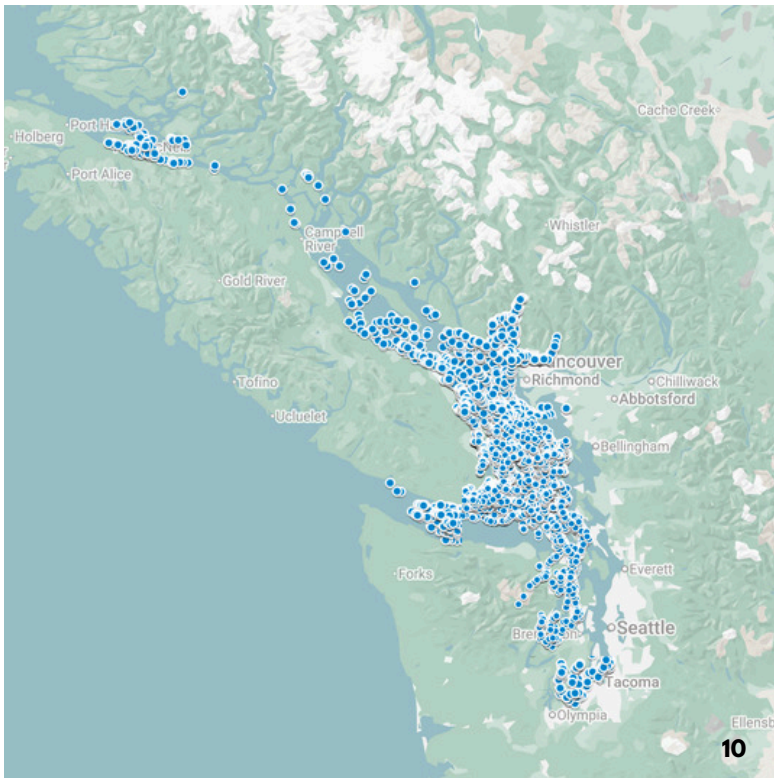
Bigg's killer whales. *Rebekah Hardee, Deer Harbor Charters*

Bigg's Killer Whales

Bigg's killer whales (*Orcinus orca rectipinnus*) are a mammal-hunting subspecies of killer whale found in the North Pacific. In 2025, the PWWA App received **17,545** logs for Bigg's killer whales. Of those, **15,449** (**88.1%**) were made by PWWA members, and **14,633** (**83.4%**) were firsthand GPS reports made from aboard PWWA vessels during whale watch tours. Bigg's killer whales were reported to the PWWA App on **342** days in total, were reported by PWWA members on **313** days, and were encountered during PWWA whale watch tours on **289** days of 2025.

Bigg's killer whales were present during all 12 months of 2025, were reported to the PWWA App daily from April through October, and were reported almost daily during the rest of the year. The decline in PWWA App reports of Bigg's killer whales in winter is likely due to reduced whale watching activity at that time of year rather than reduced whale presence. Orca Behavior Institute, an independent research organization that compiles whale sightings from professional whale watchers, regional sightings groups, and community scientists, confirmed that Bigg's killer whales were present in the Salish Sea on **360** days of 2025 (**98.6%** of days), including every day between January 1 and November 21. Given recent trends, it is likely that Bigg's killer whales were present ***somewhere*** within the Salish Sea on every day of the year, but were not observed, reported, or confirmed.





2025 PWWA GPS entries for Bigg's killer whales.
PWWA App and Google Maps

HUMPBACK WHALES

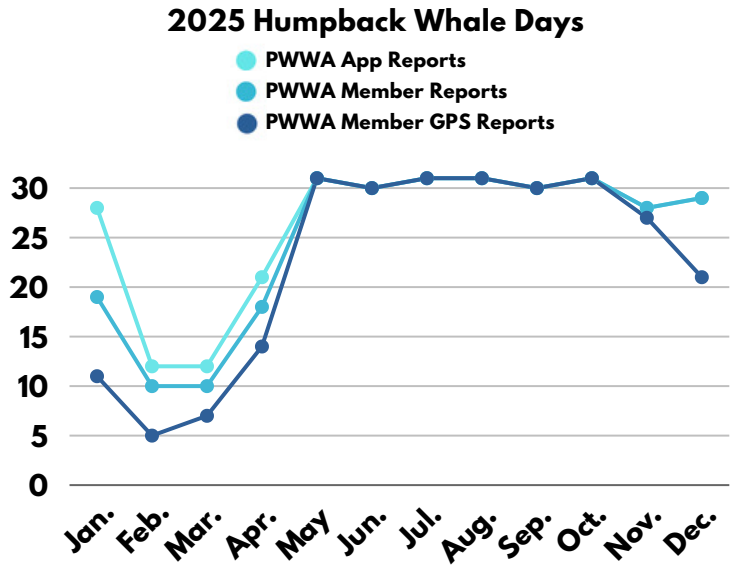
A humpback whale fluke. *Uwe Zimmermann, Seabreeze Adventures*

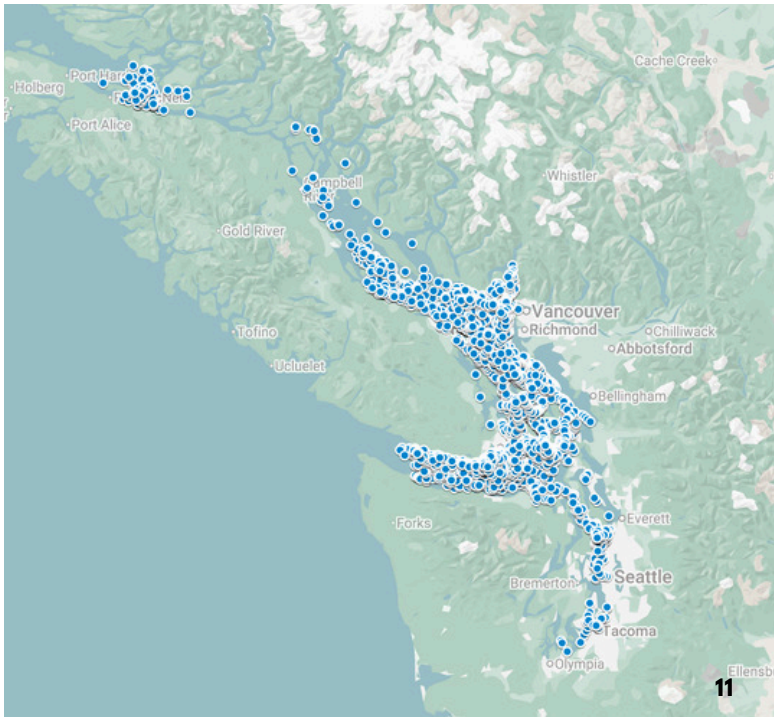
Humpback Whales

The PWWA App received **21,565** logs of humpback whales (*Megaptera novaeangliae kuzira*) in 2025. **14,983** (**69.5%**) entries were made by PWWA members, and **13,634** (**63.2%**) were GPS reports made aboard PWWA vessels during whale watch tours. Humpback whales were reported to the PWWA App on **314** days of 2025 in total, on **298** days by PWWA members, and on **269** days during PWWA whale watching tours. Humpbacks were reported to the PWWA App during every month of the year, and were observed daily during the months of May through October.

Salish Sea humpbacks are migratory. In winter, they travel to warmer locales like the Hawaiian Islands, Mexico, and Central America to breed and give birth. The sharp reduction of reported humpback presence during February and March is consistent with the months that most Salish Sea humpback whales are on the southern breeding grounds.

2025 seemed to be a particularly productive year for local humpback whales. Throughout the season, PWWA operators reported **25** different Salish Sea humpbacks returning from the breeding grounds with calves. Among the whales with new calves last year were well-known humpbacks BCX1193 “Zig Zag”, BCX1068 “Split Fluke”, BCX0870 “Scoop”, BCY0523 “Graze”, and BCY0324 “Big Mama”, who returned to the Salish Sea in 2025 with her eighth known calf.





2025 PWWA GPS entries for humpback whales. *PWWA App and Google Maps*

MINKE WHALES

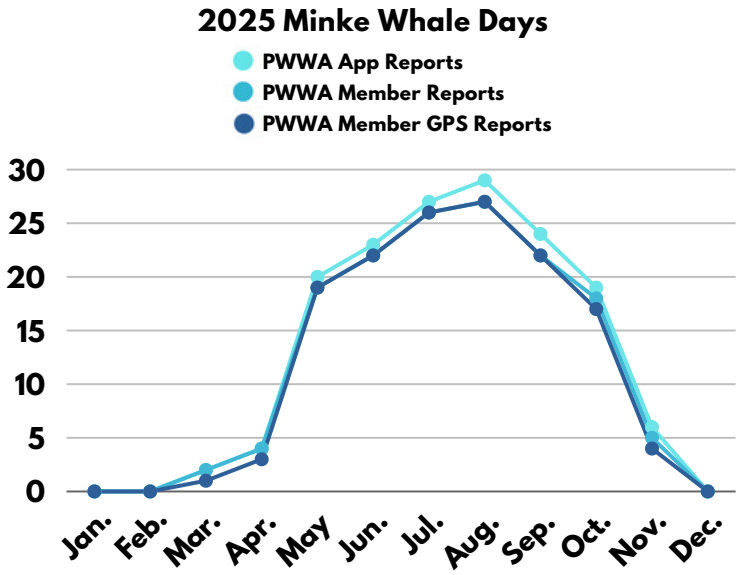
The dorsal fin of a minke whale. *Barbara Howitt, All Aboard Sailing*

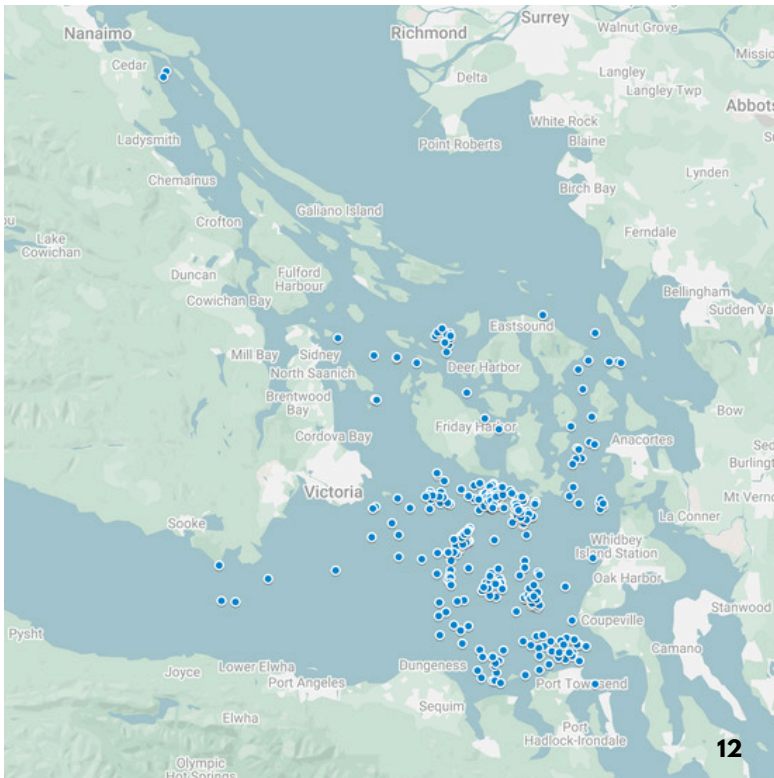
Minke Whales

The PWWA App received **569** logs of minke whale (*Balaenoptera acutorostrata scammoni*) in 2025. **519** (**91.2%**) entries were made by PWWA members, and **472** (**83.0%**) were firsthand GPS reports made aboard PWWA vessels during whale watch tours. Minke whales were reported to the PWWA App on **154** days in total, were reported by PWWA members on **145** days, and were encountered during PWWA whale watch tours on **141** days. The PWWA App received reports of minke whales during each month from March through November, but sightings were most frequent during summer and early fall.

