Living in Washington, we aren’t strangers to slugs sliding around the ground. The Pacific Northwest is known for its large and colorful banana slugs, but did you know there are also slugs living underwater in Puget Sound? Sea slugs, or nudibranchs as scientists refer to them (pronounced new-di-bronks), can be even more colorful than their land slug cousins. There are about fifty species of nudibranchs in Puget Sound, but over 3,000 different sea slug species around the world!

Nudibranchs are characterized by their long squishy bodies that are usually covered in colorful spines called cerata. These cerata are often brightly colored to scare away predators.

Although sea slugs may not sound threatening, they are actually fierce carnivores that eat algae, anenomes, barnacles, and sometimes other nudibranchs! Some species, like the Shaggy Mouse nudibranch (Aeolidia papillosa), can store the poison from the anenomes they eat in their cerata to sting any predators who get too close. The poison isn’t strong enough to sting humans, but it is very important defense in the ocean.

Cerata also help the nudibranch breathe. The word “nudibranch” comes from the latin roots for “naked gills” because the cerata are exposed all along their bodies. Although the cerata aren’t quite like other fish gills, they provide more surface area for the gas exchange through their skin.

One of the most common species of sea slugs in Puget Sound is the Opalescent Sea Slug (Hermissenda opalescens), which has long, shiny blue and orange cerata with bright red tips (see photo above). It lives in tide pools or along docks and pilings and can be seen all year long. Look for them off of Jerisich Dock in Gig Harbor or on your next visit to the beach!

Erin interned for Harbor WildWatch during Spring 2019. She graduated in May 2019 with a dual B.S. in Natural Science and B.A. in International Political Economy from Pacific Lutheran University.
Save the Date for the 5th Annual Make Waves Benefit for Environmental Education

Every year this program brings the Harbor WildWatch community together for a fun evening out in support of Harbor WildWatch’s mission to inspire stewardship for the Puget Sound and greater Salish Sea.

This year the benefit will take place at Gig Harbor Yacht Club and feature food and drinks from Chef Sunshine Catering, Taylor Shellfish, and Heritage Distilling. The event will also include live music, features of Harbor WildWatch’s programs, and a lively Raise the Paddle event. All proceeds will directly support youth environmental education.

Thursday, September 12 • 6:30-10:00 p.m.

Youth Volunteer of the Year

We are so proud of Dylan Shipman, our Youth Volunteer of the Year! Dylan volunteered a whopping 49.5 hours with Harbor WildWatch in 2018 and was featured in Key Peninsula News’ recent highlight of Key Peninsula Middle School students who are giving back to their communities. As Stena wrote: “After an exciting and rare find of a Humboldt squid carcass during a beach walk at Sunrise Beach Park (in Gig Harbor), Dylan took the time to research and then write a multiple page report detailing the life history and adaptations of this unique creature. I have yet to meet another student who writes me creature reports just for fun.” Way to go, Dylan! Read the full article on Key Peninsula News’ website.

The Puget Sound Sea Bird Survey

Stena Troyer, Science Specialist

What a lovely spring: the flowers are blooming, the sun is shining, and the birds are singing. But while we’re enjoying the sweet songs of the birds migrating back to the area for the warmer season, many of the seabirds are migrating out. Seabirds migrate to the Puget Sound to spend the winter in the brackish waters of our wonderful estuary which is less likely to freeze and then migrate North to thawing lakes and rivers in the summertime.

This winter, Harbor WildWatch collaborated with the Seattle Audubon Society to take part in the Puget Sound Seabird Survey (PSSS). Once a month, a team of hearty volunteers met rain, wind, cold, and yes, sometimes sunshine, to count and identify seabirds. You might be thinking, ‘gee, I just read about how freezing winter beach monitoring is with Harbor WildWatch and now you’re adding another cold community science experience?!’ I promise that not all Science with Stena is paired with enduring inclement weather. It just so happens that a lot of great community science opportunities happen in the winter… when the weather is typically less inclement. Seabird monitoring is one of those few weather opportunities - so winter birding it is.

Despite the cold, Harbor WildWatch was excited to partake in the PSSS and even re-establish a monitoring site at the Purdy Sand Spit. The goal of the PSSS is to develop long-term baseline density estimates for seabirds in the Puget Sound and beyond. Such a broad look requires a huge effort and Harbor WildWatch is just one of many groups with volunteers at sites from the Puget Sound, to the Straight of Juan de Fuca, and out to the waters surrounding the San Juan Islands. Together teams of community scientists captured a monthly snapshot of the live seabird density on more than 5,400 acres of nearshore saltwater habitat. This project really puts the ‘community’ in community science!”

So, here’s how it works:

All surveys are synchronized to take place during a four hour window over the high tide on the first Saturday of the month, October through April (yes, feel free to mark your calendar now). Using a ruler and a compass, surveyors gather data that allows scientists to estimate bird density through “distance sampling.” This means that birds are only counted within a certain distance (300m) from the observation site because our ability to identify a bird declines as distance increases.

While we often see birds beyond 300m, even with a high powered scope, it can be tricky to accurately identify and count the seabirds. Distance sampling provides a robust approach to estimate density and allows for calculation of less biased density estimates. AKA, we’re out there collecting high quality data!

All of this information is then entered online and is made available for your viewing pleasure. You can peruse the site map, check out species lists, and even see some data analysis. For any birders out there, this site is especially helpful for determining which sites to visit to see some truly spectacular seabirds. Some highlights from Purdy Sand Spit included double crested cormorants, buffleheads, horned grebes, common and red breasted mergansers, surf scoters, goldeneyes, and even harlequin ducks. Contact Stena if you’re interested in getting involved and next time you see some birders while you’re driving over the spit, give them a happy honk!

Save the Date for the 3rd Annual Save Our Feet Wet Benefit for Environmental Education

What is it? It’s our annual fundraiser to support the Salish Sea After Dark program and other youth science projects. This program is exclusive for Ocean5 members and Steward Club members for the Dark. for $60 for members through August 1. After August 1, member pricing is $80/ticket; non-members $100/ticket. Tickets can be purchased online or in-person at the Skansie Visitor & Interpretive Center.

Don’t miss the premiere screening on Tuesday, June 4 from 6-7:30 p.m. at Ocean5.

The program is exclusive for Steward Club members all-ages and will feature a panel discussion with Carly, Mike, and Stena afterwards. Here are a few words from Carly about it:

“This short documentary stemmed from a simple idea: what if I tell the story of community members who are volunteering their time to monitor local shorelines? The focus began on the Salish Sea, but the short film ultimately became connected to the global effects of climate change and other human impacts. I became passionate about what audiences could learn from it: Our connection and stewardship to the ocean, estuaries, environment as a whole, begins in our own backyard.

We are scientists. We’re all out in the world making observations.

So how can you help? The event will also include live music, features of Harbor WildWatch’s programs, and community science projects. Check out the trailer for the short documentary on Harbor WildWatch’s YouTube page, join us on Tuesday, June 4 for this fun screening premiere and QA panel afterwards, and stay tuned for information about future screenings and film festivals!

Now, more than ever, community science is a relevant way anyone can be involved with conservation and research. As you will hear Mike say in the trailer, "There just aren’t enough scientists to do all of the work we need to do going forward."

I hope audiences who watch Salish Sea After Dark are inspired to inquire – both about the habitats around them and how also they can get involved in local community science projects.

Make Waves Celebrate - Donate - Educate

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