

THE WILDSIDE

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Spring Issue #21
Issue Date - April 2022
Published Quarterly



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April 2022

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UPDATES FROM HWW

Spring Back to In-Person Programs

Lindsey Stover, Executive Director

Spring has sprung...at least I thought it had until it snowed in mid-April! Despite the wild Pacific Northwest weather, the team at Harbor WildWatch is excited to offer a more predictable spring program schedule in 2022.

First, we are happy to host in-person field trips once again for schools in Pierce County this spring. Thanks to a grant from Pierce Conservation District, we will be delivering 50 field courses for K-12 grade students to explore a local beach, estuary, wetland, or forest with our talented staff biologists. Most of these workshops will take place this spring, with the remainder in the fall during the salmon spawning season. Find out why Rachel is passionate about this program in the next article.

We are also thrilled to introduce the reinvented Junior Naturalist Workshops this year. Formally known as seaStars & Beyond, this program has been adjusted to fit the changing needs of students and parents over the last decade. Starting in May, we will offer monthly "drop-off" workshops for science-minded students ages 6-12 to explore a variety of scientific topics. Workshops are offered a la carte or in a package rate and scholarships are available to families in need. Learn more about this updated program on our website under the 'Youth Programs' tab.

Finally, I want to remind you to renew your Steward Club membership this year. Your annual dues are crucial to fund programs and activities that are not grant funded, including our Cocktails & Fishtales program. You may renew your membership on our website using the "Member" tab, mail us a check, or drop it by the Skansie House Wednesday-Friday between 10-4pm. If you aren't sure when your Steward Club membership expires, please contact me at lindsey@harborwildwatch.org.

In case it isn't abundantly clear, we are incredibly excited to see you all in person once again in the coming months. Be sure to watch your inbox for weekly updates about our upcoming events, creature features, stewardship tips, and videos from the field. Thanks for your support and enjoy your spring Steward Club newsletter!

OUR STAFF



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UPCOMING EVENTS

Cocktails & Fishtales Facebook LIVE at 6pm

May 25
Rockfish Recovery
with Adam Obaza

June
Invasive Plants
with Dana Coggon

July 13
Pacific Oysters
with Emma Beck

Steward Club Member Only Events

Join us for a guided beach walk!
August 12 @ 11:30am
Penrose Point State Park



WHAT AM I?

ANSWER ON PAGE 2



Please recycle

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KIDS CORNER

How much salt do hermit crabs like on their food?
Just a pinch.

How do crabs get around on land?
They use the sidewalk.

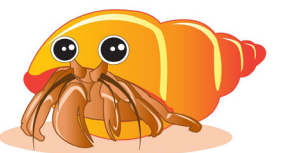


Photo above: First beach field trip of 2022 at Titlow Beach Park.

Beach Field Trips

Rachel Easton, Education Director

Spring means different things to everyone. Some rejoice in the return of daylight and the extra hours of light in the evenings. Some celebrate the flowers and new leaves which transform the landscape. Others find joy in planning for summer vacation and eagerly await the end of the school year. For me, spring has always meant the return of day time negative tides. This is the time of year I get most excited about and this year even more so. Students are going on their first field trips in two years, with eager parent

chaperones by their side. These field trips are some of the most impactful teaching that we do.

While our classroom workshops and virtual field trips are always well received, there is something about actually getting your feet wet that leaves a lasting impression. When students get to hold a shore crab in their hands, or gently touch a moon snail's slimy foot, a core memory is created.

Our goal with every program is to inspire stewardship for the Salish Sea and when we bring students to the beach, we get to watch it happen in real time. Some of my favorite moments from the past 15 years with Harbor WildWatch have happened on school field trips.

Each field trip begins the same way. Eager students pour out of the busses and a teacher does a quick head count.



Then begins our a beach etiquette lesson. Students learn how to be a good "GUEST" at the beach. We explain what a stressful time the negative tides are for these animals, trapped between the sea and the shore, and how our presence shouldn't add extra stress for them. Students all raise their right hand and make a verbal vow to be a good guest. Then we hit the beach, each chaperone group wandering in search of sea creatures.

Without fail, almost all the groups stop right at the first rocks they encounter, fascinated by shore crabs, periwinkle snails, and barnacles. Squeals of delight and sometimes a little fear, fill the air as curious hands are tickled by tiny crabs. We hold them low to the ground so they cannot fall and place them back under their rocks with care. The experienced students march right past the shore crabs and head for the lower intertidal zones, where the more delicate and rare creatures can be found. On very low tides, the receding water uncovers all sorts of treasures, like moon snails and their strange, plunger shaped egg collar, translucent white squid eggs, drooping plumose anemones, and the siphons of clams, hidden below the surface of the sand.