Minke whales are not endangered, but there aren't many in the Salish Sea. Photo identification studies suggest the local population is driven by a group of approximately 30-40 individuals that forage seasonally in the area (Olsen et al. 2024).

Most minke whale sightings occur between late spring and early fall. Little is known about where local minke whales go when not in the Salish Sea, but evidence suggests they may travel south in winter. Many minke whales documented off Washington and BC exhibit small, circular scars consistent with bites from cookiecutter sharks (*Isistius brasiliensis*), a species primarily found in oceanic waters within 20° of the equator. The presence of cookiecutter shark bites on local minke whales would suggest they spend at least some time at lower latitudes (Towers et al. 2013).





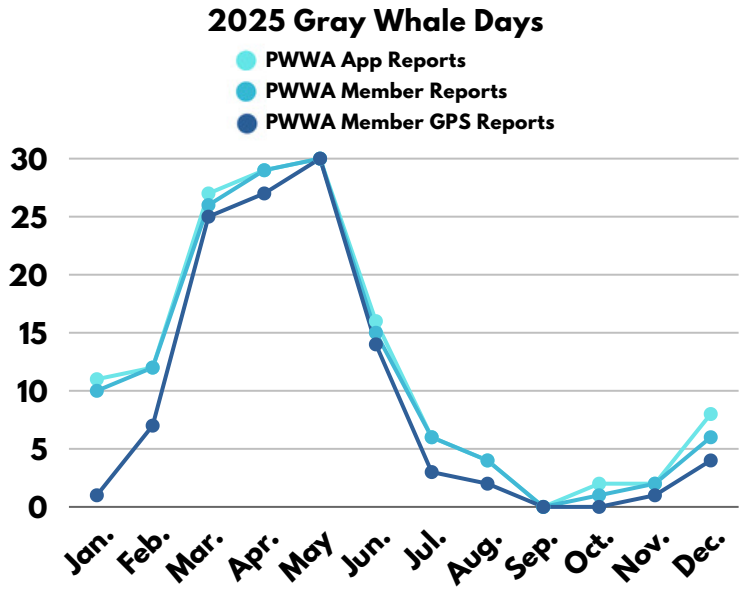
2025 PWWA GPS entries for minke whales. *PWWA App and Google Maps*

GRAY WHALES

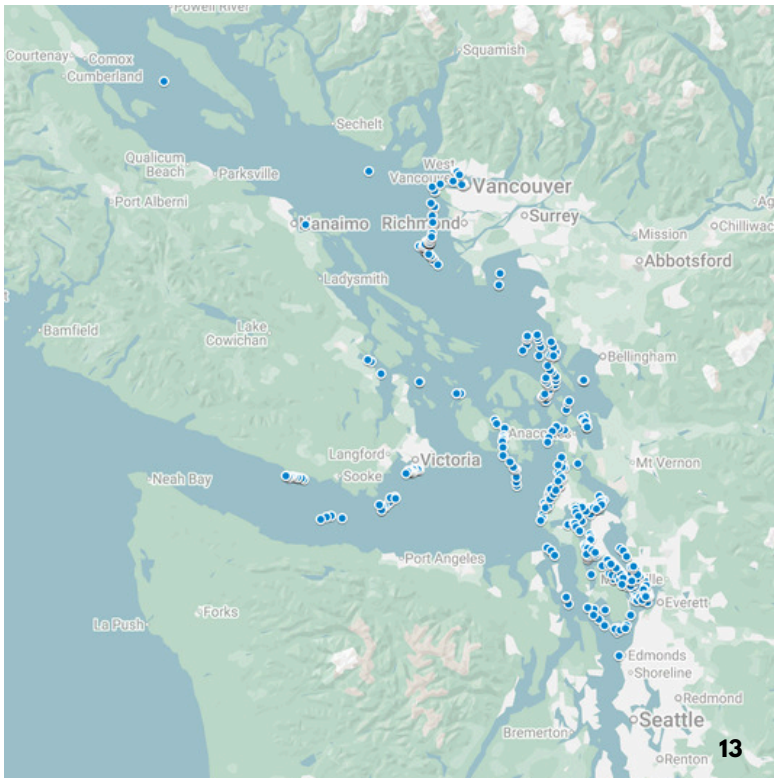
Gray whale tail. *Amanda Colbert, Blue Kingdom Tours*

Gray Whales

The PWWA App received **686** logs of gray whales (*Eschrichtius robustus*) in 2025. **650** (**94.8%**) entries were made by PWWA members, and **545** (**79.4%**) entries were firsthand GPS reports made from PWWA vessels during whale watch tours. Gray whales were reported to the PWWA App on **147** days of 2025 in total, were reported by PWWA members on **141** days, and were encountered during PWWA whale watch tours on **114** days. For decades, the Salish Sea has served as a stopover location for a small group of gray whales during their northbound migration from Mexico to the Arctic. Gray whales were reported during every month of 2025 except September, although most sightings occurred during winter and spring.



Between December 17, 2018 and November 9, 2023, Eastern North Pacific (ENP) gray whales experienced an Unusual Mortality Event (UME) throughout their range of Alaska to Mexico. The National Oceanic and Atmospheric Administration (NOAA) determined the UME was associated with changes in the whales' Subarctic and Arctic feeding areas which led to malnutrition, decreased birth rates, and increased mortality. While NOAA declared the UME over in late 2023, PWWA operators continued to observe lingering signs during the 2025 season. Several known gray whales chose to forego their southbound migration to Mexico, instead electing to spend the winter feeding in Puget Sound, a potential sign of ongoing nutritional stress within the population.



2025 PWWA GPS entries for gray whales. *PWWA App and Google Maps*

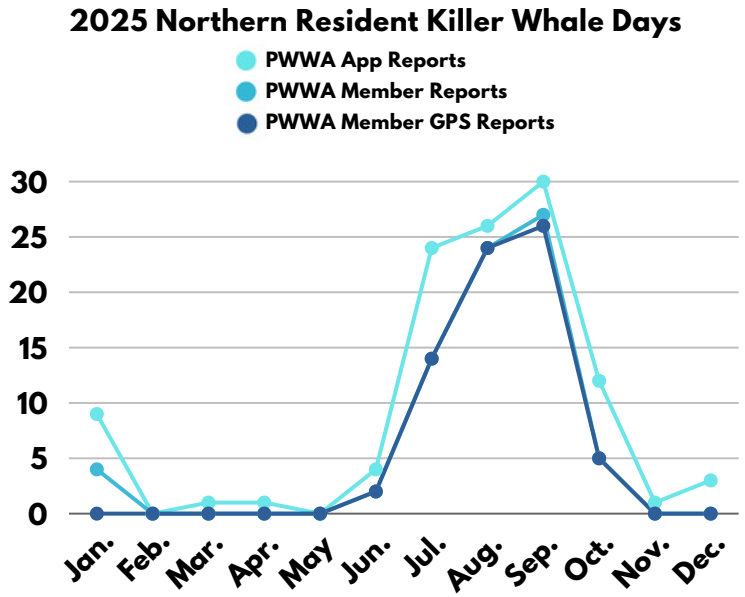
NORTHERN RESIDENTS

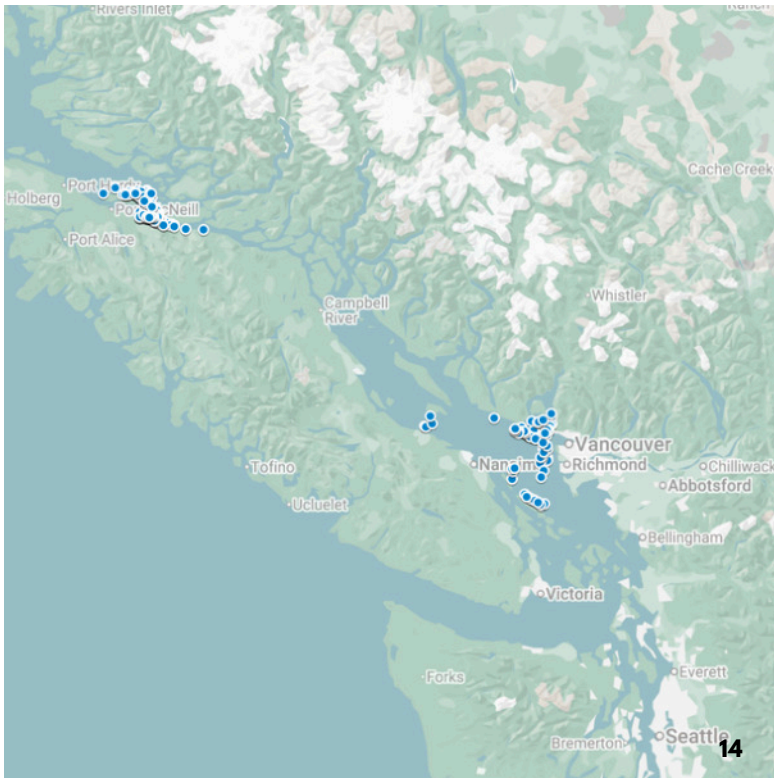
Northern Resident killer whales. *Andrina Lindenaar, Ocean EcoVentures*

Northern Resident Killer Whales

Northern Resident killer whales (*Orcinus orca ater*) are a population of fish-eating killer whales found in the North Pacific. The PWWA App received **1,324** entries for Northern Resident killer whales (NRKW) in 2025. **383** (**28.9%**) entries were made by PWWA members, and **353** (**26.7%**) were firsthand GPS reports made from aboard PWWA vessels. NRKW were reported to the PWWA App on **111** days in total, were reported by PWWA members on **76** days, and were encountered during PWWA whale watch tours on **71** days of 2025.

NRKW are most often seen near north Vancouver Island, the northern Strait of Georgia, or on the outer coast. In 2025, the majority (**71.1%**) of NRKW reports to the PWWA App were submitted by members of the North Island Marine Mammal Stewardship Association (NIMMSA) and Campbell River Association of Tour Operators (CRATO). Historically, almost all PWWA member reports of NRKW have come from a single PWWA company in Telegraph Cove, BC on north Vancouver Island. In September and October of 2025, however, a small group of NRKW spent several weeks in the southern Strait of Georgia. Of the **383** NRKW reports submitted by PWWA members in 2025, **280** (**73.1%**) came from north Vancouver Island and **103** (**26.9%**) came from the southern Strait of Georgia. This is a stark contrast to 2024, when only **three** (**1.0%**) of **312** NRKW reports submitted by PWWA members came from beyond north Vancouver Island.





2025 PWWA GPS entries for NRKW. *PWWA App and Google Maps*

SOUTHERN RESIDENTS

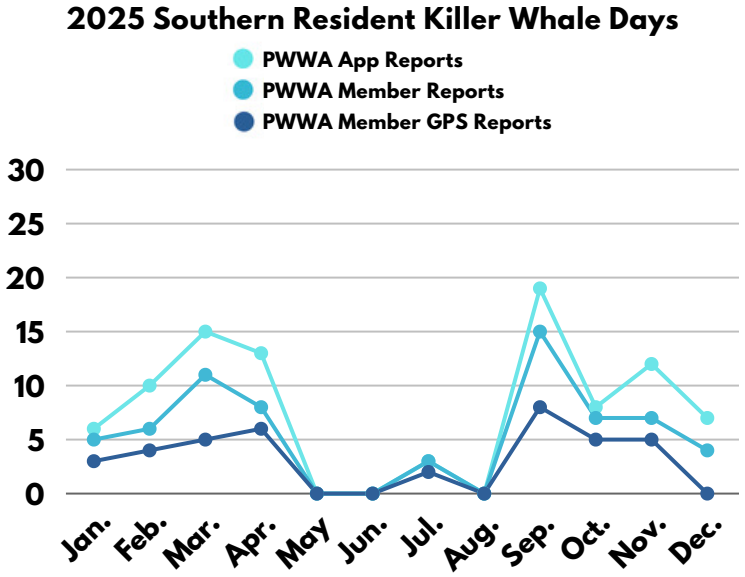
Southern Resident killer whales. *Melisa Pinnow, San Juan Excursions (taken from shore)*

Southern Resident Killer Whales

Southern Resident killer whales (*Orcinus orca ater*) are another population of fish-eating killer whales in the North Pacific. Unlike Northern Residents, Southern Resident killer whales (SRKW) are endangered due to a host of interconnected threats. These threats include a lack of consistent prey throughout their entire range, accumulation of chemical contaminants, and acoustic and physical disturbance.

Per Center for Whale Research's annual census, there were **74** SRKW in July 2025, an increase of one individual since the 2024 census. This total includes calf J63, first seen on April 6, 2025. The total does not include calf K47 who was first seen on December 9, 2025, after the conclusion of the annual census. Another calf, J64, was seen with mother J42 on September 18, 2025, but was sadly declared missing and presumed deceased on October 23.

In 2025, the PWWA App received **383** logs of SRKW. **327** (**85.4%**) were secondhand or shore-based reports logged by PWWA members, or GPS reports from researchers, boater education groups, or other authorized PWWA App users outside of the PWWA. Only **56** (**14.6%**) logs were GPS reports made by PWWA vessels during whale watch tours. Reports made during PWWA tours either stemmed from unintentional SRKW encounters, or were made from a distance of more than 1,000 yards in



2025 PWWA GPS entries for SRKW.
PWWA App and Google Maps

Washington waters. SRKW were reported to the PWWA App on **93** days, were reported by PWWA members on **66** days, and were encountered during PWWA whale watch tours on **38** days.

This was a decrease from 2024 during which SRKW were reported to the PWWA App on **133** days in total, were reported by PWWA members on **105** days, and were encountered during PWWA whale watch tours on **59** days. According to Orca Behavior Institute (OBI), 2025 was the first year on record during which there were no confirmed SRKW sightings in the Salish Sea during the months of May, June, *and* August.

New Washington State Legislation

On January 1, 2025, a new law increasing the approach distance for SRKW from 300 yards (400 yards in front or behind) to 1,000 yards went into effect in Washington state (Protection of Southern Resident orca whales 2023). The change did not impact PWWA operations, as professional whale watch vessels have been required to stay 1,000 yards away from SRKW in Washington since 2021 under WDFW's Commercial Whale Watching License Program (CWWLP). The new legislation remedied a disparity that for several years allowed unlicensed private vessels to approach SRKW more than three times closer than trained, licensed professional whale watch vessels.

Pacific Whale Watch Association

Under the CWWLP, any operator offering tours to see marine mammals in inland Washington waters must obtain a commercial whale watching license, pay annual fees, utilize an onboard Automatic Identification System (AIS), complete an annual training quiz, and report all encounters with SRKW to the Whale Report Alert System (WRAS).

Sustainable Whale Watching Authorization

Since 2019, as part of a recurring Interim Order intended to protect SRKW, the viewing distance for ***all*** killer whales in BC waters between Campbell River and Ucluelet was increased from 200 meters to 400 meters. Transport Canada's Sustainable Whale Watching Authorization (SWWA) allows skilled professional whale watch operators to continue viewing non-Southern Resident killer whales from the previous distance of 200 meters if they agree not to view Southern Resident killer whales in BC waters from any distance. Vessels with authorization are required to safely leave the vicinity of SRKW as soon as possible if encountered in BC, immediately report encounters with SRKW to WRAS, utilize AIS, and display a purple "Authorized Vessel" flag unique to their vessel at all times.

In 2023, Fisheries and Oceans Canada (DFO) began the process of amending Canada's Marine Mammal Regulations to provide additional protections for endangered SRKW. Based on feedback provided during ongoing consultation with stakeholders, including the PWWA, as well as from a national public survey conducted in 2024, DFO has recommended increasing the approach distance from SRKW to 1,000 meters in BC waters while maintaining a distance of 200 meters for all other killer whales. This would align with the new 1,000-yard regulation in neighboring Washington state.

At the time of this report's publication, the new regulations are expected to begin in summer 2026. Transport Canada has also announced that the SWWA program will be discontinued, as it will no longer be necessary.

Authorized Vessel flag.
Erin Gless, PWWA

SEA OTTERS

A sea otter in the kelp. *Jeff Friedman, Maya's Legacy*

Sea Otters

Sea otters (*Enhydra lutris),* were once commercially hunted to the brink of extinction due to demand for their dense fur coats. Following decades of conservation efforts, sea otters are now seen regularly on the outer coast of Washington and British Columbia, and near north Vancouver Island. It is only in the last several years, however, that sea otter sightings have become more frequent in the waters of the Salish Sea.

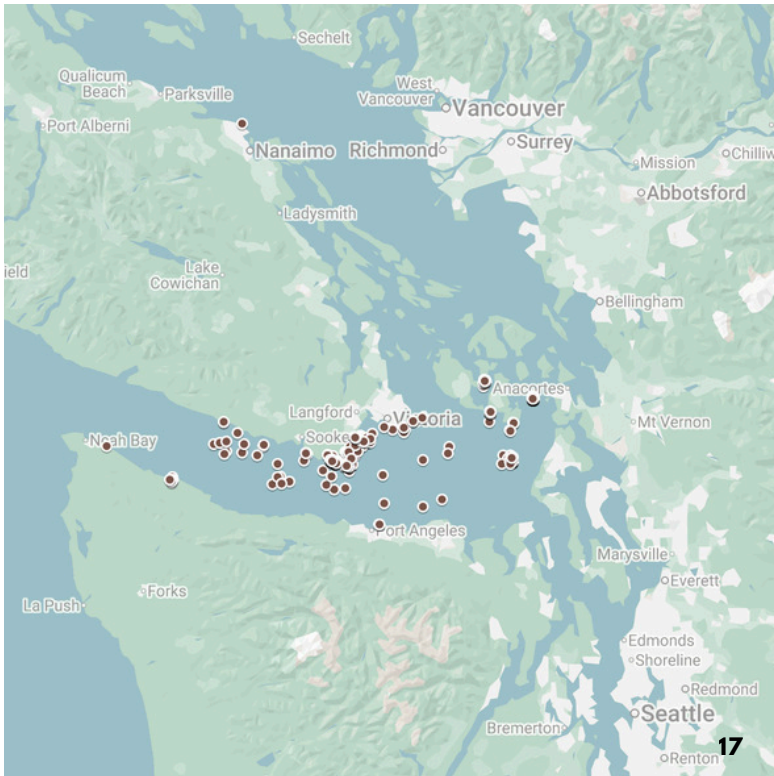
In 2025, PWWA members documented **681** sightings of sea otters in the PWWA App. Of those, **663** (**97.4%**) reports were within the Salish Sea. Sea otter sightings are common near north Vancouver Island, therefore PWWA App users in that region typically only report very large rafts of sea otters. The remainder of this section will focus only on sea otter reports within the Salish Sea.

For many years, a lone male sea otter nicknamed "Ollie", who has resided near Race Rocks Ecological Reserve off south Vancouver Island since 2015, was the only sea otter known to PWWA members. In recent years, however, several other sea otters have been sighted in the Salish Sea, and a few of them seem to have established some level of residency. These new sea otters are typically encountered near south Vancouver Island and Washington's San Juan Islands and Smith Island.

Ollie is often identified by distinctive markings on his nose. As the number of sea otter sightings in the Salish Sea increases, it's become difficult to infer which PWWA App reports are of Ollie, and which are of different otters, especially in the vicinity of south Vancouver Island, based on location alone. That said, of the 663 sea otter sightings within the Salish Sea in 2025, PWWA members specifically identified the otter seen as "Ollie" in **129** (**19.5%**) reports.

Interestingly, in 2025, Ollie spent less time at Race Rocks and more time further north near places like Pedder Bay and Albert Head near Metchosin, BC. It's not known whether this change in behavior might be due to displacement caused by new otters in the area, his advanced age, or simply personal preference.

Map of 2025 PWWA sea otter reports within Salish Sea (manual & GPS). *PWWA App and Google Maps*



NOTEWORTHY WILDLIFE

A rare fin whale. *Sophia Madden, Outer Island Excursions*

Fin Whale

Fin whales (*Balaenoptera physalus*) are the second longest whales on the planet, reaching lengths of up to 85 feet (26 meters). Sightings of fin whales are rare within the Salish Sea, but do occur occasionally.