My time is spent bouncing from group to group, answering questions and challenging students to wonder about these special animals. After a few hours, the tide returns and pushes us all off the beach, each a little muddier, hungrier, and hopefully inspired by the amazing animals we have seen. My challenge to each student as they leave the beach, is to think of how we can protect this place, so busloads of kids can experience the wonder for years to come.

If you know of a teacher or school in Pierce County who wants to explore the beach, estuary, wetland, or forest with us, please have them contact me at Rachel@harborwildwatch.org.

What Am I? (Page 1):
The orange ribbon worm (*Tubulanus polymerphus*) is a spectacular find during a low tide beach walk. This brightly colored animal can stretch out to 1 meter!

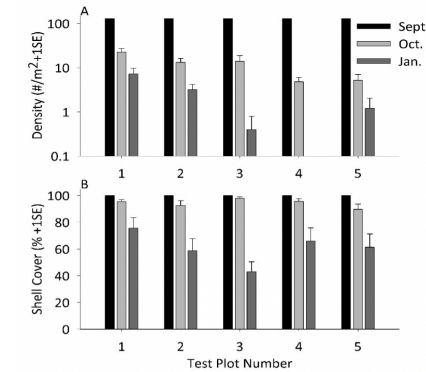


Community Science

Dr. Michael Behrens, PLU Biology & HWW Science Advisor

Native oyster beds are important for the ecosystem services they provide, but are threatened globally. Locally, Olympia oyster (*Ostrea lurida*) restoration has been identified as a priority in the Salish Sea. To better understand the potential for and impacts of restoration of Olympia oysters at Penrose Point State Park, our community science team began utilizing experimental test plots to monitor recruitment. Here is a summary of those initial findings.

In September 2020, we established 5 restoration test plots at Penrose Point State Park at approximately the 0 ft. MLLW tidal height. The test plots were 10 ft. by 10 ft. and consisted of ~1 cubic yard of Pacific Oyster shell hash spread to a uniform thickness. We then seeded the plots with approximately 1200 juvenile oysters (~ 25 mm in size). In October 2020 and January 2021, we surveyed the test plots for Oyster density and size and shell cover and spread. Additionally, the project monitored oyster recruitment fortnightly utilizing shell strings (Becker et al. 2020) at seven locations each at Penrose Point and Maple Hollow Park, as a reference site, during summers of 2019-20. To understand potential changes in the surrounding ecological community, we utilized Harbor WildWatch's long-term Beach Monitoring



Density (A) of juvenile oysters and shell hash cover (B) on experimental test plots.

STEWARDSHIP TIP

Give Marine Mammals Space

Stena Troyer, Science Specialist

There is no selfie stick long enough for you to appropriately take a photo with a marine mammal. Early summer is pupping season for harbor seals and while it is tempting to take a photo with an adorable baby seal resting on the beach, getting too close to these animals puts them at risk. Harbor seal mothers may not return to shore if they feel it is unsafe so human disturbance can cause abandonment of newborn pups. Do your part to give pups their space by staying a minimum of 100 yards as recommended by NOAA. While it is normal for pups to spend many hours on the beach resting and warming up while mom is out hunting, if you suspect a seal pup is in trouble, you can call the marine mammal stranding network.

The test plots showed dramatic changes in the density of juvenile oysters and shell cover since they were established (Figure 1). The oyster density declined dramatically within the first month after outplanting and continued to decline over the first 4 months. After 4 months, survivorship ranged from 0-6%. We attribute most mortality to predation by crabs, due to crabs rapid colonization of the plots and observations of damage on small Olympia oyster shells. The stability of the shell hash also varied over time and among plots. The percent cover of shell hash declined after 4

SCIENCE WITH STENA

months across all plots (mean cover = 40-70%). The decline in shell cover was primarily associated with sinking of shell in test plots 4 and 5 and transport of the shell due to waves/currents in test plots 1-3. For the past two reproductive seasons, there has been extremely low Olympia oyster recruitment at both Penrose Point and Maple Hollow, with 1-3 recruits per season observed across 210 shells per site observed fortnightly. Although full analyses of community data have not yet been conducted, initial observations indicate that there have not been important community-level changes, as the shell spread from test plots has been away from monitoring locations and recruitment of Olympia oysters has been functionally absent.

These findings indicate that any potential olympia oyster restoration at Penrose Point will need to consider spatial variability in substrate stability and the risk of predation to juvenile oysters. The low levels of recruitment will likely require simultaneously addition of shell substrate and oysters for restoration to be successful.

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