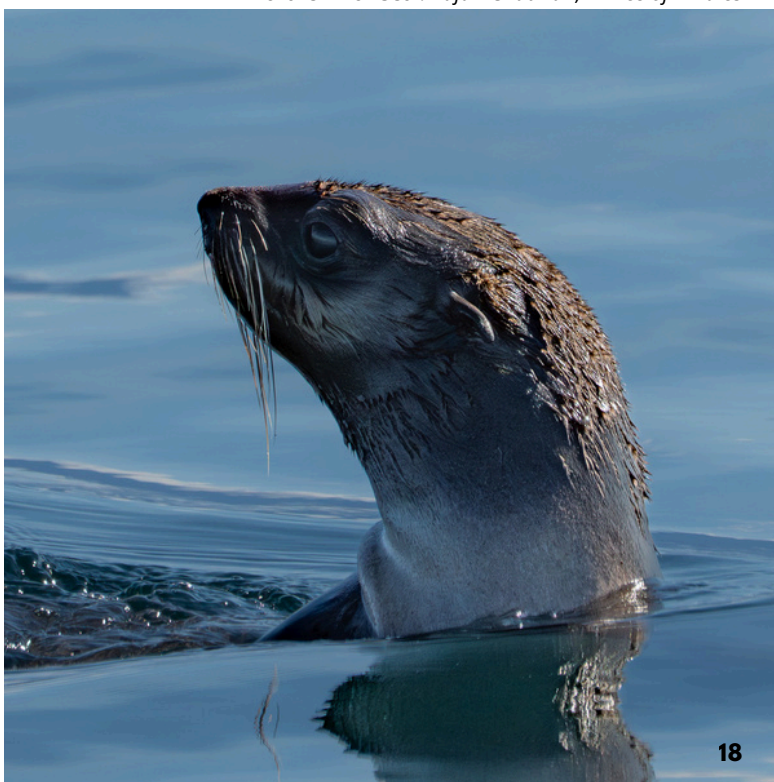
On September 14, 2025, a fin whale was photographed by PWWA operators off the southern end of Washington's San Juan Island. The whale, which had a very distinctive dorsal fin, was resighted on September 15 in the same general area, and again on September 17 in Boundary Pass near Pender Island, BC. Photographs of the whale were submitted to Cascadia Research Collective, but the individual was not found in their existing west coast fin whale catalog.

While there were no confirmed sightings in 2025 after September 17, between September 19 and October 13, experienced shore-based observers near BC's Boundary Bay and Washington's Semiahmoo Bay reported regularly seeing a long, dark whale with a tall spout exhibiting behavior unlike that of a humpback or gray whale. It's believed this elusive animal could have been the fin whale.

Fur Seals

Fur seals are pinnipeds most often found along the region's outer coast, however in 2025, there were several fur seal sightings inside the Salish Sea. Fur seals were reported to the PWWA App on **ten** days in 2025 including three days in April, one day in August, one day in September, four days in October, and one day in December. All but one of the sightings were near Race Rocks Ecological Reserve southwest of Victoria, BC. In addition to the sightings at Race Rocks, one fur seal was reported northeast of San Juan Island on October 5, 2025. The San Juan Island sighting occurred on the same date at roughly the same time that another fur seal was reported near Race Rocks, indicating the presence of at least two different individuals. It is assumed these animals were northern fur seals (*Callorhinus ursinus),* although Guadalupe fur seal (*Arctocephalus townsendi*) sightings are also possible.

A northern fur seal. *Rajan Chauhan, Prince of Whales*



A pair of Pacific white-sided dolphins. *Rachel Rodell, Puget Sound Express*

Pacific White-Sided Dolphins

Pacific white-sided dolphins (*Aethalodelphis obliquidens*) are frequently observed near north Vancouver Island, the northern Strait of Georgia, and on the outer coast of Washington and British Columbia, yet sightings are relatively rare within the PWWA's core operating range in the central and southern Salish Sea.

In 2025, the PWWA App received **830** reports of Pacific white-sided dolphins from all users across **195** days. Almost all of these sightings came from authorized users belonging to NIMMSA or CRATO, but **55** of the reports (**6.6%**) came from PWWA members across **14** different days. The majority of the PWWA's reports of Pacific white-sided dolphins involved a small group of 2-3 individuals that spent an extended period of time in eastern Juan de Fuca Strait between August and October.

Pacific white-sided dolphins were long referred to colloquially as "Lags" based on the scientific name *Lagenorhynchus obliquidens*. In 2025, however, after a thorough taxonomic analysis, the Society for Marine Mammalogy reclassified Pacific white-sided dolphins into a new genus, *Aethalodelphis,* along with dusky dolphins (*Aethalodelphis obscurus),* and updated their scientific name.

Pacific Whale Watch Association

Horned Puffin

Tufted puffins (*Fratercula cirrhata)* are known to nest in the Salish Sea each year, but sightings of horned puffins (*Fratercula corniculata)* are rare. Horned puffins typically nest on rocky shorelines in Alaska and Russia each summer.

Since 2017, at least one horned puffin has been observed near Washington's Smith Island each summer, and in 2024, two horned puffins were photographed near Smith Island together. In 2025, at least one horned puffin was confirmed near Smith Island, and in late August, The Salish Sea School, a local non-profit organization, shared a series of photographs on social media showing a horned puffin and a tufted puffin preening each other and sharing a hillside burrow, behaviors consistent with courtship.

Horned puffin (left) and tufted puffin. *Tomis Filipovic, Eagle Wing Tours*

SENTINEL ACTIONS

A humpback surfaces with a BC Ferry in the background. *Steph Spencer, Seabreeze Adventures*

PWWA Sentinel Actions

"Sentinel actions" are defined by the PWWA as protective actions taken by professional whale watchers during the course of a tour to benefit whales and other wildlife. Examples of sentinel actions include stopping other vessels from speeding near whales, proactively warning vessels of whales nearby so they can reduce speed and/or change course, retrieving harmful marine debris from the water, and alerting authorities about injured or entangled wildlife.

Since 2020, PWWA members have used the PWWA App to document the sentinel actions they perform. Similar to wildlife sightings, sentinel action reports collected by the PWWA App include the time, date, and GPS coordinates of each protective action along with other important details of the intervention.

Passive Sentinel Role

In addition to the documented sentinel actions detailed in this report, professional whale watch vessels also have the ability to positively influence the behavior of other vessels in the vicinity of whales by simply being present. PWWA operators help to mark the location of whales and model appropriate speeds and distances. Since 2018, PWWA vessels have also been encouraged to display the brightly colored Whale Warning Flag within one kilometer (0.62 miles) of whales. Outreach campaigns in both British Columbia and Washington ask boaters to slow to a speed of seven knots or less and be vigilant of whales if they see a vessel flying the Whale Warning Flag.

An independent, peer-reviewed study found that the number of dangerous recreational boating incidents in the vicinity of Salish Sea killer whales decreased from **6.60** incidents per hour to **2.65** incidents per hour when a professional whale watch vessel was present (Shields 2022). The analysis of sentinel activity in this report does not account for any potential dangerous boating incidents that may have been prevented by the visible presence of PWWA vessels alone.

The PWWA App is also utilized by an increasing number of authorized non-PWWA users such as marine mammal observers, commercial vessel pilots, ferry captains, cetacean researchers, and more. It's likely precautions are taken by these user groups in the vicinity of whales as a result of their direct access to real-time sightings through the PWWA App without the need for direct interaction with PWWA operators. Unfortunately, the PWWA is unable to quantify such behavior modifications at this time.

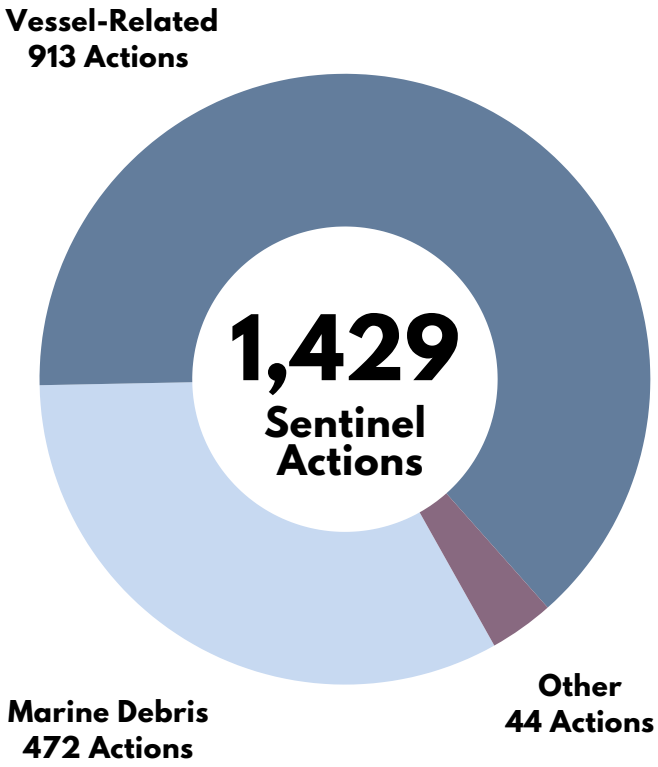
2025 Sentinel Action Summary

In 2025, PWWA captains, naturalists, and crew members documented a total of **1,429** sentinel actions during their professional whale watching tours.

Vessel-related sentinel actions were the most common type of intervention documented with **913** actions, accounting for **63.9%** of total sentinel actions reported. These included **531** reactive sentinel actions and **382** proactive sentinel actions.

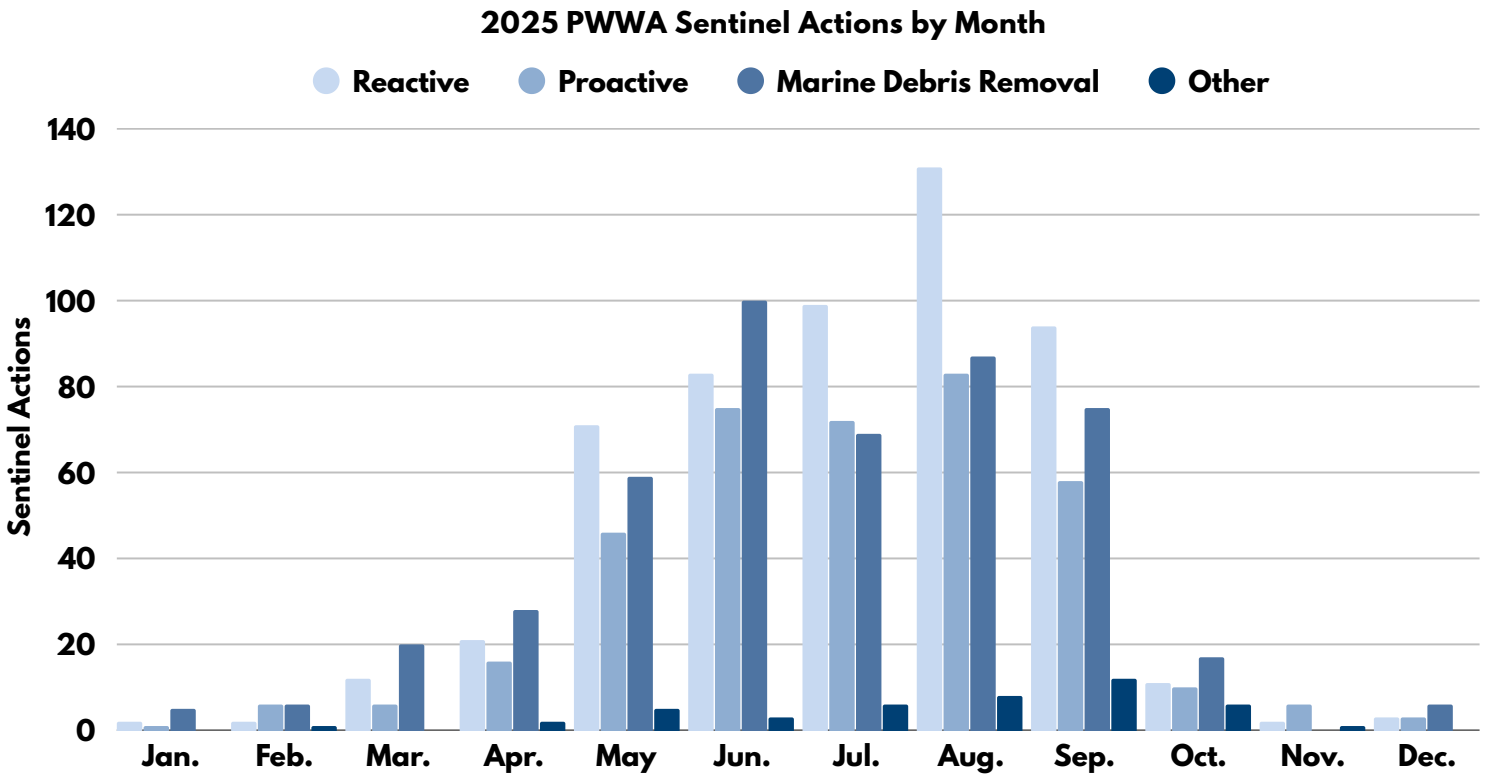
Reactive sentinel actions involve direct contact with vessels traveling too close and/or too fast in the immediate vicinity of whales. Communication during reactive sentinel actions often occurs via VHF radio, the waving of arms or the Whale Warning Flag, or a quick blast of the ship's horn. *Proactive* sentinel actions involve contacting vessels in advance, before they enter the immediate vicinity of whales. Proactive contacts tend to occur primarily over VHF radio, or by waving arms or the Whale Warning Flag.

472 sentinel actions (**33.0%**) involved marine debris removal. Examples of harmful marine debris include balloons, polystyrene foam, derelict fishing gear, plastic bags, bottles, rubber tires, and other miscellaneous garbage.



There were **44** sentinel actions (**3.1%**) categorized as “other" during the 2025 season. Examples of other sentinel actions include reporting injured or entangled wildlife to authorities, assisting boaters in distress, and educating boaters about drone usage or illegal fishing within prohibited areas.

Bigg’s killer whales with tanker in the background. *Mollie Cameron, Sooke Coastal Explorations*



2025 Sentinel Actions by Month

Sentinel actions occurred during all twelve months of 2025, but the majority were performed between May and September. This timeframe coincides with the peak of PWWA whale watching activity. These are also the months with the longest daylight hours, most favorable weather conditions, the heaviest ferry and recreational boating traffic, and the highest likelihood of encountering whales.

For these reasons, it is not surprising that most sentinel actions were performed during summer months. Similarly, it is expected that fewer sentinel actions are performed in winter, as there are fewer PWWA operators on the water to perform sentinel actions at that time of year.

In 2025, August was the month with the most total documented sentinel actions. **309** actions were logged to the PWWA App throughout the month, including **131** reactive interventions, **83** proactive warnings, **87** marine debris removals, and **eight** sentinel actions categorized as "other". August was also the month with the most reactive sentinel actions and proactive sentinel actions overall.

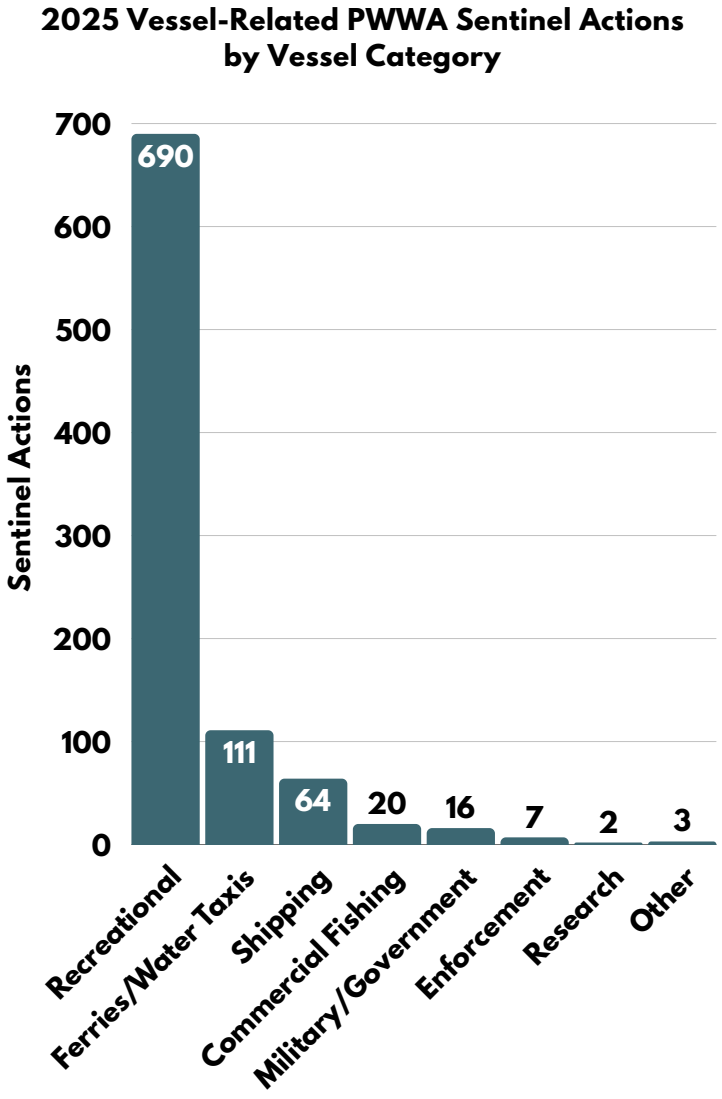
June saw the most documented marine debris removals (**100** actions), and September was the month with the most sentinel actions categorized as “other” (**12** actions). September’s other sentinel actions included **eight** reports of entangled sea lions, **one** report of an entangled humpback whale, and **two** reports of contacting vessels illegally fishing in protected areas.

A PWWA member flags down an oncoming vessel.
Maya's Legacy

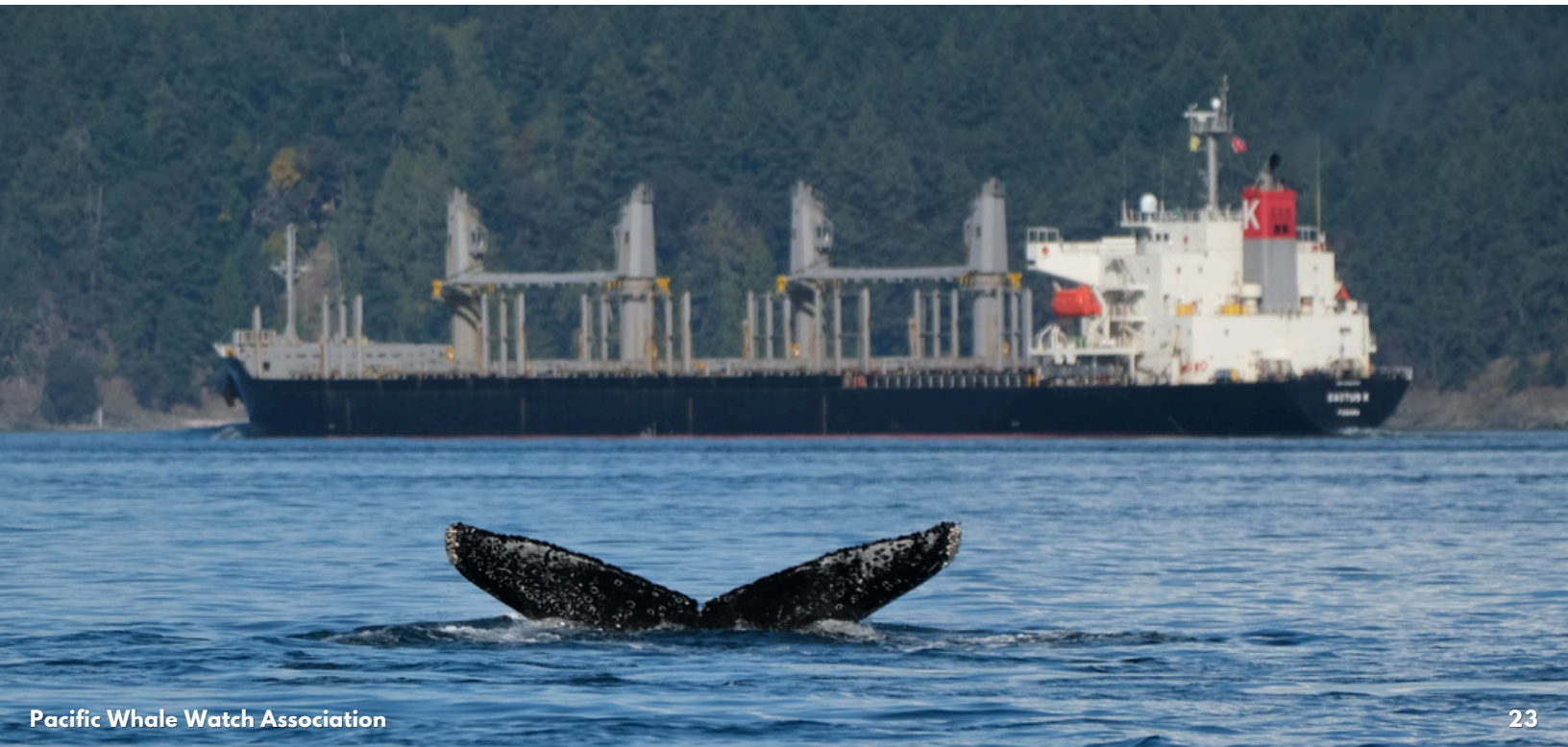
Vessel-Related Sentinel Actions

Of the **1,429** sentinel actions reported to the PWWA App in 2025, **913** (**63.8%**) involved interactions with other vessels. PWWA members observed a positive change in behavior following **659** (**72.2%**) vessel-related interventions, detailed further on page 26 of this report. Contact with other vessels was most frequently made through VHF radio, a quick blast of the ship's horn, or the waving of a flag or arms. **531** (**58.2%**) vessel-related actions were *reactive* sentinel actions involving vessels in the immediate vicinity of whales, and **382** (**41.8%**) actions were *proactive* interventions warning vessels of whales in their eventual path.

Recreational vessels were the category contacted most frequently, accounting for **690** vessel-related sentinel actions (**75.6%**). Ferries and water taxis were the second most frequently contacted category with **111** sentinel actions (**12.2%**). Large commercial vessels, such as container ships and tankers, were contacted during **64** sentinel actions (**7.0%**), and commercial fishing vessels were contacted **20** times (**2.2%**). Military and other government vessels were contacted **16** times (**1.8%**), law enforcement vessels were contacted **seven** times (**0.8%**), and research vessels were contacted **two** times (**0.2%**). **Three** (**0.3%**) vessels categorized as "other" were also contacted.



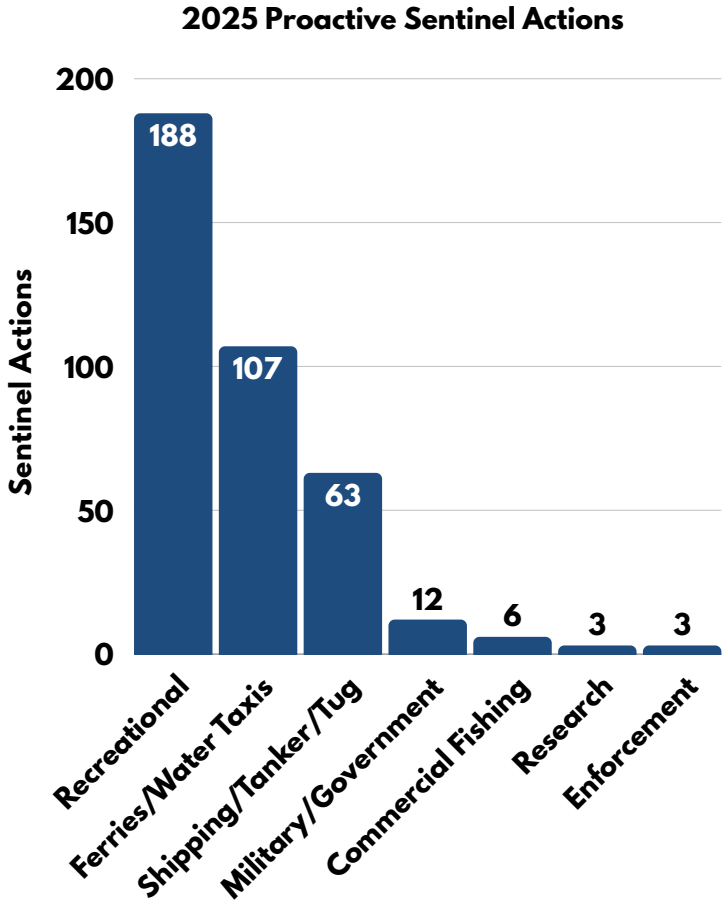
A humpback surfaces with a bulk carrier in the background. *Bethany Shimasaki, Western Prince*



A Bigg's killer whale surfaces with a ferry in the background. *Amanda Colbert, Blue Kingdom Whale & Wildlife Tours*

Proactive Sentinel Actions

Of the **382** proactive sentinel actions documented in 2025, recreational vessels were the vessel type contacted most frequently. Recreational vessels were contacted during **188** proactive sentinel actions (**49.2%**). Ferries and water taxis were contacted during **107** proactive sentinel actions (**28.0%**), and large commercial vessels such as tankers, cargo ships, and tugboats were contacted during **63** proactive sentinel actions (**16.5%**). Other vessels contacted included **12** military/government vessels (**3.1%**), **six** commercial fishing vessels (**1.6%**), **three** research vessels (**0.8%**), and **three** law enforcement vessels (**0.8%**).



In 2025, the most common means of proactively warning vessels of the presence of whales was via public VHF radio, accounting for **260** (**68.0%**) interventions. Waving arms or the Whale Warning Flag was the next most common method, utilized during **125** (**32.7%**) sentinel actions. If necessary, a short blast of the ship's horn was used during **52** (**13.6%**) sentinel actions. More than one means of communication was used during **70** (**18.3%**) proactive sentinel actions.

Vessel speed has been shown to be the most important predictor of noise levels received by whales underwater (Houghton et al. 2015). By proactively warning vessels *before* they're in the immediate vicinity of whales, those vessels have more time to reduce their speed and/or alter course, resulting in quieter and safer conditions.

The Whale Warning Flag. *Alli Montgomery, FRS Clipper*

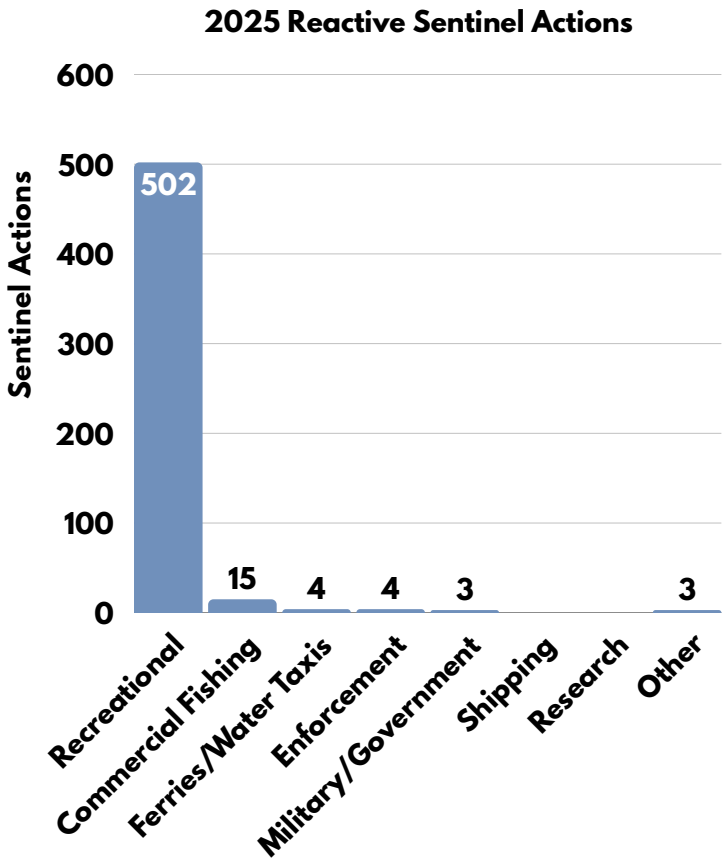
Reactive Sentinel Actions

Reactive sentinel actions involve contacting vessels in the immediate vicinity of whales. Unlike proactive sentinel actions, reactive sentinel actions typically unfold quickly, and involve vessels that pose a more imminent threat.

In 2025, the overwhelming majority of the **531** reactive sentinel actions documented by PWWA members involved recreational vessels, accounting for **502** (**94.5%**) interventions. Commercial fishing vessels were contacted in **15** (**2.8%**) interventions, ferries and water taxis were contacted during **four** sentinel actions (**0.8%**). Law enforcement vessels were also contacted in **four** (**0.8%**) interventions, and military/government vessels were contacted during **three** (**0.6%**) interventions. **Three** (**0.6%**) vessels categorized as "other" were also contacted.

471 (**88.7%**) reactive sentinel actions involved contacting vessels traveling at high speed near whales, and the remaining **60** (**11.3%**) involved contacting vessels traveling too close to whales but at slow speeds.

The most common means of communicating with other vessels during reactive sentinel actions in 2025 was waving arms or the Whale Warning Flag. This method was used during **420** (**79.1%**) actions.

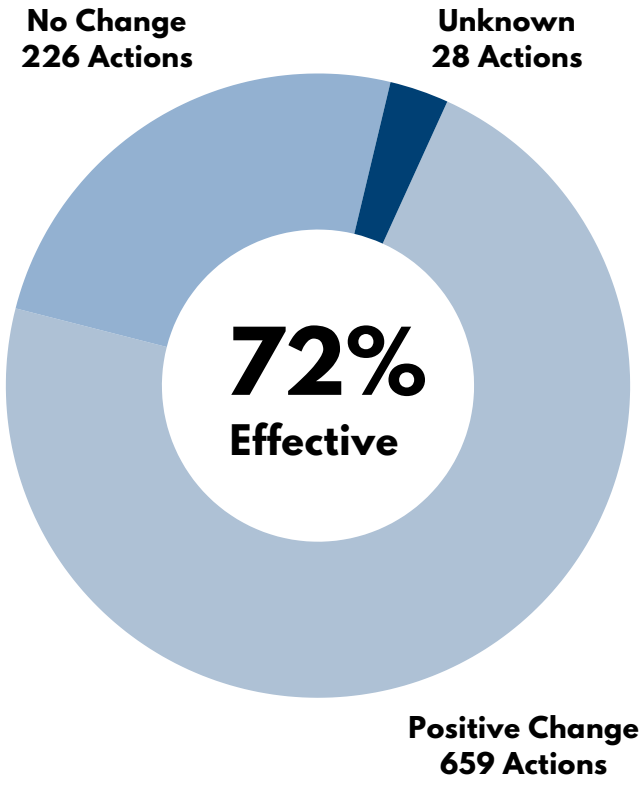


Brief horn blasts were used during **277** (**52.2%**) interventions, and VHF radio warnings occurred during **68** (**12.8%**) actions. Multiple means of communication were used during **271** (**51.0%**) of reactive sentinel actions.

Change in Vessel Behavior After Contact

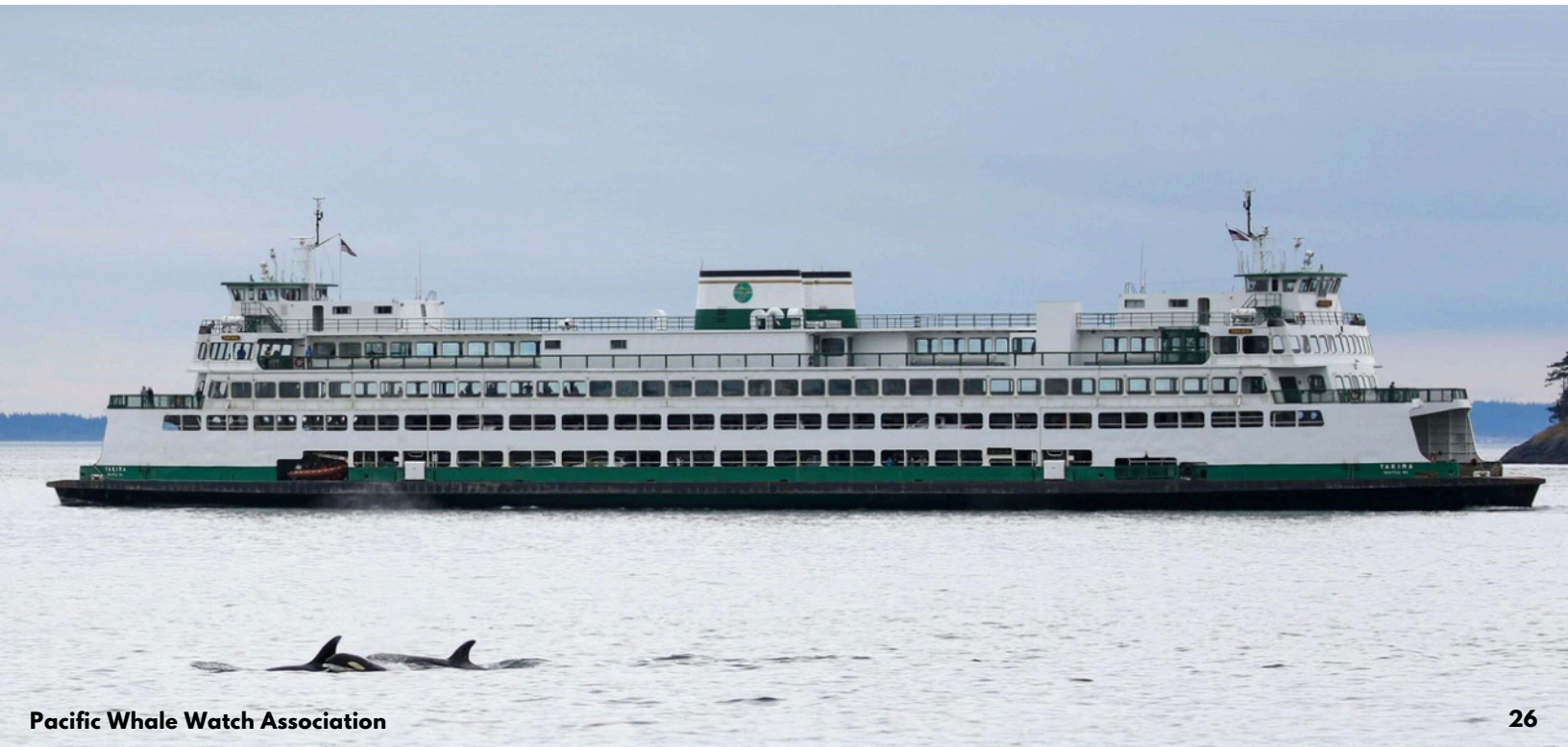
Of the **913** vessel-related sentinel actions by the PWWA documented in 2025, PWWA members observed a positive change in vessel behavior following **659** (**72.2%**) interventions. A positive change in behavior was characterized by the contacted vessel stopping, slowing, and/or diverting following communication with a PWWA operator. There was no noticeable change in behavior after **226** (**24.8%**) incidents. It was unknown whether there was a positive change in behavior following **28** (**3.1%**) sentinel actions. PWWA members are not always able to remain in the area long enough to confirm whether behavior was modified or not, accounting for an unknown result.

Of the **382** *proactive* sentinel actions, PWWA members observed a positive change in vessel behavior following **326** (**85.3%**) of contacts. Of the **531** *reactive* sentinel actions, PWWA members observed a positive change in vessel behavior following **333** (**62.7%**) interventions. Proactive sentinel actions are likely more effective as they involve a relatively greater number of commercial vessels such as ferries and container ships. These ships are easier to warn as they monitor VHF radio regularly, and have more time to alter their speed and/or course accordingly.



While not all vessel-related sentinel actions are successful in positively modifying the behavior of vessels contacted, when egregious violations of existing marine mammal regulations are observed, PWWA members are able to document such incidents and report them to authorities.

Bigg's killer whales surface with a ferry in the background. *Johannes Krieger, San Juan Excursions*



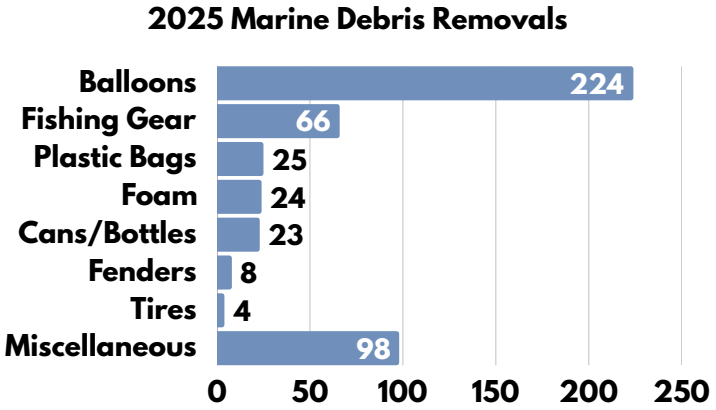
Derelict fishing gear collected during a PWWA tour. *Joe Zelwietro, Eagle Wing Tours*

Marine Debris Removal

The PWWA documented **472** marine debris removals in 2025. When possible, crew members were asked to record the specific type of debris collected.

Balloons were the most common items retrieved by the PWWA in 2025, removed during **224** debris-related sentinel actions (**47.5%**). In many instances, bunches of balloons tied together were retrieved during a single sentinel action, meaning the total number of balloons removed from the water was greater than 224.

Derelict or discarded fishing gear was the next most commonly removed debris, collected during **66** sentinel actions (**14.0%**). Plastic bags were collected during **25** sentinel actions (**5.3%**), polystyrene foam products were collected during **24** sentinel actions (**5.1%**), and cans and bottles were collected during **23** sentinel actions (**4.9%**). Boat fenders were collected during **eight** sentinel actions (**1.7%**) and car tires were collected during **four** sentinel actions (**0.8%**). The remaining **98** (**20.8%**) marine debris-related sentinel actions involved miscellaneous items such as clothing, buckets, cardboard, tarps, plastic containers, wooden palettes, lightbulbs, an air mattress, an infant car seat, and more.



A crew member holds a large piece of foam. *Orca Spirit Adventures*

Humpback whale “Starry Knight” with fresh scars from a recent entanglement. *Ken Szeto, Vancouver Whale Watch*

Other Sentinel Actions

Sentinel actions not involving vessel contacts or marine debris removal are categorized in the PWWA App as "other". The PWWA documented **44** “other” sentinel actions in 2025 accounting for **3.1%** of all sentinel actions. **31** "other" sentinel actions (**70.5%**) involved reporting injured, or entangled animals to authorities. The remaining **13** sentinel actions categorized as “other” included notifying vessels fishing illegally in protected areas, and rescuing paddleboarders and boaters in distress.

Pacific Whale Watch Association

Perhaps the most notable entanglement of 2025 involved humpback whale CRC-22662 “Starry Knight”, the 2024 calf of BCX0915 “Fallen Knight”.

On July 14, 2025, an entangled Starry Knight was observed by a PWWA member near Sooke, BC and reported to authorities. The following day, Starry Knight was seen in Washington’s Rosario Strait still entangled. A PWWA vessel stayed with the whale for several hours until responders with the San Juan County Marine Mammal Stranding Network (SJCMMSN) arrived and attached a telemetry (tracking) buoy to the trailing gear. On July 16, members of SJCMMSN and Cascadia Research Collective (CRC) relocated and successfully disentangled the whale near Port Angeles, WA.

On August 20, a PWWA vessel reported an entangled humpback near Lopez Island, WA. Sadly, the entangled whale was none other than Starry Knight, the same whale rescued roughly one month earlier. Within hours, SJCMMSN attached a telemetry buoy, and on August 21, CRC and SJCMMSN responders disentangled Starry Knight again, this time near Point Roberts, WA. It’s thought the wounds from the first entanglement made it easier for the whale to become entangled in fishing gear a second time.

An entangled Steller sea lion. *Tomis Filipovic, Eagle Wing Tours*

RESEARCH COLLABORATION

A research vessel launches a drone. *Matt Stolmeier, Outer Island Excursions*

Research Collaboration

Marine researchers in Washington and British Columbia are often limited in how much time they can spend in the field. The PWWA, however, has a year-round presence on the water. As part of the association's commitment to conservation, the PWWA consistently collaborates with numerous research organizations whose work benefits from real-time sightings information, summary data, and/or visual assets. These organizations include, but aren't limited to, Orca Behavior Institute, Center for Whale Research, Cascadia Research Collective, SeaDoc Society, Pacific Mammal Research, Sea View Marine Sciences, and the Northeast Pacific Minke Whale Project. PWWA members are also encouraged to submit their images to the online photo-identification databases Happywhale and Finwave throughout the year.

In addition to these ongoing relationships, the PWWA and its members also support specific research projects by providing data, insight, and/or funding. This section details a few of the research efforts the PWWA contributed toward in 2025.

Distributed Acoustic Sensing

The University of Washington's Ocean Data Lab, under principal investigator Dr. Shima Abadi, has been exploring a new method of passive acoustic monitoring called Distributed Acoustic Sensing (DAS). DAS uses subsea fiber optic cables as acoustic sensors to detect underwater sounds, including whale vocalizations. Testing this new method for feasibility could expand the existing monitoring network in Puget Sound both spatially and temporally.

To provide insight into the movements of local whales, and to inform the team's analysis of data collected from underwater telecommunication cables near Washington's Whidbey Island, the PWWA supplied the Ocean Data Lab with whale sightings data from February through May 2025. These data were also used to plan the team's deployment of a 2-kilometer fiber optic cable in Haro Strait for a more purpose-built system to detect and monitor the higher frequency vocalizations of Southern Resident killer whales.

Salish Sea Whale Watching Preferences

Last year, an interesting study (Schamp et al. 2025) was published detailing the priorities of Salish Sea whale watching guests. In 2021, the PWWA provided general background information on Salish Sea whale watching activity to the

study's lead author as well as input on the study's proposed survey questions. Roughly 1,500 potential Salish Sea whale watching guests were surveyed about their preferences regarding whale species, encounter duration, viewing distances, vessel counts, and other factors that might impact their whale watching experience.

Participants showed a preference for viewing killer whales over humpback whales, not surprising given that the Salish Sea is renowned for its year-round killer whale presence. Survey participants also expressed that they would be less likely to book a whale watching tour if the viewing distance was farther than 200 yards for Bigg's killer whales or 100 yards for humpback whales, the current legal distances in Washington state.

Respondents indicated a willingness to pay more to view whales for a duration of 40 minutes rather than 20 minutes, but they were not necessarily interested in paying more to view for 60 minutes compared to 40 minutes. Finally, participants indicated that they would prefer having fewer whale watch vessels on scene during their whale watching encounter.

Insights gleaned from this study could be helpful in shaping future PWWA best practices and providing enhanced experiences for guests.

Tufted Puffin Monitoring

Tufted puffins (*Fratercula cirrhata*) are found throughout upper latitudes of the North Pacific. Unfortunately, the species is experiencing steep declines in parts of their range, and tufted puffins are currently listed as endangered in Washington state. According to Washington Department of Fish and Wildlife (WDFW), the exact causes for the decline are unknown, but potentially include a number of historical and recent factors such as reduced prey availability, climate change, entrapment in fishing nets, mortality from oil spills and chemical contaminants, disturbance of breeding colonies, impacts from introduced species, and increased predation by bald eagles.

Since 2020, The Salish Sea School (TSSS), a local non-profit organization, has shared tufted puffin sightings with WFDW to assist with monitoring the species' presence in the region. Each year, the PWWA shares the PWWA App's tufted puffin reports with TSSS to contribute toward this dataset.

In 2025, the PWWA App received **176** reports of tufted puffins across **100** different days. The first sighting of the season was logged on April 13 and the last was logged on September 27.

A tufted puffin. *Amanda Colbert, Blue Kingdom Tours*

Esquimalt Nation Whale Presence Data

Constance Bank is a prominent underwater bank within the traditional territory of Esquimalt Nation. In early 2025, the PWWA was contacted by representatives of Esquimalt Nation and ESSA, an environmental consulting firm, seeking whale sightings data for their State of Knowledge Assessment for Constance Bank, a report created as an initial phase of a Cumulative Effects Assessment for Constance Bank. The report compiled available information about Constance Bank, including PWWA whale sightings from 2019-2024, to create a profile of the bank's physical, ecological, and human dimensions, to assess the impacts of anchorage related-stressors, and to identify gaps in current knowledge about Constance Bank.

The report was developed in response to Transport Canada's proposal to transfer jurisdictional authority of anchoring at Constance Bank to the Vancouver Fraser Port Authority. Esquimalt Nation holds that prior to any change in management of anchoring at Constance Bank, an environmental and socio-political impact assessment is required. Current and future increases in anchoring at the bank could have significant impacts on constitutionally protected Aboriginal and Douglas Treaty Rights to "fish as formerly."

First Record of a Humpback Feeding on Winter-Spawning Pacific Herring in the Salish Sea

In 2025, a study (Robinson et al. 2025) was published detailing the first documented case of a humpback whale feeding on winter-spawning Pacific herring (*Clupea pallasii*) within the Salish Sea.

On March 15, 2023, juvenile humpback whale BCC0046 "Wallace" was photographed lunge-feeding on spawning herring near BC's Hornby Island in the central/northern Strait of Georgia. Based on fresh bite wounds from cookie-cutter sharks (*Isistius brasiliensis*), a species typically found in warmer waters, it's believed the whale had recently returned to the Salish Sea from lower-latitude breeding grounds as opposed to having stayed late in the season or foregone the annual migration entirely. Humpback whales have been observed feeding on spawning herring in southeast Alaska and northern BC, but to the study's authors' knowledge, this behavior had not previously been documented in the Strait of Georgia or anywhere else in the Salish Sea.

This study was funded in part by Prince of Whales Whale Watching, a PWWA member company.

A humpback whale lunge feeding. *Jake Hawley, Orca Spirit Adventures*

ENFORCEMENT & EDUCATION

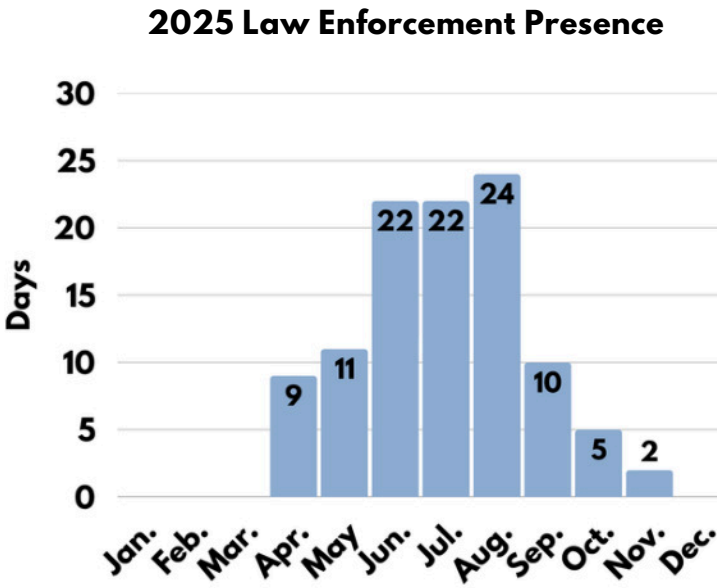
A WDFW enforcement vessel. *Ken Rea, Spirit of Orca*

Law Enforcement

Numerous agencies have been tasked with enforcing whale-related vessel regulations in and around the Salish Sea. These agencies include the National Oceanic and Atmospheric Administration (NOAA) and Washington Department of Fish and Wildlife (WDFW) in Washington, and Transport Canada, Fisheries and Oceans Canada (DFO), Royal Canadian Mounted Police (RCMP), and Parks Canada in British Columbia.

The Salish Sea and neighboring waters are expansive, and it's not uncommon to have multiple whales or groups of whales distributed throughout the region on any given day. Even with unlimited resources, it would be logistically difficult for law enforcement officers to be present with all whales at all times.

In order to document law enforcement trends, PWWA App users are asked to note whether or not law enforcement is visibly present during their GPS-based wildlife encounters. For this section, we have included ***all*** GPS-entries logged by PWWA members, not just those logged during whale watching tours. For example, if a PWWA member reported seeing law enforcement near whales from aboard a ferry, research vessel, or private vessel, those encounters have also been included.



Days of Law Enforcement Presence

According to the PWWA App, PWWA operators reported the presence of law enforcement on **105** days of 2025. This was a decrease of **16.0%** from **125** days of observed presence in 2024. Law enforcement was most likely to be reported as present with whales during the summer months, reported on **22** days in June, **22** days in July, and **24** days in August. Law enforcement was least

likely to be reported as present during winter whale encounters, and there were no reports of law enforcement during the months of January, February, March, or December on either side of the border.

In regards to days of observed law enforcement presence, whale watching operating schedules should be considered. Few PWWA companies operate during winter, therefore a lack of law enforcement reports during winter months does not necessarily mean law enforcement wasn't monitoring activity near whales, simply that they were not observed by PWWA operators. Likewise, most PWWA activity occurs during the late spring, summer, and early fall, therefore the chance of law enforcement vessels or aircraft being observed by PWWA members during those months is higher.

A DFO surveillance plane. *PWWA*

Overall Enforcement Presence

Of the **31,398** GPS-based cetacean entries logged by PWWA members in 2025, either during whale watch tours or from aboard other types of vessels, law enforcement was noted as being present in **352** entries (**1.1%**). The majority of PWWA App users did not specify which specific law enforcement agency or agencies were present in their reports, but based on the GPS coordinates of each report, law enforcement presence was closely split across the border, with **172** (**48.9%**) reports made in BC waters and **180** (**51.1%**) reports made in Washington waters. DFO and Parks Canada were the agencies mentioned most frequently in BC, and WDFW was the agency mentioned most frequently in Washington. Moving forward, PWWA members will be encouraged to specify which agency or agencies are present when they create a log in the PWWA App in order to more accurately understand and report law enforcement trends.

It's critical to stress that these totals are based solely on the observations of PWWA members, and do not necessarily include all law enforcement presence near whales in 2025. These numbers also don't capture the presence of any law enforcement officers that may have been monitoring from shore, or from unmarked vessels that aren't recognizable to PWWA members as belonging to law enforcement.

Law Enforcement Presence by Species

Based on GPS-based PWWA App entries, law enforcement presence was reported most frequently during encounters with Bigg's killer whales, with enforcement vessels or surveillance planes documented in **291** entries across **83** days. Law enforcement was reported as present with humpback whales in **56** PWWA App logs across **34** days, and with Northern Resident killer whales in **four** logs on **three** different days. Law enforcement was reported by PWWA members as being present with Southern Resident killer whales in **one** log on **one** day. There were no PWWA reports of law enforcement with gray whales or minke whales in 2025.

Restrictions on professional viewing of endangered Southern Resident killer whales in Washington and BC severely limit the number of PWWA encounters with their population. Given public pressure on law enforcement agencies to prioritize their protection, it's important to emphasize that law enforcement may have been present with Southern Resident killer whales more frequently in 2025 than reported here, but there were no PWWA vessels present to observe and document their presence.

Soundwatch monitors boating activity around whales. *Erin Gless, PWWA*

Boater Monitoring & Education

The PWWA collaborates with two on-the-water boater education organizations within the Salish Sea — Soundwatch (WA) and Straitwatch (BC). Soundwatch and Straitwatch seasonally monitor vessel activity in the vicinity of whales and educate boaters about proper boating behavior. These organizations do not have law enforcement capabilities, but they *are* able to educate boaters about regulations and report vessel infractions to law enforcement agencies if necessary.

Soundwatch and Straitwatch monitor vessel behavior around all whale types, but priority is given to endangered Southern Resident killer whales (SRKW) when they're in the area. Since 2022, the PWWA has provided Straitwatch's southern Salish Sea program and Soundwatch's San Juan Islands program with access to real-time SRKW sightings through the PWWA App.

In addition to receiving sightings of SRKW, Soundwatch and Straitwatch crew members are asked to in turn share their own SRKW sightings in the PWWA App. These reports allow PWWA vessels to avoid accidental encounters with SRKW in compliance with the conditions of Canada's Sustainable Whale Watching Authorization and Washington's Commercial Whale Watching License Program.

In 2025, Soundwatch and Straitwatch logged a combined total of **41** SRKW reports to the PWWA App across **eight** different days. This was significantly less than the **129** SRKW entries logged by Soundwatch and Straitwatch in the PWWA App across **28** different days in 2024, reflecting the fact that SRKW were largely absent from the region during Soundwatch and Straitwatch's 2025 operating seasons.

A Soundwatch vessel on patrol. *Olivia Ellman, San Juan Safaris*

SUMMARY

A breaching Bigg's killer whale. *Lincoln Humphry, San Juan Cruises*

2025 Summary

The PWWA App received a total of **50,323** reports in 2025, and increase of **12.0%** over 2024's total of **44,933** reports. **37,535** (**74.6%**) reports came from PWWA captains, naturalists, crew members, and support staff, and **12,788** (**25.4%**) reports came from authorized non-PWWA users of the PWWA App.

Bigg's killer whales were reported to the PWWA App on **342** days of 2025, more than any other whale type. Humpback whales were reported on **314** days, minke whales on **154** days, and gray whales on **147** days. Northern Resident killer whales were reported on **111** days, and Southern Resident killer whales on **93** days. When including only GPS entries made from aboard PWWA vessels during whale watch tours, Bigg's killer whales were reported on **289** days, humpbacks on **269** days, minke whales on **141** days, gray whales on **114** days, Northern Resident killer whales on **71** days, and Southern Resident killer whales on **38** days.

In 2025, PWWA members documented a total of **1,429** sentinel actions. Vessel-related sentinel actions were most common, with **913** interventions reported (**63.9%** of total sentinel actions). This included **531** reactive interactions and **382** proactive interventions. Marine debris removals accounted for **472** sentinel actions (**33.0%**), and balloons were the most common debris retrieved, collected during **224** (**47.5%**) sentinel actions. Incidents classified as "other", such as reporting entangled or injured marine life, made up the remaining **44** (**3.1%**) sentinel actions.

For the **913** vessel-related sentinel actions documented in 2025, PWWA members observed a positive change in vessel behavior following **659** interventions (**72.2%**). Recreational vessels were the most frequently contacted category of vessel, involved in **690** (**75.6%**) sentinel actions. August was the busiest month for sentinel actions, with **309** sentinel actions documented overall.

Law enforcement vessels or aircraft were recorded as being present by PWWA members during whale encounters on **105** days of 2025. Of **31,398** GPS reports to the PWWA App made by PWWA members, law enforcement was reported as being present in **352** (**1.1%**) entries. Law enforcement was most likely to be observed with Bigg's killer whales and humpback whales, documented in their vicinity on **83** days and **34** days respectively. Law enforcement was most likely to be observed during late spring, summer, and early fall, and least likely to be observed during the winter months.

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